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INCORPORATING KNOWLEDGE OF DEVELOPMENTAL NEEDS AND CRITICAL THINKING INTO A PARENTING CURRICULUM MODULE FOR UNDERGRADUATE NURSING STUDENTS

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

BY

MARYBETH YOUNG

CHICAGO, ILLINOIS

JANUARY, 1991

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ABSTRACT

This non-traditional dissertation incorporated two previously published articles with a review of critical thinking literature. These led to the development of an Adolescent Parenting Module designed to help students improve delivery of nursing care to adolescent mothers. The first article, reviewing theory and parenting research, led to identification of the needs and problems of adolescent mothers. Since undergraduate nursing students provide some care to these young women during a brief maternity hospitalization, their perceptions of adolescent mothers were explored in a pilot study, the second publication. Critical thinking research and theory were reviewed as a basis for meeting selected needs of both adolescent mothers and nursing students. This led to development of the **Adolescent Parenting Module,** based on Ralph Tyler's curriculum principles. Module-influenced changes may enhance personal and professional growth in the nursing student, initial parenting in the adolescent mother, and subsequently improve initial newborn trust. Suggestions for further research include expanded comparative studies of parenting in adolescents and older mothers, the use of critical thinking in fostering clinical judgments of nursing students in varied settings, and replication of the pilot study with a larger sample of novice nursing students, advanced beginners, or practicing nurses.

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS iv

CHAPTER

1. INTRODUCTION 1

Challenges for Undergraduate Nursing Educators 2

Nursing Role Development 2

Nursing Curriculum Design 5

Challenges for Professionals Caring for Adolescent Mothers 6

Morbidity Statistics and Risk Factors . . . 6

Impact of Adolescent Parenting 7

Purposes 9

Procedure 9

Summary 12

2. PARENTING DURING MID-ADOLESCENCE: A REVIEW OF DEVELOPMENTAL THEORIES AND PARENTING BEHAVIORS 14

Abstract 14

The Competent Mother 15

Developmental Theories: Mid-Adolescence . . . 20

Teenaged Parents 24

Implications for Research 27

References 30

3. UNDERGRADUATE NURSING STUDENTS' PERCEPTIONS OF ADOLESCENCE AND EARLY PARENTING: A PILOT STUDY 35

Abstract 35

Introduction 35

Method 38

Sample 38

Measures 39

Results 42

Discussion 48

Interpretation 48

References 51

4. CRITICAL THINKING RESEARCH AS A BASIS FOR MEETING NEEDS OF NURSING STUDENTS AND ADOLESCENT MOTHERS 53

Introduction 54

Critical Thinking Theory and Research 55

Definitions of Critical Thinking 55

Need to Teach Critical Thinking 60

Assessment of Critical Thinking Abilities 61

Teaching Methodologies to Stimulate Critical Thinking 63

Historical Perspectives 63

General and Content Specific Approaches 64

Other Emerging Trends 67

Specific Strategies to Enhance Critical Thinking 68

Desired Outcomes of Teaching Critical Thinking 71

Critical Thinking in Nursing Education 73

Professional Role Development 74

Teaching Methodologies to Promote Critical Thinking 75

Nursing Process as a Basis for Problem Solving 77

Summary 79

5. DEVELOPMENT OF THE ADOLESCENT PARENTING MODULE BASED ON A CRITICAL THINKING FRAMEWORK AND TYLER'S CURRICULUM PRINCIPLES 81

Introduction to Tyler's Curriculum Model . . . 82

Adolescent Parenting Curriculum Module 84

Learner Attributes 85

The Undergraduate Nursing Student 85

Cognitive Attributes 87

Psychomotor Attributes 89

Affective Attributes 89

Summary 91

Studies of Contemporary Life 91

Education as a Means to Meet Selected Learner Needs 93

Maternity Nursing Content Base for Module Development 94

Tyler's View of Philosophy 96

Tyler's Psychology of Learning 97

Module Goals 99

Learning Experiences 104

Content 104

Client Outcomes 110

Mutual Outcomes 113

Evaluation of Learning Outcomes 115

Summary 118

6. DISCUSSION 121
Introduction 121
Rationale for Selected Module Components . . . 124
Learners 124
Studies of Contemporary Life 126
Goals and Objectives 127
Learning Experiences 127
Implications of this Study 129
Suggestions for Future Research 132
Needs and Problems of Adolescent Mothers . . 132
Needs and Problems of Nursing Students . . . 133
Additional Research Suggestions 134
Summary 135
APPENDIX
A. SURVEY TOOL 139
B. INTERVIEW TOOL 141
C. REVISED STUDENT SURVEY TOOL 142
D. FACULTY SURVEY TOOL 146
E. ADOLESCENT PARENTING RESOURCES 147
F. ADOLESCENT PARENTING PROGRAMS/INFORMATION . . . 149
G. CRITICAL THINKING RESOURCES 151
H. PERMISSION TO REPRODUCE PUBLISHED WORKS 153
REFERENCES 155
VITA 166

LIST OF TABLES

TABLE

1. Assessment of Behaviors in Competent Parents in Relation to Developmental Status of Adolescents in Terms of Selected Developmental Theorists 19

2. Categories Based on Student Perceptions of Essential Characteristics of a Good Parent . 44

3. Interventions to Assist the Adolescent Mother to Develop Essential Attributes of a Good Parent 46

4. Learning Objectives 100

5. Broad Goals, Learning Objectives and Selected Specific Outcome Statements 101

6. Content Outline: Adolescent Parenting Module . 105

7. Learning Objectives within Content 106

8. Module Learning Experiences in Varied Settings 108

9. Client Learning Objectives and Behavioral Outcomes 112

10. Summary of Outcome Cues Resulting from the Reciprocal Student/Adolescent Mother Relationship 114

11. Selected Thought Provoking Questions to Stimulate Students' Critical Thinking 117

12. Module Influenced Changes of Nursing Students Entry Level Attributes 120

LIST OF FIGURES

Figure

1. Implementation of Adolescent Parenting Module . 138

CHAPTER ONE

INTRODUCTION

Within their fields, philosophers, ecologists, psychologists, educators, and nurses utilize a rich knowledge base to better understand human behavior in terms of learning and development. In using the non-traditional dissertation approach described by Monaghan (1989), these concepts can be integrated with critical thinking and nursing research and theory. They could then be used to form the design of a curriculum module which demonstrates problem resolution and leads to the design of an action-oriented outcome.

This dissertation focuses on the needs and problems encountered by nursing students in transition from their role as novices to advanced beginners and by adolescent "mothers-too-soon", one client group to whom students provide care. In order to meet selected needs and resolve identified problems in both groups, interventions are necessary. Desired outcomes are enhanced growth in which: the novice nurse attains a professional role identity and gains comfort interacting with clients, e.g. communicating and teaching; the adolescent mother becomes a competent and nurturing parent; and her infant develops into a trusting child.

The needs and problems of nursing students and contemporary adolescent mothers are very complex. Since existing approaches to identify and meet the needs of nursing students providing care to adolescent mothers have not incorporated critical thinking methodologies, such application provides a framework for this study. An overview addressing the separate needs and problems of each group follows.

Challenges for Undergraduate Nursing Educators

Two major challenges face undergraduate nursing educators; nursing role development and curriculum design. Education for twenty-first century practice demands thoughtful planning. A knowledge explosion and the changing health care system dictate ongoing curriculum evaluation simultaneously with implementation of planned revisions. The acute need for nurses is a reality; at the same time the most appropriate academic preparation for professional entry remains a hotly debated issue. Dimensions of the nursing role expand creatively within the limitations of professional standards and legislative regulation.

Nursing Role Development

Benner (1984) is acknowledged by both practitioners and educators for major contributions to the understanding of professional role development. Her analysis of nurses' critical incident reports revealed that thought and feeling

patterns distinguished the novice from the expert. One outcome of this research was a clear description of professional competencies and practice domains, including the helping relationship, and interactions such as communicating and the teaching/coaching role. Students function as novices in these areas very early in their educational development. Faculty must identify entry level attributes and plan learning experiences thoughtfully so that expertise in these domains grows concurrently with professional development.

The practice of nursing has itself evolved. The American Nurses' Association and specialty groups define the components of care amid complex delivery systems. The medical model has given way to an integrated approach with emphasis on biopsychosocial responses to health problems in a multi-cultural society (Shaver, 1985; Thiederman, 1986).

Caring remains a vital aspect of professional nursing. Cooper (1989) suggests using Gilligan's model of caring as a moral action to educate young professionals, emphasizing the impact of reciprocal interactions on client and care-giver.

Stevenson (1988) reflects on nursing knowledge development within the caring perspective. This is supported by the current thrust of the National Center for Nursing Research: improved nursing practice through examination of clinical problems and their solution. A major research focus is identification of healthy and risk

taking behaviors with priorities for broadening the understanding of the family, fostering the mother/child relationship, and enhancing parenting skills of adolescents.

While addressing the complexity of nursing education, Wallhead (1986) uses Erikson's developmental theory as a framework for professional role development of students. Specific suggestions to faculty include fostering trust while maintaining an interest in students' learning. As self-esteem grows with experience, identity crises are resolved.

Nursing education and service must recognize the need for students and young graduates to take personal responsibility for the life-long learning process. While internships and continuing education programs may meet the needs of some young nurses, there is need to bridge the gap between education and practice through continued professional development after graduation (Dolan, 1984).

Nurse educators and their counterparts in other fields are greatly concerned about the decision-making abilities of future practitioners. Holbert & Thomas (1988) emphasize that nursing students need educational preparation to problem solve in realistic situations. Learning critical thinking skills in the educational setting is a first step towards life-long professional learning.

Nursing Curriculum Design

Currently, the undergraduate nursing curriculum builds on an integrated knowledge base from the sciences, humanities, and nursing. Content presented in the classroom is applied in varied clinical settings. Clinical courses in nursing span the period from birth to death and emphasize health promotion, early identification of risks, and interventions that minimize the impact of altered health. Typical clinical experiences foster development and learning in students and optimal client outcomes. Catalysts in maximizing this potential are the nurse educator's expertise and a curriculum design that stimulates problem solving. While creative strategies employed by faculty often stimulate critical thinking, nursing programs lag behind the educational trend of basing a total curriculum or unit upon critical thinking research findings.

Maternity nursing is a foundation course that ranges from four to seven weeks, depending on the type of educational program. Within this short time-frame, the student learns about physiologic and psychological adaptations during the childbearing cycle. Teaching the new mother self-care, infant care, and parenting skills are important clinical activities during this rotation.

Consistent with national trends, many students encounter adolescent mothers in clinic or in-patient settings. Some of the interactions are viewed very

positively; in other cases, students seem uncomfortable communicating with women close to their own ages. Some students find it challenging to adapt clinical teaching to meet the developmental needs of very young mothers. Others have much difficulty identifying problems and meeting adolescent mothers' needs. This poses a challenge for educators of today's nursing students.

Challenges for Professionals Caring for Adolescent Mothers

Morbidity statistics and problems associated with adolescent parenting pose critical challenges for professionals caring for adolescent mothers. These are discussed separately in the sections that follow.

Morbidity Statistics and Risk Factors

While recent statistics indicate that the overall birth rate in the United States continues to decline, the incidence of pregnancy in girls under age 15 continues to rise, accounting for approximately eleven births per 1000. Urban birth rates and figures for minority teens are significantly higher than those for other groups; American Indian and black adolescents bear twice as many babies as caucasians. One-fifth of all births occur in women younger than nineteen (Moore, 1988).

Because prenatal care is sometimes lacking or inequitable, these adolescent women are at high risk; negative outcomes are seen in mothers and infants.

Adolescent mothers bear twice as many low birth-weight babies as older mothers, increasing the cost and complexity of care. Lifestyle-associated problems often complicate the pregnancy. Parenting skills are often minimal; potential for infant neglect is a very real concern. For some, poverty and inadequate support systems add to the identified risk factors.

The Impact of Adolescent Parenting

A recent panel called by the Public Health Service identified critical components of prenatal care for the future. Among those targeted for improved service are the high-risk group of adolescent mothers (Caring for our Future, 1989).

While recent research findings suggest that some teen parents eventually overcome initial problems of interrupted schooling and financial stress (Zabin et al, 1990), the scope of these problems is widely recognized. The need to reverse the adolescent pregnancy trend has led to the recent initiation of many longitudinal federal projects and funded research studies.

Among many active professional organizations, the National Organization for Adolescent Pregnancy and Parenting (NOAPP) is a resource and clearinghouse for legislative information, publications, and educational programs. Their newsletter (NOAPP Network, 1990) urges concerned educators

and health care workers to follow the progress of proposed legislation such as the ABC Bill to provide child care for low income families, and the Teen Pregnancy and Parenting Services Act. Application for program funding through Adolescent Pregnancy Prevention, Care and Research grants and/or Adolescent Family Life grants is encouraged. At the tenth annual convention in 1990, awards were presented to individuals and groups who made outstanding contributions to teen pregnancy prevention or parenting services (NOAPP Network, 1990).

Innovative local and state-wide programs meet young parents' needs; for example, some bring health services to mothers and babies through mobile care units. Special parenting classes are provided in both the traditional high school and alternative settings. Outreach projects serve some special families, such as homeless adolescents and their children. Nationally, many organizations sponsor successful peer support networks. The March of Dimes and the Ford Foundation provide grant monies. The emphasis is primarily on healthy outcome for babies, and adolescent parenting education and health care.

While there is promise that selected services, including elementary school Education for Parenting classes, will improve the outcome for many young mothers and their babies, (Knowles & Scattergood, 1989), much remains to be done for the growing numbers of girls who begin adolescence

and parenting almost simultaneously. Among the professionals interacting with these families, nurses have an excellent opportunity to affect change. However, many young nursing students often have misperceptions about adolescent mothers.

Purposes

The purposes of this study are to:

Describe the needs of a unique group of health care recipients, adolescent mothers;

Identify undergraduate nursing students' perceptions of adolescent mothers; and

Design a maternity nursing Adolescent Parenting curriculum module, which is infused with strategies to stimulate critical thinking and which builds on the strengths and meets selected needs of both nursing students and adolescent mothers.

Procedure

An extensive literature review preceded this study and identified many research studies which focus on undergraduate education and professional role development of the nursing student. Other articles describe the needs of adolescent pregnant girls and young mothers. Critical

thinking research and theory is abundant in current literature. No studies document the development or evaluation of a curriculum module focusing simultaneously on the nursing student learner and the adolescent mother. Selected professional, philosophical, and educational research; investigator-written research based articles; and the Tyler curriculum model were reviewed and synthesized to accomplish the purposes of the study. References and pertinent research are included within the body of this work.

The methodology for this study, the non-traditional dissertation, is a relatively recent innovation in graduate education. It is an alternative to a single topic scholarly work. Published articles in refereed journals, solely or co-authored, are "stapled" or connected via a unifying discussion or summary (Monaghan, 1989).

This non-traditional study integrates two related articles published in the nursing literature. The first article (Young, 1988a), Chapter Two, focuses on mothering in adolescence. Developmental and parenting theories are reviewed, analyzed, and compared to identify commonalities and differences from early to late adolescence. Characteristics of the competent parent are identified. Areas of strengths and limitations are illustrated in a table that compares common adolescent attributes and parenting competencies.

The second article, Chapter Three, describes a pilot study that examined nursing students' perceptions of adolescent parenting (Young, 1988b). Through surveys, interviews, responses to case studies, and observations, attitudes were explored and interactions with young mothers were evaluated. This qualitative research project included a case study describing an adolescent mother and her family. Clinical problem solving approaches were examined and analyzed using triangulation methods. Student generated interventions to foster competent parenting were identified and illustrated in tables.

The unifying threads of critical thinking, development, and education are evident in discussion of needs and problems of novice nurses and adolescent mothers. An extensive review of past and contemporary views of critical thinking in Chapter Four encompasses: definitions; the need to teach the process; assessments; teaching methodologies; and optimal learning outcomes. Application of critical thinking research findings forms the framework for subsequent development of a nursing curriculum module, Chapter Five, which is directed towards adolescent mothers. This module is based upon Tyler's curriculum principles and interactions with this scholar during a one semester independent study elective.

The integration process used in identifying and meeting the needs of two distinct learner groups was heavily

influenced by critical thinking theory. Research and theory on development and cognition, and personal knowledge of the strengths and needs of undergraduate nursing students and adolescent mothers are integrated throughout the paper and lead to the design of the **Adolescent Parenting Module.**

Since this instructional unit is designed to prepare the nursing student as care-giver to the adolescent mother, the nursing process provides the framework. Examples of student-client interactions illustrate the many dimensions of critical thinking in clinical situations.

Summary

An overview of the unique developmental and educational needs and problems of undergraduate nursing students and their adolescent maternity clients is presented in Chapter One. Two investigator-written journal articles: Chapter Two, which focuses on the adolescent mother's problems and needs; and Chapter Three, which addresses nursing students' perceptions of adolescent parenting, have been synthesized with a body of knowledge on critical thinking to develop an **Adolescent Parenting Curriculum Module.** Theory review and applications for nursing education are presented in Chapter Four. The infusion and careful sequencing of critical thinking methodologies in the curriculum plan, based on Tyler's principles, comprises Chapter Five. A discussion of outcomes related to goals, selected rationale for action,

implications of this study, and suggestions for future research are presented in Chapter Six.

Equally important in this study is the process of developing the **Adolescent Parenting Module.** In addition, the non-traditional nature of this study requires critical thinking, problem finding, and resolution to synthesize the varied facets of the overall project in a meaningfully organized approach.

CHAPTER TWO

PARENTING DURING MID-ADOLESCENCE: A REVIEW OF DEVELOPMENTAL THEORIES AND PARENTING BEHAVIORS[1]

Developmental literature on adolescence is reviewed with emphasis on the span between 15 and 17 years. Characteristics seen in the competent parent are identified. A chart illustrates specific parental competencies expected during mid and late adolescence, based on theory analysis. Areas of strength and potential problems for the young teenaged parent are examined. Among the deficits identified for the mid-adolescent parent are caregiving skills and affective behaviors including empathy and stimulation. Based on the resolution of developmental tasks, it is evident that a self-view as competent parent is dependent on achieving a sense of identity. Suggestions for interventions and further research focus on increasing the parental competence of the adolescent mother.

Adult mothers and fathers find parenting in the 1980's a very challenging task. For the teenage mother, this challenge can prove overwhelming. The middle adolescent, 15 to 17 years of age, is establishing a sense of identity, the major psychosocial task of adolescence, according to Erikson (1968). In addition to resolving this developmental crisis, the adolescent who has become a parent must attempt

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[1]Chapter Two is an article originally published in the Maternal-Child Nursing Journal. Spring, 1988. 17(1), 1-12. Reprinted with permission of the Editor.

to meet the daily care needs of an infant by providing a safe environment, nutritious food, suitable clothing,and affectionate stimulation. Consistency in parental behaviors provides the basis for the infant's development of a sense of trust. Fostering this trust while struggling to establish his or her own sense of identity is often emotionally and physically stressful for the teenaged parent.

This article explores the literature for clues to solve the problems associated with parenting during adolescence. The initial focus is on common beliefs and research regarding caregiving by all parents. Developmental theories of middle adolescence are reviewed, and special characteristics of the adolescent parent are discussed. Suggestions are made for further research in assessment of and intervention for the teenage mother.

The Competent Mother

Parenting behaviors have been identified in classic literature, religious writings, great books, and poetry for many centuries; however, it is only in recent years that parenting studies have surfaced in scientific research. Studies of early bonding and attachment suggest that the mother who has successfully attached to her infant is realistic in expectations of her child and is able to provide consistent and developmentally appropriate care for the infant. (Bowlby, 1969; Klaus & Kennell, 1969).

Through a review of widely recognized theories of parenting, a view of the "competent mother" emerges. In the 1960s, expectations for mothering focused on the "good enough mother;" recent emphasis in the 1980s is on the "best possible mother." Today's woman is expected to invest herself and her energies in the child and his or her care, while maintaining a sense of unique self (Carrilio & Walter, 1984). Extensive observations of maternal-infant interactions and the more recent trend towards videotaping the reciprocal maternal-child relationship have increasingly caught the imagination of developmentalists and contributed to the knowledge base on parenting (Stainton, 1981).

Newman and Newman (1973) described the parental role as one of providing a consistent and warm environment, stimulating developmental growth, giving an opportunity for sensory and motor exploration, and teaching problem solving skills. Complex cycles of interactions and responses foster the development of trust in the infant. Parental empathy, developed through closeness, is seen as critical for meeting mutual needs (Newman & Newman,1973).

Anastasiow (1982) looked at parents' understanding of an infant's cry, feeding needs, and responses to discipline. Whether this sensitivity is measured merely by observing or by using a scale, a tuning-in to behavioral cues seems to foster the development of empathy between caregiver and infant, enriching the relationship for both.

Mercer (1983) and Ludington-Hoe (1977) viewed parenting as a process which includes cognitive and psychomotor parental care-giving tasks as well as "maternicity," used to specify nurturing behaviors. These nurturing behaviors include touching and speaking to the infant with affection, protecting the child lovingly, and responding to cues.

The mother's anticipation of the newborn's needs, the infant's temperament, and the child's unique contribution to the relationship were examined in research. Brazelton, Koslowski & Main (1974) studied cues transmitted to the mother and the resultant reciprocal pleasure of both infant and parent. Bowlby (1969) identified the infant as an active participant in the family relationship. Korner (1971) researched the effects of cuddliness on parents. The infant's role in attachment was described by Ainsworth, Blehar, Waters & Wall (1978). Tronick, Ricks and Cohn (1982) focused on clear affective messages exchanged between infant and parents. Chess & Thomas (1983) and Klaus & Klaus (1985) have contributed much to the understanding of infant behavior towards caregivers.

The Neonatal Behavioral Assessment Scale developed by Brazelton (1973) is widely used to help parents tune-in to the infant's communication of need and satisfaction, and see the newborn as an interactive partner. Other tools have been developed to assess parenting behaviors. Mercer (1980) focused on caregiving tasks such as feeding, stimulation,

problem solving, maternal satisfaction, and nurturance of well and sick infants. Use of such assessment tools to identify the adaptive and maladaptive behavior patterns of new parents may also suggest interventions that foster positive parenting behaviors. Specific needs may subsequently be met, for example, through follow-up visits by the community health nurse.

Many experts on family interaction agree that one essential attribute of a mother is availability to the child. Emotional availability--empathic sensitivity that fosters security and learning within a system of mutual rewards--was defined and studied extensively by Emde (1980). Using the Neonatal Perception Inventory Scale of Broussard and Hartner (1971), some mothers were identified as lacking availability to their infants. They were taught ways of responding to infant cues, with the goal of fostering healthy infant development. In learning to tune-in to signs of satisfaction such as cuddliness, smiles, and playful interaction, mothers found incentives for availability. They also reported feeling better about themselves as parents.

In summary, the competent mother is both a nurturer and care giver, consistently responds to infant cues, and sees herself as capable in a parenting role. Refer to the left column in Table 1 for a summary of self-view parental

Table 1.--Assessment of Behaviors in Competent Parents in Relation to Developmental Status of Adolescents in Terms of Selected Developmental Theorists.

	ADOLESCENT DEVELOPMENT																	
	Erikson		*Marcia*		*Elkind*			*Blos*		*Selman*		*Social Learning*		*Cultural Anthropology*				
BEHAVIORS SEEN IN A COMPETENT PARENT	*Identity*	*Intimacy*	*Foreclosure*	*Internal control*	*Decentering*	*Role taking*	*Personal fable*	*Separation/parents*	*Identification/peers*	*Role taking*	*Problem solving*	*Modeling*	*Reinforcement*	*Cultural conditioning*	*Interaction*			
Self-View																		
Independent		>		>		>		>		>			>	>				
Knowledgeable		>	*	>		>		>		*	>		>	>				
Decision Maker		>		>		>		>		>			>	>				
Empathetic		>		>		>				>			>	>				
Satisfied		>		>		>		>		>								
Successful		>		>		>		>		>								
Nurturing		>		>		>		>		>								
Consistent Performance of Parenting																		
Feeds		>	*	>	*	>		>		*	>	*	>	*	>			
Provides care		>	*	>		>		>		*	>	*	>	*	>			
Cares for ill child		>		>		>		>		>			>	>				
Maternicity Behaviors																		
Nurtures	*	>	*	>		>	*	>		>			>	>				
Stimulates		>		>		>		>		>			>	>				
Responds	*	>		>		>	*	>		*	>	*	>	*	>			
Teaches		>		>		>		>		>			>	>				
Available		>		>		>		>		>			>	>				
Empathetic		>		>		>				>			>	>				
Realistic expectations		>		>		>		>		>			>	>				

Note. * Indicates behavior appropriate in the 15–17 year old girl faced with daily parenting responsibilities for her infant.
> Indicates behavior expected in the teenaged mother over 17.
Absence of a symbol means that no specific parenting behavior is suggested by the theory.

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attributes and the behaviors of parental competence drawn from these studies.

Developmental Theories: Mid-Adolescence

A review of characteristics of mid-adolescence, between ages 15 and 17, may increase insights into their self-concept and needs, and suggest ways to enable them to become better care givers.

Erikson (1968), from a psychoanalytic developmental perspective, suggested that the search for identity is the major task necessary before beginning an intimate relationship. Even though it is biologically possible for the young teen to become a parent, the egocentric developmental stage does not lend itself to identifying an infant's needs. Life focuses on personal desires. It is only in the stage of generativity that Erikson believed the individual could give totally to a child. Sprinthall and Collins (1984) reaffirmed Erikson's belief that the egocentric person is not ready to share, particularly with an infant.

The psychoanalytic developmental theory of Marcia (1967) referred to the youth who makes a premature commitment without investigating other options, prior to resolving the identity crisis. This commitment may force the adolescent to remain in a stage of "foreclosure" with little chance to try out other roles or to work towards developing an intimate relationship. The decision to

continue with a pregnancy, and to take immediate responsibility for the baby pushes the teen into an adult role.

Influenced by Freud, Lewin (1948) formulated a developmental field theory in which the adolescent was seen as a "marginal person," not quite in the social world of either the child or the adult. He suggested that adolescents experience increased stress as life spaces enlarge beyond immediate family, church, and school. Because culture and values vary, different levels of stress are perceived. Should the reality of early responsibilities abruptly end youthful fantasies, tensions increase. This view was consistent with studies of role confusion by Erikson (1968).

The imagination of the adolescent contributes to a sense of reality that is often distorted. In his social cognition theory, Elkind (1970) suggested a developmental stage theory of egocentricity closely based upon Piaget (1952). The adolescent sees self at the world's center. Belief in a personal fable brings a sense of invincibility. "It can't happen to me!" is a common perception; accidents, including pregnancy, cannot occur. Elkind suggested that decentering is a necessary developmental change before an adolescent can understand the views of others or take on a sharing role in social situations.

According to maturationalists Gesell, Ilg, and Ames

(1956) the typical dream for the 15 year old girl is of independence from parental control and an eventual home of her own; the 16 year old imagines a romantic relationship. Neither girl is prepared, within these fantasies, to envision daily infant care burdens. Nor will the infant who fulfills the desire for "someone to love," remain passively contented as he or she develops from trusting infant to autonomous toddler. The infant's needs are constant-and often overwhelming.

The struggle for independence was seen as a part of adolescence by many developmentalists. Blos (1979) emphasized the importance of the peer group to adolescents. Although acknowledging individual differences among males and females, he suggested that separation from family is a crucial task that affects personality development. The 15-17 year old girl who is just beginning to separate from her parents is often forced to maintain dependence on them in order to meet both her own and her infant's needs for survival and economic support. In some cultures, the return to parental control leads to conflicts over infant care responsibility. At the very least, developing independence is thwarted.

Selman's research on adolescent development (1971), influenced by theories of cognition (Piaget, 1952) and moral thought (Kohlberg, 1963), evolved into a social cognition theory. Selman emphasized role taking as a key stage in

development, occurring when the individual understands self and can begin to understand the needs of others within the social system. Empathy is a key factor in meeting a child's needs: Selman suggested that empathy is beyond the capacity of the mid-adolescent parent.

Gilligan (1982), expanding on Kohlberg's theoretical perspective, focused on female moral development and responses to societal demands. Although she differed from other developmentalists in defining identity as a result of relationships, Gilligan concurred that adolescent dependency creates a situation that makes parenting difficult.

In addition to the work of developmentalists, a review of research of social learning theorists and cultural anthropologists can broaden the understanding of the adolescent parenting role. Bandura (1963) and Sears, Maccoby, and Levin (1957) recognized that independence and maturity, necessary qualities for parenting a next generation, are difficult attributes for the adolescent to attain. However, these theorists noted that competencies modeled and reinforced by parents, teachers and peers contribute to development of one's self-concept as a parent.

Benedict (1980), in studies of socialization into adult roles in selected cultures, felt that the parenting role is part of a gradual and continuous process affected by interaction with the environment. In our society, the

teenager is poorly prepared for the role, unless he or she has assumed care for younger siblings or neighbors' children. Increased tension accompanies sudden role discontinuity if the adolescent must suddenly conform to society's expectations of caregiver.

Table 1 (page 19) summarizes the major focus of selected theorists who have pursued an in-depth study of adolescence. The (*) indicates developmental expectations for the 15-17 year old female. The "greater than" sign (>) refers to expectations for the adolescent over the age of 17. Note the variance in self-view and the accomplishment of parenting behaviors for the mid and late adolescent periods. Based on analysis of the theories cited, it appears that the older adolescent is markedly more suited for the demanding role of mother than the younger teen.

Teenaged Parents

Research on the physical and emotional implications of adolescent pregnancy and the subsequent stresses of parenting is abundant, although few studies examine mothering competencies across developmental levels. Several recent reports on the adolescent parent are described in the following section.

Roosa, (1983) in a critical examination of parenting behaviors, found little research focusing on parenting capabilities of adolescents. Among the many studies of maternal attitudes, few compared early and middle

adolescents to older teens or adult parents. In an attempt to remedy this situation, Roosa studied non-pregnant adolescent girls, pregnant teens, and older expectant mothers. Using the Maternal Attitude Scale of Cohler, Weiss, and Grunnebaum (1967), no clear relationships or differences were identified in the parenting attitudes of the subjects. Roosa suggested that further comparative studies and research on adolescent parents' maturity, knowledge and values were needed before appropriate interventions could be planned.

Barth, Schinke, and Maxwell (1983) had multiple criticisms of early studies on adolescent parents that often lacked control groups or were based on broad assumptions. These studies focused on generalized problems of young mothers. For example, Babikian and Goldman (1971) suggested that poor ego strength and poor inner control were common attributes. The results of the research project of Barth et al. (1983) with 85 young women in varied settings suggested that economic and social factors affect the vulnerability of teen parents more than the pregnancy itself. In fact, they concluded that adequate support systems appeared to reduce tension significantly and often led to contentment with the parenting role. Recommendations focused on facilitation of support for adolescent parents as a first step in intervention.

Referring to Table 1, note that the developmentally

egocentric 15-17 year old girl may be loving and find satisfaction in daily infant contact. However, she is unlikely to understand the needs of an infant for adequate nutrition, safe care, stimulation, and nurturance.

With support and a developmentally appropriate teaching program, recent studies suggest that effective parenting can be learned by adolescents. Assessments of perceived learning needs have elicited valuable information from teenaged parents and can form the basis for intervention.

Howard and Sater (1985) asked young mothers to rank learning needs for self and infant care. The chief perceived need was for medical care for an ill child, and for information on available resources. The major psychological need was for information on ways to let the baby know he/she is loved.

In her most recent research, Mercer (1985) interviewed and observed teenaged mothers and their infants for the first year of life. Although competence varied, she reported a general sense of fulfillment among the adolescents.

Poole (1976) developed a tool based upon American Public Health Association Community Child Health guidelines. The questions, which elicit information on self-view and cognitive and affective aspects of parenting, have been incorporated in several maternity nursing texts.

In response to the obvious needs of adolescent parents

and their children, several national and local pilot programs have been initiated to resolve some of the many problems. Among the groups that have reached out to young parents are the Life Skills Training Groups, Parent-Child Centers, and the Parents Too Soon, the latter sponsored by the March of Dimes and the American Red Cross. Each of these programs uses education, modeling, and reinforcement to strengthen the maternal-infant bond and promote safety, nurturance, and competent parenting. Expansion of these programs and development of other innovative educational and support programs could provide valuable service to the mid-adolescent parent.

Implications for Research

In summary, the data in **Table 1** indicate that the average mid-adolescent demonstrates few behaviors of the competent parent. From the review of the literature, it appears that even though research on parenting is extensive, it rarely focuses on middle-adolescent parents. Ideally, studies should link developmental theory with parenting behaviors to expand the body of practical knowledge on adolescent care-giving.

In-depth studies of mothering should be replicated with a younger population. Interventions fostering "mirroring," have promoted am awareness of how to be emotionally "with the child" while retaining self-identity (Kohut, 1971;

Heffner, 1980). These have been effective in promoting mothering in adult women; they could be useful for the younger population (Carrilio & Walter, 1984).

Assessment tools that have been developed to measure attachment, nurturance, and availability could be more widely used to identify learning needs of the young parent. Comparative research between middle and late adolescent girls and adult parents might resolve certain questions about adequate parenting.

Other questions remain. Does modeling, suggested in anthropological and social learning studies, improve the care giving abilities of young mothers? Can nurturance be taught? Would group classes which combine teaching with support meet the needs of adolescent parents? Is there an approach that leads to more effective assessment and intervention, so that competent adolescent mothering and a sense of joyful accomplishment are achievable?

Packter (1979), in an address to the American Public Health Association, urged that a return to family nurturance and old-fashioned values could provide the solution to problems caused by teen aged pregnancies. This suggestion remains valid and unresolved. Thus, the ultimate goal of teen parent-infant programs is dissolution because the need ceases to exist! Until that time, those concerned about the well being of the infants of teenaged mothers must be advocates for learning programs, so that, given their

situation, these adolescents become the "best possible parents."

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CHAPTER THREE

UNDERGRADUATE NURSING STUDENTS' PERCEPTIONS OF ADOLESCENCE AND EARLY PARENTING: A PILOT STUDY[2]

Abstract

Nursing students often care for young adolescent mothers and their infants during the birth and post partum experience. While there may be little age difference, some appear to establish rapport more easily with young mothers. This pilot project explored the perceptions of adolescent parenting of a convenience sample (n=13) of undergraduate nursing students through surveys, interviews and interaction observation. Analysis of data indicated that most students recognized the young mothers' need to form a trusting relationship with the care-giver. Respondents with positive memories of adolescence acknowledged the need for a nurturing relationship with a child. Future research plans include replication with a larger sample of students and with nursing staff.

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Introduction

There is widespread concern among health care professionals about the increasing numbers of adolescent girls under age seventeen giving birth and raising the infants alone. During the brief hospital stay of 24-72 hours, nurses spend much time teaching parenting and infant care-giving skills. Nursing students are often assigned to such young adolescent mothers during the maternity nursing rotation. These students are close in age to their clients, yet the gap between them often seems very wide. Some nursing students are very effective in establishing rapport and developing a teaching plan for the young mother and her infant. Others have much difficulty relating to the adolescent parent.

Many studies in nursing literature focus on the relationship between the development of empathy and role socialization of the undergraduate nursing student. Comfort in use of therapeutic communication skills is acknowledged as a difficult transition for many young adult nursing novices who may lack extensive life experience (LaMonica, Carew, Winder, Haase & Blanchard, 1976; Baer & Lowery, 1987). Attitudes and values of the student influence rapport established with adolescent unwed mothers (Moser, 1987; Morgan & Barden, 1985). Thus promotion of student self awareness is a critical first step in learning to meet

needs of populations from different cultures and lifestyles (Jourard, 1971; Mc Holland, 1976; Garant, 1980; Krikorian & Paulanka, 1982).

The research question sought to identify what factors promote effective care-giving to the adolescent mother by the nursing student. It was hypothesized that there may be a relationship between the young adult student's experiences during his/her own adolescence and views of teen-aged parenting, that self awareness of the student's attitudes and feelings may influence interactions, and that perceptions of attributes of the "good parent" may affect the teaching of infant care giving skills to the young mother.

DeTornyay & Thompson (1987) emphasized the need to understand the learners' readiness and anxiety prior to clinical experiences. This pilot project explored the perceptions of nursing students towards adolescence and adolescent parenting in order to identify their learning needs. The qualitative approach was ideally suited for such a study, since it affords the opportunity to explore several dimensions of a unique student/client relationship.

The framework for this study was the psychosocial developmental theory of Erikson (1968). The establishment of a sense of identity is a critical task for the adolescent parent as it is for the development of a sense of professional role. Fullar (1986) emphasized meeting the

young parent's developmental needs prior to establishing a successful care-giving relationship. Competent parenting behaviors such as nurturing and responsiveness to an infant are developmentally appropriate for the young adolescent. However, other attributes of the "good parent," such as understanding a child's developmental needs, consistent availability, empathy, and realistic behavioral expectations are not attained until a later age.

According to Erikson, individuals in late adolescence and early adulthood are assumed to have achieved a sense of personal identity and be capable of empathetic relationships. These behaviors are seen as especially important to ensure that care-givers provide developmentally appropriate care for adolescent mothers and their infants (Jensen & Bobak, 1985). Wallhead (1986) urged faculty to understand the student's personal and professional development as a basis for effective clinical teaching.

Method

Sample

The convenience sample for this pilot study was comprised of thirteen undergraduate students in one midwestern baccalaureate nursing school. Seven students were in orientation to maternity nursing; six others had just completed the course and clinical experience. It was assumed that the sample would yield findings representative of the larger population.

Peripheral persons included seven young unwed mothers between the ages of fifteen and seventeen who were patients in the obstetrical unit of one community hospital. The students were assigned to care for these mothers.

Settings within the hospital included the post partum unit, the newborn and intensive care nurseries and the unit conference room. The faculty member's office at the university campus was the scene for interviews.

Survey questionnaires were simultaneously administered to two groups of students. Face-to-face interviews were conducted with four volunteers who had completed the clinical rotation, and observations of students' care-giving to adolescent mothers and infants were made for one group.

Measures

Review of existing tools measuring perceptions of nursing students revealed none appropriate for the study. Therefore, a tool was devised. Two experts examined the tool for content validity.

The tool consisted of an introduction, six questions and a demographic profile. It was administered in the conference room to two groups of students. A brief introduction informed the student that the purpose of the questionnaire was to focus on self evaluation as a part of the learning process and to increase awareness of specific strengths and strategies that might be helpful in working with one specific client population.

The questions were unstructured and open-ended to elicit self reported, in depth information. The questionnaire included discrete and related questions focusing on attitudes and feelings. One question directed the student to reflect on experiences between the ages of 15 and 17. Another item questioned the student's perceptions of the essential characteristics of a good parent. To determine reliability, two convergent forms of one question were included.

Following these questions was a brief case-study describing the situation of an adolescent mother. In this learning activity, students were asked to plan teaching based on their own prioritized values of parenting. This approach, identified by Foley & Smolanski (1980) and deTornyay & Thompson (1987) as an effective clinical teaching strategy to foster competence, allows the student to base critical thinking on personal attitudes and beliefs. It was hoped that consistency between prior responses and the plan for the young teen-aged parent would be evident.

The demographic data was placed at the end of the tool to maintain optimal objectivity. Limited information was sought to ensure students' anonymity. Questions were developed to elicit background factors that could influence attitudes, such as completion of a high school family life course or prior contact with adolescent parents.

Interviews with four volunteers who had completed the

clinical course were conducted on campus on one day. The purpose of these student interviews was to further explore the nature of the student/adolescent mother relationship. However, no attempt was made to identify the volunteer with the previously completed survey. This purpose was explained to the student preceding the interview. The twenty minute interview consisted of eight questions read aloud to the student. To minimize bias, no further intrusion by the faculty member occurred other than occasional question clarification. Responses to the semi-structured questions were recorded in writing during the interview.

The interview questions reflected the research problem and the developmental framework, focusing on one specific interaction between that student and an adolescent mother for whom he or she had provided care. The student was asked to reflect on initial feelings and the nature of the communication, such as teaching or listening to concerns. Each was then asked about his/her teaching of infant care to the young client. Infante (1981) emphasized the value of self-evaluation in learning professional accountability in the clinical setting.

Interactions between students currently enrolled in the maternity nursing course and adolescent mothers were randomly observed during the usual clinical activities of a seven week rotation. Seven different adolescent mothers were cared for by students during the study. Observations

focused on communication patterns, the relationship between the client and student and the approach used in the teaching-learning process during care-giving. These behavioral observations were not part of the course evaluation process.

The faculty member was the participant-observer. At the time of the observation, no attempt was made to model behaviors or to enhance the student-client relationship. The observer viewed each student/mother interaction for approximately five minutes; at least once the infant was present. Students were engaged in assigned care-giving or teaching in the client's room or were providing support to the mother in the nursery or the intensive care nursery. Notes were recorded immediately after each observation. The nature of the interaction was identified, for example, the teaching of infant care skills. The participant-observer's perceptions about rapport and communication techniques used were also recorded. It is acknowledged that the presence of the participant-observer may have affected the interaction.

Results

Data gathering took several weeks. Questionnaire and interview data were subjected to content analysis. Categories and codes were not established prior to the study, but drawn from the emerging data. Data gathering and analysis were an ongoing process. An initial summary sheet was used to focus survey and interview data.

Responses of all students to each question were compared. Categories were generated as responses were read, and then reduced as patterns became evident and concepts emerged. Using the constant comparative method, subsequent responses were matched with existing categories. As those categories became saturated no further concepts were identified.

Table 2 illustrates categories that emerged from two questions on essential characteristics of a good parent. Twenty-five different behaviors were identified. Caring, loving, and communicates were cited most frequently.

Memos were written during coding of data. These included notations on: the possible misinterpretation of a question, suggestions for a category change, and observation of emerging "positive" and "negative" themes. On review of these notes, patterns of responses to several questions were seen for each individual. For example, it was noted that one individual who reported no positive memories of adolescence identified no characteristics of a good parent. Another student who revealed negative attitudes toward adolescent parenting did not suggest any teaching strategies. Demographic profiles and responses were examined for possible relationships. No relationships between the demographic profile and responses were apparent.

Table 2.--Categories Based on Student Perceptions of Essential Characteristics of a Good Parent.

Emerging Category	Code	Representation
Emotional	Emot	All personal characteristics
Individual Developmental Relational	Social	All interpersonal relationships
Financial		
Physical	Phys	All care-giving/providing
Disciplinary		
Intellectual	Intel	All cognitive behaviors

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Triangulation methods were also used in analysis of data. A second expert was consulted to examine categories and codes. General concurrence indicated that thinking was logical and that categories were appropriate. Reference to additional literature on interventions with adolescent mothers validated the theoretical approach.

Table 3 identifies interventions based on prioritized attributes of a good parent. Those interventions which fostered nurturance were listed most frequently.

Verification and analysis followed the data gathering process, but were also ongoing because of the constant comparative method used throughout. The sampling unit, processes and events were as representative as circumstances

permitted. Patterns and clusters were identified for the within-site study. For example, there was consistency for individuals in response to questions on personal strengths, characteristics valued in a good parent and problem solving approaches suggested for the case study.

Strengths and weaknesses of specific survey questions were evaluated and ideas for revision noted. For example, responses to the question asking students to reflect on their own adolescence elicited some statements that focused on a self-view; others looked at family; a few identified important social activities at that time. This item was revised to separate internal and external factors.

Table 3.--Interventions to Assist the Adolescent Mother to Develop Essential Attributes of a Good Parent.

Intervention	Emerging Category
Communicate infant's need for love	Nurture
Urge her to develop trust with infant	
Develop trust initially	
Support mother	
Encourage relaxation	Encourage
Affirm positive behaviors	
Get financial help	Refer
Encourage her to seek help	
Demonstrate infant care	Teach
Teach growth and development	
Use media	

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In another question addressing attitudes, some responses described feelings. This question was revised.

Interview data confirmed patterns seen in written responses. Despite the time interval of two to three weeks between care-giving and the interview, memories for the client/student interaction were vivid for the four volunteers. In response to a question on the student's initial feelings towards the adolescent mother, statements included, "I felt insecure and awkward;" "I had negative feelings towards the situation;" " It was difficult to

communicate at first." Some students focused on self while others identified client behaviors.

Students' initial approaches to teaching varied. One student observed for a time before beginning to teach infant care; another asked questions; two stated they gave information. In evaluating the effect of learning on the adolescent mother's behavior towards her infant, students generally saw a positive result. Responses included, "I could see by the way she handled the baby and talked to him that she changed;" "She fed the infant correctly but still seemed overwhelmed;" "There was more understanding of how to be safe with the baby."

The interview questions were not revised, except to clarify the distinction between attitudes and feelings. It would be helpful to correlate interview responses with surveys in a future study. The student/mother observation notes were re-examined for patterns and focus. Because of the brief nature of these observations, categories and codes were not identified. However, the nature of the communication and general positive or negative perceptions were noted.

Three interactions between students and mothers revealed mutual involvement in active learning. During two observations very little apparent rapport was noted. Two interactions involved mother and student both meeting the infant's needs. Varied approaches were used by students who

supported mothers in the nursery and intensive care unit. One very quiet and gentle student appeared to convey warmth and concern, with the mother responding openly. Another student was enthusiastic and verbal, and involved the mother actively in care.

Discussion

The developmental framework was relevant for this study. Most students recognized the developmental need of the young adolescent mother to form a trusting relationship with the care-giver. Written comments and interview responses showed that some students focused on the young girl as an individual prior to beginning a teaching plan. Recognition of the young adolescent's need to achieve a sense of identity suggested that the nursing students had developed empathy.

Other theoretical frameworks emerged as significant to the research question. Communications and systems theory, with emphasis on feedback in teaching and therapeutic use of self is an additional logical conceptual base.

Interpretation

Possible conclusions can be drawn from the data in this limited pilot study. It appeared that responses were honest. Consistency was evident in examining trends for each individual. Those respondents who had good memories of nurturing relationships with parents emphasized the importance of love for the adolescent's infant.

Perceptions of effective communications and teaching showed insight. Reasons for seeing an incident as positive or negative were stated clearly and freely. Self-evaluation appeared to be more valid an interpretation of behavior than is commonly believed.

Suggestions for future research include examining whether there is a relationship between a positive experience with one's own parents and the student's ability to teach care-giving skills; whether a happy adolescence influences successful intervention with the adolescent mother; and whether the nursing student who views adolescent pregnancy as totally negative can be empathetic with the teen-aged mother? The research question could be refined to guide curriculum changes and suggest teaching strategies that better prepare nursing students to intervene with adolescent parents. Modifications of the case study might be used in the classroom or clinical conference to develop problem solving skills.

The future use of the survey tool, with revisions, has many research possibilities and curriculum implications. It would be helpful to administer the written survey twice (perhaps at the beginning and completion of the course) to identify patterns and growth in the professional role. Administration of the survey tool to nursing staff or randomly selected students in another setting would also ensure greater reliability. Interviews conducted

immediately after care-giving might elicit greater insight and self-awareness. However, bias must be considered if the interviewer also functions as evaluator. Using a third party as participant-observer would solve that dilemma.

The focus on nursing students' self awareness and empathetic care-giving with adolescent clients will ultimately benefit the children of young mothers. Even a brief care-giver/mother relationship during hospitalization may have long lasting effects on all involved.

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CHAPTER FOUR

CRITICAL THINKING RESEARCH AS A BASIS FOR MEETING NEEDS OF NURSING STUDENTS AND ADOLESCENT MOTHERS

Educational programs pay much attention to the issues and controversies surrounding the teaching of critical thinking and problem solving. The unique situation of the undergraduate nursing student demands both general and content specific thinking skills as a basis for safe practice. Educators guiding the development of novice nurses draw upon practice expertise and curriculum strategies from many disciplines. As nursing knowledge is further developed, attention continues to focus on the clinical decision making process. Teaching critical thinking for twenty-first century application is an integral part of the development of practitioners in nursing and other health care professions.

This chapter reviews critical thinking literature: definitions; the need to teach thinking and problem solving; assessments; teaching methodologies; outcomes; and the research applications for nursing education. Needs and

problems of adolescent mothers and nursing students are addressed throughout the paper; selected examples are integrated in this chapter. These provide the basis for subsequent curriculum module development.

Introduction

Early reflections on thinking are recorded in the works of the great philosophers. In the last thirty years, prolific research on cognition indicates a trend away from behavioral explanations for problem solving. Scientific studies of memory, neurophysiology of the brain, and information processing have led other scholars to examine the complexities of human cognition.

Educators, aware of this expanding knowledge base, attempt to incorporate learning theories based on problem solving into instruction through changes in programs, courses, and learning experiences. Consistent with this trend, curriculum in higher education is the focus of much current research. In higher education, as well as in primary through secondary schools, critical thinking has gained increased attention.

An extensive review of recent journal articles and research studies documents a lack of agreement among educators on the nature of critical thinking and problem solving and the strategies to foster such abilities. However, there seems to be general acceptance that such skills are essential in light of the current knowledge

explosion. Participation at the 10th Annual International Conference on Critical Thinking and Educational Reform provided exposure to the ground swell for curriculum change. Attendance by hundreds of educators, administrators, and philosophers attested to the intense interest across educational levels.

Critical Thinking Theory and Research

Definitions of Critical Thinking

Prior to identifying key components of critical thinking, the meanings of the terms critical thinking and problem solving must be clarified. While a vast number of research studies and scholarly papers about thinking have been published in current professional journals, and discussion of critical thinking consumes educators, agreement on basic definitions is lacking. This was evident at one university cross-disciplinary faculty seminar attended by the researcher. In a discussion of the need to stimulate students' thinking skills, an English professor defined critical thinking in terms of a literary critique; a philosopher operationalized critical thinking as analysis and separation of assumptions from theories; and a historian viewed the process in light of causes and effects. Several faculty equated critical thinking with clear and concise writing that integrated personal opinion with reality. Similar differences are seen in current literature.

There is a rich diversity of definitions of critical thinking and problem solving; the meaning depends on the frame of reference. However, whether the process is labeled problem solving, critical, or creative thinking, there is agreement among scholars that many of today's current students have a deficit in these skills.

Paul (1988;1990), a major contributor to the current critical thinking educational reform movement, firmly believes that an understanding of critical thinking derives from the study of philosophy. As an advocate for dialogue to stimulate mental growth, he values the enriched knowledge provided by multiple definitions of complex higher order thinking. While he identifies many characteristics of critical thinking, his condensed definition portrays the process as, "disciplined, rational, self-directed thinking that skillfully pursues the purpose for thinking within some domain of knowledge or human concern" (Paul, 1990 p. 397). From Paul's perspective, problem solving transcends models and rules with reflection, redirection of thought, and judgment. Creativity is seen as an integral part of the critical thinking process, as the individual uses imagination to envision many viewpoints.

Key ideas drawn from other definitions illustrate the many dimensions of higher order thinking. Siegel (1988) suggests that a critical spirit pervades thought, while Nosich (1990) views critical thinking as judgment suspended

while considering a problem's many dimensions. According to Meyers (1986; 1990), learners struggle to understand specific concepts within the context of each discipline.

Lipman's (1988) definition of critical thinking focuses on outcome. The individual recognizes a need to identify characteristics and connections in order to understand knowledge application. Skillful, responsible thinking is needed for evaluation and self-correction.

Initially Ennis (1985) described critical thinking as a judgement about the reliability and credibility of a source, followed by corroboration and generalization. This definition has subsequently been expanded to view critical thinking as reflective, reasonable, and based on thought (Ennis, 1985 p. 45). Van der Bogert (1985. p. 85) expresses the need to clarify what critical thinking is and how it may be facilitated and improved. De Bono (1985, p. 206) sees critical thinking as a habit of the mind, while Halpern (1985 p. 206; 1990) suggests that it is goal directed thinking that includes problem solving and decision making. Resnik (1987) and Pollard (1990) concur that introspection and judgment are necessary for critical thinking. Higher order thinking is viewed as very complex, yielding multiple outcomes.

Kurfiss (1988) describes the critical thinking process as one of investigating facts, reaching a hypothesis, and justifying conclusions. In a similar problem solving

orientation, Miller & Malcolm (1990) refer to clinical nursing judgments as critical thinking. To Ruggiero (1990), the evaluative quality of critical thinking complements creativity; combined they lead to holistic problem solving. This approach is consistent with viewing problem solving as a creative act within formal operational development (Piaget & Inhelder, 1969).

The many opportunities for problem solving skills' transfer are the major focus of Chaffee (1988, 1990). In his definition, resolving problems is integral to critical thinking, as one learns to view many dimensions of reality and reflect on the abilities needed to reach solutions.

Presseisen (1985, p. 45) views thinking as a complex process involving analysis and the development of insights and logical reasoning patterns. Through creative approaches, known facts may lead to generation of possibilities. Problem solving is seen as the basic process used to resolve difficulties, check facts, and reach solutions. Decision making selects the best response from many, as one weighs advantages and disadvantages. From the perspective of Hyde (1990), critical thinking is a natural extension of language acquisition and reading skill. Agreeing with Sternberg's (1983) encoding theory, the organization of thinking is analogous to comparing, contrasting, and recognizing word patterns.

The political elements of critical thinking are

recognized by scholars across cultures. In some groups, this thinking process may be liberating; for others it may be linked to power or to interrelationships within the social system (Villarini, Marcos, & Weil, 1990).

The ecological perspective, focusing on specific circumstances in context, is favored by Bronfenbrenner (1979). Critical thinking and problem solving are related to the individual's development of values at home, work place or school, and in relationships.

The discussion of definitions of critical thinking and problem solving provides a basis for identifying the many components of these processes. From the diversity of thoughts of philosophers, psychologists, ecologists, and educators, several commonalities emerge. For the purpose of this study, a synthesized definition of critical thinking/problem solving can be drawn from these varied perspectives, and will provide a basis for subsequent discussion.

> The active learner uses a content knowledge base and applies general skills to resolve real problems, make decisions, and form judgments. Continued growth in cognitive and affective domains depends upon ongoing reflection and self-evaluation.

Need to Teach Critical Thinking

Primary grade through university level faculty in this nation are increasingly aware that many learners think less critically than those of a decade ago (Benderson, 1984). Decreasing standardized test scores have stimulated the development of critical thinking workshops and courses. Some states require incorporation of analytic skills into every subject, while others, including Canadian provinces, mandate general critical thinking courses for all college students. There is consensus that thinking skills should be taught; however there is no agreement on the best approach to use.

A clear division exists between the strategies advocated by contemporary scholars. Philosophers emphasize logical thinking, analysis, and affective growth, while educational psychologists draw upon research findings and learning experiments. Each group is drawn to newly formed associations and journals that promote critical thinking. A third group, the teachers of writing skills, recommends the stimulation of thinking through carefully planned written assignments. While the College Board has not endorsed any one approach to cognitive development, its directors stress the importance of reasoning for success in college. Among the behavioral outcomes seen as ideal are the ability to identify, form and solve problems, recognize and use inductive and deductive reasoning, draw and defend

conclusions, and use concepts (Benderson, 1984, p. 16).

Paul (1990) sees an urgent need to teach critical thinking in our changing world. Agreeing in principle, Costa (1988; 1990) believes that this time of great transition requires new delivery methods to teach goal-directed critical thinking. Broad objectives suggested for the next decades include promoting harmony with the earth and facilitating achievement of each learner's fullest potential.

In the real-life situations of adolescent mothers and their nursing student care-givers, complex thinking is required. **For example. the very young mother must learn to care for her infant's basic needs, understand the impact of nurturance on the infant's trust development, and problem solve when the infant's health is altered. The nursing student interacting with the young family must listen attentively, perceive problems, possess self-awareness of the impact of care, and use appropriate communication techniques to meet client needs.**

Assessment of Critical Thinking Abilities

In order to better prepare young students for higher academic studies, the testing of critical thinking has become both a component of education and a lucrative service. Norris (1985) compares the Watson-Glaser Critical

Thinking Appraisal, (WGCTA), developed in the 1940's and widely used today, to other multiple choice tests of thinking. He concludes that, while college attendance appears to improve critical thinking scores among individuals who are re-tested, further research into predictive relationships is needed. Such research, including extensive testing of undergraduate nursing students (Miller & Malcolm, 1990), has led to refinement of the WGCTA (Paul,1990). Ennis (1985) concurs that translation of test scores into actual ability is not well documented, but suggests that assessments such as the Ennis-Weir Critical Thinking Essay Test enhance understanding of the thinking process.

Observations of learners give clues to thinking patterns. However, this method requires much time and the presence of an objective observer who is not the teacher. Several new observation methods offer a simplified assessment process using bar codes to record classroom interactions.

Self-reports often provide additional information about critical thinking. Interviews, survey tools, and combined methods are useful in gathering data on perceptions of one's problem solving skills. For example, **an adolescent mother may be asked to share her understanding of the infant's needs and discuss how these needs are met in a typical situation. The nursing student may share insights in**

dialogue with other students and faculty, leading to resolution of common parenting problems.

Teaching Methodologies to Stimulate Critical Thinking

Strategies suggested for teachers have varied with the theoretical framework used and beliefs held about cognitive development. As there is little agreement on the definition of critical thinking or the best approach to testing the skills, it follows logically that teaching interventions to foster problem solving in the twenty-first century are diverse.

Historical Perspectives

The Socratic approach employed by Greek philosophers, provides the basis for some current teaching methodologies. Teachers are encouraged to stimulate thought, generate questions, and dialogue with learners (Paul, 1990; Ruggiero, 1990; Pollard, 1990).

Followers of Thorndike and those who adapt some of his methods, such as Costa (1988), envision the teacher's role as helping students see connections. Piagetians theorize that learning occurs with conflict resolution at ordered stages of cognitive development. While this research has provided much data on the thought process, lack of educational application limits its practical value.

Neo-Piagetians advocate instruction that promotes

transition to the next developmental level, while social learning theorists believe that environment, peer groups, teaching, and modeling impact on problem solving abilities. Vygotsky (1978) and Costa (1988) concur with these two groups, placing value on formal teaching and mentoring to facilitate transformation from novice to expert.

The current emphasis of McKeachie (1989) is on qualitative change as the learner adds to the cognitive schema. He urges teachers to construct situations that enable students to understand relationships.

Information processing research currently focuses on attention, memory, perception, expectancy, and teaching strategies to enhance these factors (Resnick 87). Enhanced understanding of the unique functions of brain and mind may lead to exciting educational innovations.

General and Content Specific Approaches

In a discussion of varied educational approaches to stimulate problem solving, Ennis (1989) identifies four emerging designs. These include the identification of a general logical thinking thread; the infusion of critical thinking into subject matter or a domain, as advocated by Glaser, Resnik, and Paul; the immersion approach advanced by McPeck; and a mixed approach now identified with Ennis and Sternberg. Each of these methods has value in specific situations; none addresses all learners' needs. Among the several recent trends, two major approaches to instructional

design are most widely accepted; which is more effective is hotly debated.

The advocates of general thinking skills as a separate curriculum component focus on the exercised mind, believing that the study of Latin, higher mathematics, or chess leads the student to discover the key to successful transfer in other fields. For example, emphasizing problem solving with adolescents and their peers may provide the strategies needed to resolve many situational conflicts. Lipman (1988) has developed such a general program that emphasizes philosophical inquiry, reading, listening, reasoning, and communication. Beyer (1990) reflects on the nature of philosophy as both a subject and a method of thinking; several concepts provide relevant guidance in teaching critical thinking across disciplines. These concepts include reasoning, critical judgment, dialogue, and a disposition to seek the truth.

DeBono (1984) prefers critical thinking courses that cross subject areas or may fit into specific content such as English. His CoRT program provides such a broad perspective on creative thinking.

Costa (1990) stresses internal mental searching and rehearsal within the active learner. He encourages teachers to stimulate critical thinking by using stories to illustrate reality based dilemmas and solutions. Chaffee (1990) approaches the teaching of critical thinking through

increasingly complex problem solving activities.

Contrasting views are currently held by those who firmly believe that critical thinking is solely content specific. While the chemist who has learned scientific inquiry in that field may apply similar approaches in environmental science, critical thinking is specific within the laboratory or theoretical setting. Norris (1985) believes that content is applied in resolving problems; thus knowledge, experience, and common sense combine with thinking skills. Many other scholars concur; an individual cannot develop problem solving skills outside of a specific context (Benderson, 1984; Tyler,1949). Miller & Malcolm (1990) agree, noting that health care professionals must learn content specific critical thinking.

Perkins and Salomon (1989), tracing the research trends over the past thirty years, acknowledge that teaching specific skills as part of content appears to enhance transfer. However, they disavow the belief that general and content specific knowledge approaches to teaching/learning are mutually exclusive. Whimbey (1984) sees the key to thinking within each subject, yet favors separate thinking skills courses to teach comprehension, relationships, and analysis.

While Paul (1990) endorses the infusion of critical thinking into a discipline's subject matter, as a tool to understand content, he values general reasoning courses as

well. More importantly, he urges faculty to change from didactic to dialogical approaches that foster critical thinking. He urges faculty to work together to affect reform that facilitates learners' development.

A combination of content-based and general critical thinking skills may be needed in every day situations. For example, **an adolescent mother must have a basic understanding of early infant development, behavioral variations, and nutrition. The nursing student providing care to these young girls must draw upon content knowledge in nursing and related courses, think about knowledge applicable to the situation, prioritize and make decisions.**

Other Emerging Trends

A very recent shift to general approaches with self-monitoring, as in currently successful reading programs, appears to hold promise for improved knowledge transfer. Such general thinking skills are viewed by Perkins and Salomon (1989 p. 23) as analogous to "gripping devices" used to retrieve domain specific knowledge, with the goal of educating minds rather than exercising memory.

Artificial Intelligence research contributes to educational psychologists' understanding of cognitive processing, and remains the focus of current study (Perkins & Salomon, 1989). However, philosophers caution against the tendency to operationalize thought as a set of procedures

(Paul, 1990).

McMillan (1989) summarized current programs, studies and strategies in a research analysis. He identifies a need to further explore the specific nature of thinking skills and to examine problem solving strategies, test results, and interventions.

Specific Strategies to Enhance Critical Thinking

A variety of teaching approaches have been suggested by individual scholars. Tyler (1949) and Bruner (1960) stress that a wide range of learning experiences may enhance thinking within a content area. Although instructional methodologies differ, both suggest that educators look at continuity, sequencing, and integration while creating learning activities that simulate reality.

Many innovative programs are available to stimulate students' thinking abilities. Among the model projects which have drawn the attention of educators and researchers, several have been quite successful. One program, **Project SOAR**, has been implemented with pre-medical and pre-dental students with highly positive results at Xavier University, Louisiana (Benderson, 1985, p. 23).

Case (1978) advocates the teaching of simple to complex problem solving strategies with computer assisted instruction. Interactive computer programs such as those used in medical education have been of immediate use to student physicians. Present and future clients benefit

through more skillful diagnosis and problem solving.

Many curriculum specialists and educational psychologists suggest specific learning experiences for classroom use. For example, debriefing allows students to reflect on learning and attach meaning through discussion. Use of logs or journals and role play are effective to evaluate beliefs, values, and biases (Raths, 1987; Paul, 1990). In addition to these strategies, Ruggiero (1988;1990) has developed **Mind Building Lesson Packs** designed to facilitate teacher led discussion of learners' insights. Costa (1984) suggests metacognitive strategies in which students share problem solving progress, evaluate thinking, focus on relationships, and take credit for accomplishments.

Sadler (1987) urges teachers to actively involve learners, teach communication in all courses, and avoid overloading with information and testing fact recall. Costa (1990) recommends that teachers become more involved in curriculum and instructional design, and use creative classroom approaches. Benderson (1984) challenges researchers to change focus, so that educators can explore alternatives in light of long term effects. Teacher preparation methods used in the past must be altered to meet current needs. In the interim, he suggests that teachers select from the many excellent critical thinking materials available today.

The use of case studies allows teachers to model metacognition, sharing the problem solving approach (Costa, 1985). Demonstration of higher order cognitive skills may stimulate learners' thinking. Posing questions that require complex reasoning, focusing on outcomes of thinking, and structuring the environment for optimal learning are seen as effective teaching approaches.

In addition to advocating the Socratic approach, Paul (1990) values peer learning, a concept that has been widely studied at all educational levels (Johnson & Blair, 1983; Rogoff,1982). The resources within the environment and the sharing process enhance learning. As with Bronfenbrenner (1979), the situation (context) greatly influences learning. The social interaction also broadens learners' understanding of the larger community and their own unique interactive role (Vygotsky, 1986; Johnson et al, 1984; Johnson & Johnson, 1987; Radebaugh & Kazemek 1989).

McKeachie (1989) suggests that peer learning activities might include asking students to think about how they resolve a specific content problem. Alternatively, the teacher may solve a problem and describe the process of thinking and rethinking.

Examples of peer sharing are evident in many contexts. **Facilitator-led adolescent parenting groups incorporate peer learning and support to help individuals cope with the situational stressors of daily responsibility for an infant.**

young adult nursing students benefit from peer sharing as they critique successful problem-solving interventions under faculty direction.

In summary, contemporary educators agree that there is a pressing need to teach critical thinking at all levels. The proliferation of assessment tools suggests that the educational reform movements have created a market for objective and easily administered tests. Controversies remain as to the most effective approaches to foster critical thinking. Philosophers continue to encourage reflection and dialogue as a methodology; psychologists, educators, and ecologists suggest varied approaches to stimulate problem solving abilities. Current research focuses on teaching general critical thinking skills, infusing critical thinking into content areas, and combined methods. Innovative programs designed to foster active learner involvement continue to proliferate; each must be further investigated to identify the most effective methods.

Desired Outcomes of Teaching Critical Thinking

The desired outcome of teaching for critical thinking varies with the orientation of the researcher. The goal may be to produce an active learner, with a positive attitude, who displays concern for facts and accuracy, and can break complex problems into parts (Whimbey & Lockhead, 1982, 25-

27); or a scholar who asks and answers questions, uses analysis to explain ideas, comprehends and integrates advanced knowledge, and is aware of relationships. To Sternberg (1983), among the desired training outcomes are reflection on thought processes and knowledge based action.

In the view of Chaffee (1985), the expert thinker organizes information well and is highly perceptive and attentive to problems. A sense of the world enlarges through awareness of both personal and others' thinking. Glaser (1984) distinguishes between the novice and the expert problem solver on the basis of memory, the ability to make abstractions and to regulate one's own thinking process through altered cognition.

Paul (1990, p. 14) envisions the ideal outcome of well developed critical thinking skills as the ability to ground action in reason. Particularly valued are such attributes as clarity, accuracy, and fairmindedness. Ruggiero (1988; 1990) views the ultimate outcome of teaching critical thinking as enabling the individual to evaluate beliefs, values, and attitudes. Insights gained should lead to strengthening those values identified as worthy and changing those that cannot be supported.

Desired outcomes often demand multiple behaviors. For example, **critical thinking for the adolescent mother might be evident in active discussion following use of self-selected media on infant safety. Demonstrated ability to**

problem solve and ensure the infant's safety during handling are desired outcomes. For her nursing student caregiver, acknowledging the adolescent mother's strengths and limitations and learning reality-based problem solving could lead to planning, implementing, and evaluating a developmentally appropriate patient teaching plan on safety.

In summary, the discussion of critical thinking theory and research suggests application to varied programs and courses. Optimal learning outcomes vary with the expert's frame of reference, educational level, goals, content area or discipline, and problem-solving context.

Critical Thinking in Nursing Education

"If caring were enough, anyone could be a nurse!" (Recruitment slogan, 1990). This challenging statement introduces a creative public service television spot for nurse recruitment. The subsequent scenario leaves a profound impact. The viewer can have no doubts that nursing practice is complex and requires high level thinking abilities. This conclusion is confirmed in the nursing literature base. Critical thinking is viewed as an essential component of comprehensive client care, especially as traditional caring is combined with technologically complex judgments and interventions. To enhance understanding of nursing decision making, professional role development; teaching methodologies that promote problem

solving; and the nursing process as a problem solving method are discussed.

Professional Role Development

Research on professional role development blends theories of cognition and nursing into a reality based clinical focus, with the ultimate educational goal delivery of competent care. As nursing students begin the transformation from novice to expert, the sciences and humanities provide the knowledge base. Upon this broad support, general and specialty nursing courses and clinical learning experiences expand the framework for professional growth. While overload may occur, educators recognize the need for content depth for subsequent learning transfer and application.

Standards set by the National League for Nursing, the professional program accrediting body, include a critical thinking behavioral outcome (NLN, 1989). Nurses need the educational preparation to problem solve in realistic situations. They must learn critical thinking skills in a classroom setting as a first step in assuming the professional role (Holbert & Thomas, 1988). Nurse Educators are encouraged to teach innovative approaches to problem solving, basing strategies on individual learning styles.

Benner's differentiation between the novice and expert nurse leads to many practical suggestions for educators. Novice nurses with minimal health care experience benefit

from use of models or rules transferred from context-free learning. Since content knowledge is limited initially, critical thinking skills must be emphasized in the clinical setting so that the student begins to perceive, interpret each unique situation, and provide competent care. Faculty should assist the beginning practitioner to gain insight into problem solving abilities and knowledge transfer from one clinical setting to another (Benner, 1984). One approach may be through dialogue and case study analysis.

Reed (1983) sees the need for the nurse to develop executive problem solving skills to foster conceptualization of the whole problem. The ability to see beyond the present and visualize future consequences occurs with role socialization. As the individual concurrently develops as an adult, egocentric behavior is replaced with empathy.

Both professional and personal growth contribute to expanding clinical competence. For example, **the student providing care to an adolescent mother draws upon personal characteristics and experiences in an attempt to see the world from the client's unique perspective. Communicating empathy while teaching or supporting is highly therapeutic for the young parent and satisfying to the novice caregiver.**

Teaching Methodologies to Promote Critical Thinking

The expectation is that independent learning follows basic baccalaureate preparation as the generalist. Billue

(1988) and Heims & Boyd (1990) suggest that concept learning facilitates this process in the present knowledge explosion. The faculty role blends presenting content, identifying critical thinking approaches to specific problems, and modeling attitudes. The learner is actively involved in continued professional growth and self actualization.

Saylor (1990) recognizes the need for critical thinking and reflection in nursing practice. Faculty are urged to teach students to think about the knowledge needed by the competent practitioner and to evaluate their own thinking while planning and providing care. In addition to teaching metacognition, strategies that improve reading comprehension and study skills enhance problem solving abilities (Worrell, 1990).

The nursing literature contains some research reports on approaches to teaching critical thinking in specific content areas. However, there are few widely available tools to foster clinical decision making. Several new computer and video simulations enable students to identify problems, make choices, and see possible outcomes. These may be increasingly helpful to beginning students who encounter multiple challenges and often doubt their abilities as decision makers (Jenkins, 1985; del Bueno, 1990).

The Nursing Process as a Basis for Problem Solving

Klaassens (1988) suggests that the nursing process, a systematic approach to problem solving widely used in clinical settings, provides a framework for developing higher order thinking skills. With a goal of improving client health, the nurse collaborates in phases from assessment to evaluation in resolving problems.

The difficult challenge of teaching problem recognition and measuring resolution faces all clinical faculty. Benner (1984) views the nursing process as an especially valuable teaching tool for the novice. As the faculty present guidelines and cues, the learner begins to view clients in context, ideally from a holistic perspective. With increasing competence, the nurse transcends the framework.

Gordon (1984) sees models as similar to "training wheels, most useful until skills are refined" (p 243). Such tools, including the nursing process and standards of care, are models of reality, and serve to direct those with limited experience. The author warns against viewing models as a separate entity; they are no substitute for knowledge.

Many research articles examine the relationship of the Nursing Process to clinical decision making. Jenkins (1985) suggests that such decisions are very complex because of the vast data comprising a patient profile. Miller & Malcolm (1990) focus on the development of clinical judgment

throughout the nursing curriculum, while Itano (1989) compares the clinical judgment among registered nurses and students.

The analysis phase of the nursing process has been the subject of recent intensive study. From assessment data, the nurse matches selected actual and potential problems with diagnostic categories, nursing diagnoses. Using clinical judgment, nurses prescribe measures within the scope of professional practice that are designed to restore or improve function. (Kim, McFarland & McLane, 1988).

With renewed emphasis on health promotion and problem prevention, classification has been expanded to include nursing diagnosis categories for wellness (Houldin et al,1987; Stevens, 1988). While some of these are not as yet approved by the North American Nursing Diagnosis Association, the national professional body charged with classifying causes and characteristics of actual and potential problems, acknowledgement of client strengths is especially useful for nurses practicing in settings where individual coping mechanisms and family dynamics contribute to health.

Promotion of health requires critical thinking in daily nursing practice within the maternity setting. For example, as a nursing student individualizes care for an adolescent mother, a parenting role model within her support systems may contribute significantly to the client's

learning. A teaching plan acknowledges these potential strengths as the student considers the broad perspective, dialogues with the adolescent and her support person, and uses peer learning strategies. A standardized nursing care plan could be a useful resource; however, the student must transcend the text book case, based on insights into the client's unique situation.

Summary

Within this chapter, critical thinking research findings and theory provided an extensive knowledge base. Definitions were listed and compared; the need to teach critical thinking was identified; assessments were discussed; teaching methodologies suggested by past and contemporary experts were reviewed and desired outcomes were identified. Essential components of critical thinking have been suggested from diverse sources. Drawn from the varied body of literature reviewed in this chapter, and from the synthesized definition suggested by the researcher, key components of critical thinking for this study were identified as:

1. **Active learner involvement**
2. **Application of specific content knowledge**
3. **Use of general thinking skills**
4. **Resolution of real problems**

5. Decision making

6. Judgment formation

7. Ongoing reflection

8. Self-evaluation

9. Delivery of competent nursing care, within the nursing process framework, by the undergraduate nursing student to an adolescent mother.

Application of critical thinking to the unique developmental and educational needs of nursing students and adolescent mothers has been suggested throughout this chapter. This leads to the development of the **Adolescent Parenting Curriculum Module** presented in Chapter Five.

CHAPTER FIVE

DEVELOPMENT OF THE ADOLESCENT PARENTING MODULE BASED ON A CRITICAL THINKING FRAMEWORK AND TYLER'S CURRICULUM PRINCIPLES

Development of an Adolescent Parenting Module that builds on the strengths, meets the needs, and resolves selected problems of nursing students and adolescent mothers was influenced by many factors. These included: critical thinking research and theory; concepts of personal and professional role development via the nursing process; Ralph Tyler's curriculum principles; and consultation with the scholar during one semester of independent study. The **Adolescent Parenting Module** was designed to modify one component of a maternity nursing course; one course among many preparing the generalist nurse. The nursing program for which the module is planned, a midwestern baccalaureate school of nursing, exists to prepare educated persons who practice nursing.

The development of the unique curriculum module which follows is one approach to fostering nursing student problem solving. While the learning experiences are specific to one clinical setting, concept understanding and knowledge transfer contribute to professional role development across clinical courses. Insight developed through reflection on positive care outcomes could affect professional identity and self-actualization.

Introduction to Tyler's Curriculum Model

Tyler (1949) views curriculum as an organized plan to match present and future needs of both learners and society, the knowledge to be mastered, and the goals of the educational institution. His model, developed at the University of Chicago in the 1950s, was based on earlier theories of Thorndike and Gronlund. It has been widely used for curriculum planning, and remains viable for developing twenty-first century nursing education programs. The key elements of the Tyler approach are briefly summarized in the following section. This model forms the framework for the **Adolescent Parenting Module.**

Prior to or concurrent with planning, Tyler challenges curriculum builders, ideally faculty involved in daily classroom instruction, to ask and answer several broad questions about the program's unique features. By systematically addressing each broad issue, the educator

tailors the design or revision to fulfill a specific need. Throughout the process, equal weight is placed on the emerging plan and the instructional methodology used to implement the curriculum.

Throughout his curriculum guide (Basic Principles of Curriculum and Instruction, 1949), Tyler emphasizes the uniqueness of: the learners, the contemporary social situation, and the educational purpose. These provide clear direction to planners. The primary curriculum guide is the school's philosophy, the program's essence, which serves as a screen for goal setting. Equally important to Tyler are theories and research from learning psychology and other disciplines. These guide faculty in identifying desired behavioral objectives and in organizing content. From these theories and goals emerge learning experiences designed to meet the learners' special needs. These needs include `gaps' between what is and what should be (Tyler, 1949,p.8). Ideally such learning experiences facilitate goal achievement in an active learner who incorporates past experiences and personal strengths into the pursuit of knowledge. The teacher's role includes structuring the situation so that interaction with the environment leads to learning.

In Tyler's design, concepts may evolve from simple to complex; or serve as an integrating framework along horizontal and vertical threads. Ongoing evaluation is

essential to appraise the effectiveness of the program or unit.

In summary, development of the **Adolescent Parenting Module,** based on critical thinking research, follows Tyler's principles in this sequence: 1. Learners' attributes; 2. Studies of contemporary life (the problems and needs of adolescent mothers); 3. Education as a means to meet selected learner needs; 4. Maternity nursing content; the knowledge base for module development; 5. School's philosophy; 6. Application of selected learning theories; 7. Goals and learning objectives; 8.Content; 9. Learning experiences and 10. Evaluation. Each module segment is expanded upon in detail.

Adolescent Parenting Curriculum Module

The **Adolescent Parenting Module** took into consideration knowledge of learner attributes: a description of the typical undergraduate nursing student, cognitive, psychomotor, and affective attributes; studies of contemporary life; education as a means to meet selected learner needs; maternity nursing content; the school's philosophy; Tyler's learning theories; goals and objectives; maternity nursing content; learning experiences; and evaluation. These follow Tyler's suggested approach to curriculum design and revision.

Learner Attributes

The Undergraduate Nursing Student

In the nursing program, as in every discipline, the learners' needs provide direction for curriculum plans. During undergraduate study, post secondary students learn the essence of nursing, and narrow the gap between novice and competent care-giver. The pursuit of excellence extends beyond graduation and entry into professional practice. If a learner specializes in an area such as maternity nursing, intensive orientation, continuing education courses, or graduate study may be required.

Students enrolled in a baccalaureate nursing program complete the usual university core curriculum and basic courses. Sciences, humanities, nursing role, and concept courses provide a knowledge base. During the first semester of the junior year, there are many intellectual and emotional challenges that accompany the first clinical rotation. As students "take" one of four age group courses (nursing of children, mothers and newborns, adult medical surgical patients or the elderly) their knowledge base is expanded.

In the program for which this module is designed, the major curriculum concepts, Person, Adaptation, Health, Environment, and Nursing form an organizing framework. Sub-concepts, such as development, flow from each major concept. These are expanded upon and reinforced within

clinical courses. During each seven week clinical course, learning experiences place the student in direct contact with clients in hospitals and clinics. Developmentally appropriate health teaching is emphasized in every setting. Some students find the transfer of basic knowledge very challenging, while others have problems applying earlier learning in novel situations.

Novice students experience various degrees of comfort communicating with and assessing patients, and implementing basic care. During the seven week maternity nursing course, students are expected to learn basic content and clinical skills unique to childbearing. While some individuals may gain additional experience providing care for mothers and infants during senior community health experiences or the synthesizing professional role development course, all are expected to function proficiently in this basic course. Despite the novelty of care-giving in the initial clinical courses, students must meet specific behavioral criteria established by the school, state and national accrediting bodies and professional organizations.

Each learner enters junior year with unique life experiences and personal attributes. Thus, some behavioral, thinking, and valuing outcomes of the program, course, and instructional unit may differ slightly as learners achieve learning objectives. Examples of some entry level variations include cognitive, psychomotor, and affective

characteristics. These are consistent with Tyler's descriptions and the school's behavioral objectives. Recognizing the holistic nature of an individual, some behaviors overlap.

Cognitive Attributes

The composite profile of contemporary junior nursing students includes many factors that may influence cognitive abilities. The impact of intelligence and health are difficult to measure. Differences in other areas may be evident to teachers and learners. These include learning styles, developmental levels, support of significant others, and individual strengths and problems. Contributing to the cognitive structure is the knowledge base formed through life experience and classroom learning.

Some nursing students are operational thinkers, have insights into own learning style and problem solving abilities, and reflect on the past while envisioning possibilities. Others actively explore and use resources through dialogue with faculty, peers, or tutors. Varied abilities to organize content, apply knowledge, express self with clarity, and think critically are evident among contemporary undergraduates.

A richly diverse ethnic and cultural heritage typifies today's student population. Within groups, family and friends may or may not value and support higher education. Creative stimuli of teachers and personal motivation may

significantly influence cognitive development, but are difficult to assess.

Learners' developmental levels often range from late adolescence through middle adulthood; those in transitional life periods are often quite vulnerable. The impact of limited economic resources either challenges the learner to creative problem solving or delays the beginning of career preparation. Thus, some students enrolled in a typical maternity nursing course are `on time' with educational goals, while others were employed until educational resources were sufficient.

It is common for some nursing students to live off-campus and to work extensively after classes to support selves and family. Others live in a dormitory, studying and sharing clinical anecdotes with nursing student roommates or liberal arts majors. Study time must be carefully budgeted.

Among the students who may experience learning difficulties are those for whom English is a second language, individuals with learning disabilities, and students with poor reading skills. In any sample of learners, a mix of abilities, strengths, and problems exists. Additionally, the ratio of women to men remains disproportionately high when compared to the general population.

Psychomotor Attributes

Psychomotor skill differences exist among beginning students. For some, employment or volunteer activities have afforded care-giving opportunities. Contact with individuals or groups across developmental levels at home or within a work setting influences communication abilities. Within the maternity nursing course, those students who have children, younger siblings, or child-care experience initially seem to be comfortable handling infants and teaching new parents.

Personal self-confidence also influences the performance of clinical skills. For some learners, discomfort in hands-on care-giving may be related to culture, knowledge deficit, or low self-esteem.

Affective Attributes

Differences in the affective domain are influenced by variables such as development; relationships with family, friends, and teachers; and feelings about self (in each context). Seeing and valuing the greater environment and acting upon those values, characteristics of a mature citizen, may be evident in the behavior of some students. Spirituality may be an important dimension of life; for some students, a call to service provides both career choice and personal motivation.

Highly personal and difficult to measure are those

characteristics that contribute to personal development. Emergence of a value system may follow reflection on beliefs, attitudes, and feelings. Increasingly satisfying reciprocal relationships with patients may lead to incorporation of values inherent in caring into one's personal and professional identity.

As learners develop empathy, they often gain insight into the impact of care-giving. Trust, autonomy, and identity are continually redefined; the degree to which developmental crises are resolved affects the ability to be empathic.

Patterns of stress management affect the nursing student's ability to turn from personal needs to needs of others. Some individuals balance multiple roles and relationships in ways that result in excessive demands, affecting all learning domains. All contemporary students must adapt to rapid societal change in a critical historical period. In addition, the complex stressors of professional nursing education and demands of clinical preparation and practice can be overwhelming. The presence of effective role models among practitioners and faculty may facilitate coping during role transition.

Communication patterns reflect development in cognition, skills acquisition, and awareness of own value as a person and a professional. While some communication styles emerge with personality, others are shaped through

interactions, or observation of positive role models. Therapeutic communication techniques are learned and refined in each nursing course. Beginning maternity nursing students display dissimilar ease and sensitivity in applying these skills.

Summary

The wide range of cognitive, psychomotor, and affective learner characteristics incorporate both strengths and limitations. Acknowledgement of individual differences suggests goals and learning experiences to resolve nursing students' problems and needs as they begin to care for one specific client population, adolescent mothers.

Studies of Contemporary Life

The social setting/environment is a valuable resource for planning curriculum and selecting objectives that fulfill the school's purpose. Many problems of adolescent parents, identified in Chapter One, are suggested by morbidity statistics, current research, and local and federal projects. Chapter Two described the developmental problems and needs of adolescents as they begin to take on a parenting role. While some needs of the adolescent mother and her infant must be met within the family or through social agencies, it is assumed that teaching and role modeling by nurses will have a positive impact on early parenting behaviors.

The nursing student, within the clinical component of the maternity course, provides care for adolescent mothers. Chapter Three, a pilot study, described students' perceptions as they interacted with these young clients. Students identified opportunities to enhance the adolescent's sense of identity and transition to a mothering role.

As students' learn and apply critical thinking strategies to resolve client problems, parenting skills are fostered in the adolescent and trust is enhanced in the infant. Thus learning experiences within this module for the novice nursing student expand beyond the present health care situation to meet the needs of the future.

Education as a Means to Meet Selected Learner Needs

Expectations for fulfilling the educational purpose within this course module are realistic in both allotted time and clinical opportunities. Subsequent clinical learning experiences with developmentally diverse clients provide additional possibilities for knowledge transfer. Communications and teaching/coaching abilities are refined across clinical courses.

Specific cognitive needs are met through course and module content. Opportunities for identifying and resolving realistic problems abound. Issues and dilemmas facing adolescent parents lend themselves readily to dialogue. A psychomotor activity, such as learning to handle an infant safely, is reinforced through demonstrating such care to a teen-aged mother. There is rich opportunity for affective growth as the student confronts and reflects upon own feelings, attitudes, and values during and after an interaction.

Interpersonal skills transcend all domains. Learning to communicate effectively is an integral part of care-giving to all new parents. Therapeutic communication is especially important in working with a vulnerable adolescent who, afraid and overwhelmed by her lack of experience, is hesitant to verbalize these feelings.

Providing care to someone whose life situation is very different presents many challenges. Empathy developed in

this context may transfer to other care-giving situations. Learning to foster a sense of trust in an adolescent mother is often an unforgettable and rewarding experience.

Maternity nursing content base for module development

Maternity nursing is one component of undergraduate nursing education. Learning experiences within the course and module may be sufficiently stimulating to lead to future specialty practice or research. For most, who will not practice in a childbearing setting, this basic theory and clinical experience provides knowledge essential to fulfilling many critical outcomes or terminal objectives. Upon completion of the course, the student should be able to successfully respond to content questions on the national licensure examination, transfer concepts to care of other client groups, and appreciate the powerful influence that nurses have on childbearing across systems. As the student fosters parenting abilities in young clients, he or she may begin to realize the complexity of family life. Subsequent effective nurturance of own children is a potential behavioral outcome.

As with all baccalaureate nursing programs, curriculum design is influenced by content experts and standards set within and outside of the school. Within the program, content experts contributed to course development across several dimensions. The school's maternity nursing course

was developed by a committee of nurse educators with content expertise at undergraduate and graduate levels. The course objectives, content prototypes, and selected learning activities are consistent with the broad curriculum framework and goals. The **Adolescent Parenting Module** objectives flow from course goals. Content expertise directs development of this module.

Standards set by the American Association of Colleges of Nursing (1986), including such behaviors as demonstrated proficiency in communicating, and intermediate level skill in health teaching and problem solving, also influence curriculum design. These practice standards are partially fulfilled in this curriculum module.

Guidelines for Educational Development and Practice (1990) developed by NAACOG, the Nurses Association of the College of Obstetricians and Gynecologists, stress the nurse's role in promoting health during a newborn's first 28 days of life. Goals include several that promote family adaptation to parenting. These are addressed in the **Adolescent Parenting Module.**

Specific core competency statements have been developed through multi-organizational meetings, national surveys, and regional hearings. Maternal-Infant Core Competency statements (Derwinski-robinson, Monsen, & Sherwin, 1988) include an ability to: make clinical judgments, use the nursing process for healthy childbearing women, and

understand normal development. Students are expected to begin to teach effectively, cope with developmental and situational crises, and identify families at risk. Each of these behaviors may be influenced through **Adolescent Parenting Module** learning experiences.

In summary, maternity nursing content is designed, with input from many experts, as one component within a total nursing curriculum. Within this subject of study, the **Adolescent Parenting Module** expands upon and integrates several existing content segments. Selected behavioral outcomes of professional accrediting boards and organizations may be met through module learning. Professional and personal development may be fostered through module activities.

Tyler's View of Philosophy

Tyler's belief that reflection on the school's overall philosophy leads faculty to select objectives and learning experiences is consistent with the approach used by the School of Nursing's curriculum developers. The mission statement is evident in the total curriculum plan. The general philosophy statements, developed and refined at regular intervals by all faculty, are in harmony with the university philosophy and professional nursing values.

Drawn from the broad belief statements are several values that directly influence development of the **Adolescent Parenting Module.** Baccalaureate preparation focuses on a

generalist outcome: development of an educated person who nurses. Critical thinking is highly valued as learners grow in wisdom and professional competence. Reciprocal relationships between nurses and clients are identified as leading to positive outcomes for both. Health promotion within an ever changing society is a major thrust of professional care-giving (Niehoff School of Nursing Philosophy, 1989).

Tyler's Psychology of Learning

Learning theories contribute much to curriculum development. Among the many enumerated by Tyler in his writings and emphasized in independent study discussions, several guide development of this module. Objectives and goals are realistic and achievable in a limited time frame. Critical thinking research and theory contribute to development of module objectives and learning experiences. Varied learning experiences allow for individual differences in abilities and interest.

The fact that many experiences can achieve the same objective allows for a wide range of classroom and clinical learning activities within the half semester course. Concurrently, understanding that the same experience may lead to many outcomes, including attitudinal changes, offers many benefits when designing a module for presentation within a limited time-frame.

Several specific maternity nursing course objectives

provide clear direction for goal development within the module. For example, some goals focus on integration of liberal arts and nursing content in delivery of care to childbearing families. Others identify outcomes based on application of the nursing process. Specific psychomotor objectives incorporate communication and teaching into delivery of safe care. Affective outcome statements focus on personal and professional growth and insight into the impact of own care.

Knowledge gained during the course and from the module has value in both professional interactions with adolescent mothers and subsequent personal life. Content and application that affect cognitive learning, beliefs, and values are integrated to enhance transfer in other contexts. Development, communication and the teaching/learning process are expanded upon within this module using relevant situations. As students gain in comfort during interactions with young mothers, there is potential for increased satisfaction. This in itself may enhance motivation.

Module Goals

Reflection on the school's philosophy and selected learning theories leads to identification of broad and specific objectives. To fulfill the broad module goals, each active learner will use critical thinking to:

establish helping relationships with adolescent mothers; recognize reality based problems and needs in this population; discover effective ways to promote competent parenting; and reflect on own strengths and limitations during interactions with young clients and their newborns.

Flowing from these broad goals are specific measurable learning objectives identifying anticipated behavioral changes (refer to Table 4). These objectives include cognitive and affective criteria that may be met within the classroom, and cognitive, psychomotor, and affective behavioral changes expected during clinical interaction with clients. Goals, learning objectives, and optimal outcome statements incorporate key critical thinking components, which foster personal and professional development. Application of the nursing process enhances the student's learning and the adolescent mother's development as a competent parent.

Module goals, learning objectives, and selected outcome statements provide both a basis for selection of learning experiences and criteria for evaluation of module

effectiveness. Table 5 illustrates increasing specificity of goal statements.

Table 4.--Learning Objectives

At the completion of the Adolescent Parenting Module the student will:

1. establish a supportive and trusting relationship with individual teen-aged mothers
2. learn to gather and organize complex client information
3. identify common problems and needs during initial adaptation to parenting.
4. recognize limitations of own knowledge base/ experience
5. use resources to gain knowledge needed to resolve clients' problems/ needs
6. recognize the impact of perceptions, beliefs, attitudes, values, and experiences on behavior, thoughts, and feelings about early childbearing
7. apply content to promote nurturance and safe care-giving

Table 5.--Broad Goals, Learning Objectives and Selected Specific Outcome Statements

At the completion of module learning experiences each active learner will:

ESTABLISH EFFECTIVE RELATIONSHIPS WITH ADOLESCENT MOTHERS

1. Establish a Supportive and Trusting Relationship
    - 1.1 Communicate trust, empathy, and openness
    - 1.2 Accept each mother without bias

RECOGNIZE REALITY BASED PROBLEMS AND NEEDS IN THIS POPULATION

2. Gather and Organize Complex Client Information
    - 2.1 Develop objective approach to data collection
    - 2.2 Use developmental theory in assessment
3. Identify Common Problems and Needs
    - 3.1 Identify developmental needs
    - 3.2 Dialogue with mothers to identify problems/needs
    - 3.3 Recognize ecological influences on parenting
    - 3.4 Analyze client's problem solving abilities
    - 3.5 Assess mother's awareness of newborn needs
    - 3.6 Analyze problems and potential crises

"Table 5--Continued"

REFLECT ON OWN STRENGTHS AND LIMITATIONS DURING INTERACTIONS WITH YOUNG CLIENTS AND THEIR NEWBORNS

4. Acknowledge Strengths and Recognize Limitations of own Knowledge Base and Experience

5. Use Resources to Gain Knowledge Needed to Resolve Client Problems and Needs

5.1 Analyze own clinical problem solving approaches

5.2 Identify knowledge needed to foster client problem solving

5.3 Seek additional knowledge

6. Recognize the Impact of Perceptions, Beliefs, Values, Experience on Behavior, Thoughts, Feelings about Early Childbearing

6.1 Reflect on own perceptions, beliefs, values, experiences

6.2 Analyze behaving, thinking, feeling responses to adolescent parenting

6.3 Acknowledge biases and judgmental behaviors

6.4 Modify beliefs, behaviors that interfere with objective care-giving to teen-aged mothers

6.5 Reflect on impact of care-giving

6.6 Evaluate professional role development through client interactions

"Table 5--Continued"

DISCOVER EFFECTIVE WAYS TO PROMOTE COMPETENT PARENTING

7. Apply Content to Promote Nurturance and Safe Care-giving

7.1 Structure the adolescent mother's learning experiences while allowing choices

7.2 Identify ways the mother can foster infant trust

7.3 Teach care-giving based on developmental level and needs

7.4 Model competent parenting behaviors

7.5 Foster the young mother's problem solving skills

7.6 Promote the client's personal/ parenting development

7.7 Refer appropriately to agencies and groups

In summary, the school's philosophy, selected learning theories, program and course goals directed the development of broad module goals. From these emerged measurable learning objectives and optimal outcome statements which direct the selection of learning experiences to meet the needs of nursing students working with adolescent mothers.

Learning Experiences

Suggested educational experiences for nursing students completing this module focus on critical thinking, personal and professional growth, and application of the nursing process to enhance the adolescent's parenting behaviors. The approach used adds little content to the existing course; rather it structures learning experiences to infuse critical thinking opportunities throughout one instructional unit.

Content

The module content fits into the parenting segment of the maternity course; opportunity for reinforcement occurs in the newborn segment. The **Adolescent Parenting Module** expands upon maternal role adaptation for one population, with in-depth examination of morbidity data, potential problems, and common needs. Discussion of bonding, attachment, and parenting content suggest commonalities and differences across a wide developmental and cultural range. (Refer to the content outline in Table 6).

Table 6.-- Content Outline: Adolescent Parenting Module

I. COMPARISON OF MID-ADOLESCENT AND OLDER MOTHERS

- A. Morbidity statistics
- B. Incidence
- C. Environmental impact
- d. Psychosocial factors

II. DEVELOPMENTAL CONCEPTS

- A. Adolescent mothers
- B. Newborn infants
- C. Parenting competencies

III. CRITICAL THINKING WITHIN THE NURSING PROCESS FRAMEWORK

- A. Assessment of adolescent mothers' common problems
- B. Identification of needs
- C. Analysis of actual/potential problems
- D. Problem resolution
- E. Evaluation of client outcomes and resources

Table 7, focusing on nursing students' learning, pairs module objectives with content. Behavioral objectives are measurable; however, outcome measurement of attitudinal changes and values clarification is never precise.

Table 7.-- Learning Objectives Within Content

Learning Objectives

Content	Establish supportive, trusting realtionship with teen-aged mothers	Learn to gather organize complex client data	Identify common problems and needs during initial adaptation to parenting.	Recognize limitations of own knowledge base/experience.	Use resources to gain knowledge needed to resolve clients' problems/ needs.	Recognize impact of own perceptions, beliefs, attitudes, values, experiences on behavior, thoughts, feelings on early childbearing	Apply content to promote nurturance and safe care-giving.
• Morbidity Stats • Incidence • Environmental Impact • Psycho-social Factors		X	X	X	X		
• Adolescent Mothers • Newborn Infants • Parenting Competencies	X		X			X	
Assesment of Adolescent Mothers' common problems	X	X	X				
Identification of Needs	X	X	X	X	X		
Analysis of actual/potential problems	X		X	X	X		
Problem Resolution	X				X		X
Evaluation of client outcomes	X					X	X

Table 8 organizes selected learning experiences by setting: classroom, clinical practice area, and the clinical post conference. Since critical thinking provides a major framework, active learner involvement and selection of learning options are emphasized in all settings.

Classroom content includes a review of developmental theory and communications, new information on adolescent parenting, case studies, films, optional readings, and selected assignments. Selected learning experiences were field tested during an independent study with Dr. Tyler. Feedback from the expert and nursing students suggested that some activities were highly effective. For example, one suggested learning experience is a visit to the theory classroom by more advanced nursing students, e.g. seniors enrolled in community health or the synthesis courses. Through dialogue with novice junior students, the advanced student may share insights gained during interactions with adolescent mothers in special high school programs. Novice students are encouraged to ask questions and to share their perceptions, attitudes, and feelings about early childbearing.

Table 8.--Module Learning Experiences in Varied Settings

CLASSROOM	CLINICAL PRACTICE	CLINICAL CONFERENCE
Communications Growth/development review	Communicate trust	Reflect on interactions
Module content	Apply theory	Debrief; dialogue
Case studies	Recognize client's problems; needs; crises	Focus on concept transfer
Films; discussion	Analyze client's problem solving	Discuss critical incident
Readings: discussion	Dialogue with clients	Reflect on own problem solving abilities
Peer exchanges	Assist mothers to identify newborn needs	Dialogue, share approaches to use of nursing process
Visits by advanced peers	Teach and model parenting behaviors	Role play; participate in simulation games
Journal assignment	Refer as necessary	Generate questions
Discussion of thought provoking questions	Evaluate own clinical performance	Discuss successes and difficulties in caring for adolescent mothers
Test items		Reflect on impact of care
Module evaluation		Discuss personal and professional growth

Development, the teaching/learning process, and communications are emphasized in the clinical setting. As in all clinical courses, the nursing process is a primary problem solving framework.

As the curriculum educates for nursing practice, the students' impact on specific client populations is a primary focus. This module capitalizes on the many opportunities the nursing student has to meet an adolescent mother's needs. Among typical interventions, establishing a trusting and supportive climate and taking on the perspective of the client's situation (empathy) are basic to the helping relationship.

Learning experiences are designed to heighten students' awareness of the present and future needs of adolescent parents; approaches to resolving selected problems are explored. Developmentally appropriate patient teaching often elicits immediate results. Knowledge may be reinforced through teaching.

For example, **while students develop skill proficiency, they may explain and demonstrate infant care to young mothers. With individualized attention and modeling, teen-aged mothers readily learn skills such as feeding and bathing a baby. Successful care-giving experiences are satisfying to both the client and student.**

Among the selected daily post conference activities, many employ critical thinking methodologies. Depending on the individual student's needs, instructional methods may vary.

Students are assisted in making connections between theory and practical clinical application. They are encouraged to seek the additional knowledge needed to intervene effectively with adolescent mothers, and to identify alternative resolutions to problems. Attitudes, beliefs, and values are examined and confronted. Discussions focus on relevant issues.

Client Outcomes

Since the undergraduate student has a limited case load, there is usually sufficient time for teaching and modeling using faculty as resources. It is realistic to expect the nursing student to influence some parenting behaviors. If the client's self-esteem is enhanced through contact with a supportive student, long term positive effects may result. These may extend to improved peer and family relationships, or pursuit of educational dreams. However, such outcomes are rarely observed by the student care-giver. Lacking evidence that the adolescent develops into a competent parent, the student must identify and focus on measurable changes evident during the brief

hospitalization. Reflection and dialogue may lead to intangible rewards and insights into the impact of care-giving. Refer to table 9 for selected client optimal outcomes.

Table 9.--Client Learning Objectives and Behavioral Outcomes

As a result of the nursing student's interventions, the adolescent mother will begin to:

1. RECOGNIZE THAT HER NEWBORN HAS UNIQUE AND SEPARATE NEEDS

1.1 Identify unique physical, emotional, and developmental needs of the infant

1.2 Realize parenting responsibilities

2. DIALOGUE WITH OTHERS TO PLAN FOR THE BABY'S CARE

2.1 Recognize own care-giving abilities

2.2 Identify existing support systems

2.3 Discuss plans for baby with nurses, family, others

3. IDENTIFY OWN LEARNING NEEDS

3.1 Identify knowledge limitations

3.2 Be aware of resources to meet learning needs

3.3 Use media and other resources to develop skills

4. BUILD ON PREVIOUSLY SUCCESSFUL PROBLEM SOLVING

4.1 Use critical thinking to identify problems

4.2 Dialogue with others to resolve selected problems

5. RECOGNIZE THE NEED TO NURTURE AND PROVIDE SAFE CARE

5.1 Provide nurturance and stimulation to newborn

5.2 Perform parenting skills with increasing confidence

5.3 Develop a sense of identity as a mother

Mutual Outcomes

Within the nurse-client relationship, interactions between students and adolescent mothers often lead to learning and enhanced development. Table 10 lists selected student-initiated care-giving activities that promote client responses; cues which suggest achievement of outcomes. Critical thinking is incorporated into activities such as clinical problem solving, reflection, and dialogue. Communication and teaching/learning processes are mutual interactions. Developmental theory is used to identify care-giving approaches that may foster the adolescent mother's sense of identity.

Table 10.--Summary of Outcome Cues Resulting from the Reciprocal Student/Adolescent Mother Relationship

CONCEPT	STUDENT	CLIENT	CT	P	D
Relationship	Conveys Trust	Feels Comfort		X	X
Problems Needs	Recognizes	Identifies	X		
	Assesses		X	X	
	Analyzes		X		
	Intervenes		X	X	
Problem Solving Approaches	Dialogues	Dialogues	X	X	
	Teaches	Reflects	X	X	
		Uses	X	X	X
Parenting Skills	Assesses	Reflects	X		
	Dialogues	Learns	X	X	X
	Models	Nurtures	X	X	X
	Refers	Stimulates	X	X	X
		Provides Care	X	X	X
		Uses Resources	X	X	
Development	Fosters	Accepts self	X	X	X
		Takes on new role		X	X

Note: The above changes may be identified as a result of interactions; CT = critical thinking; P = process: teaching/learning or communications; D = development; personal or professional

Resources for faculty implementing this **Adolescent Parenting Module** are suggested in Appendix E,F, and G. These provide a practical link between learning objectives and instructional methodology. As individual differences and interests suggest learning experiences, alternative resources may be identified by faculty or learners.

Evaluation of Learning Outcomes

Consistent with Tyler's beliefs about curriculum design and revision, suggestions for outcome measurement have been discussed throughout this chapter. Evaluation of changes in the adolescent mother may be very subtle and difficult to measure during one or two days of student care-giving. Selected outcomes are suggested in Tables 9 and 10. Long term effects may be seen in enhanced problem solving, increasingly competent parenting, nurturance and stimulation of the infant, and developmental changes.

Evaluation of student learning is discussed concurrently with objectives and learning experiences; outcomes are referred to within Tables 4 and 5. Additionally, selected data is gathered through review of students' examinations, care plans, and written assignments. A clinical evaluation tool offers guidelines for formative and summative evaluation; student and faculty appraisal are

compared for critical outcomes.

Personal and professional developmental changes may be evident during dialogue and discussion of clients, case studies, and responses to thought provoking questions. Examples of such questions are included in Table 11. Self-reported feedback, a method highly consistent with infusion of critical thinking into a content unit, may provide the clearest indication of module effectiveness.

Table 11.--Selected Thought Provoking Questions to Stimulate Students' Critical Thinking

1. Describe an incident that occurred while you were working with a young mother and her newborn.

   Consider the following: What did you observe? If there was a problem, how did you help her resolve it? How might you approach a similar situation in the future? What could have been done to prevent the difficulty?

2. What lead to your success in communicating with or teaching an adolescent mother?

3. How did you use the nursing process to meet the needs of one adolescent mother?

   How did you collect data? What objective/subjective assessments were made?

   How do you usually locate and use available resources?

   To whom do you communicate information about and analysis of your client?

   What information is needed to formulate a problem statement?

   How do you establish goals with the client?

4. What questions could you ask an adolescent mother in order to determine if her developmental level is consistent with chronological age?

"Table 11--Continued"

5. What behaviors might indicate she has achieved a sense of identity?

6. What long term resources are available for adolescent mothers?

7. How does a newborn develop trust? How can the nurse foster parenting behaviors that lead to infant trust?

8. What criteria might you use to evaluate successful communication/teaching with adolescent mothers?

9. How might the nurse reduce the social isolation of adolescent mothers?

Summary

This chapter integrated critical thinking theory and research findings, applications for nursing education, and Tyler's curriculum principles in the development of the **Adolescent Parenting Module.** Problems and needs of undergraduate nursing students and adolescent mothers, identified in Chapters One, Two, and Three are addressed in all module components.

Tables focused on development and learning of both students and mothers within clinical interactions. Selected examples included in Chapters Four and Five illustrated opportunities for mutual learning. Consistent with the

critical thinking approach, implementation of the **Adolescent Parenting Module** allows faculty and nursing students the freedom to individualize learning experiences. Emphasis is placed on an active learner; reflection and dialogue are primary methodologies to stimulate critical thinking.

Evaluation of learning outcomes were suggested throughout the module. Table 12 lists selected entry level nursing student learner attributes and illustrates optimal module influenced changes. These changes reflect the critical thinking framework of the **Adolescent Parenting Module** and personal and professional development. Increasing abilities to apply the nursing process should be evident.

Table 12.--Module Influenced Changes of Nursing Students' Entry Level Attributes

ENTRY LEVEL ATTRIBUTES	MODULE INFLUENCED CHANGE
Self Awareness	Increased Self Awareness
Motivation to Learn	Active Pursuit of New Knowledge
Personal History Development	Insight into Strengths Enhanced Personal Identity
Knowledge Base	Increased Content Knowledge Base
Professional Role	Emerging Professional Identity
Problem Solving Skills	Improved Clinical Problem Solving
Caring within Role	Caring Approach to Adolescents
Communication Skills	Rapport in Communicating with Adolescent Mothers
Comfort with Clients	Comfort with Teen-aged Clients
Basic Knowledge for Client Teaching	Developmentally Appropriate Teaching Approach
Value System	Synthesized Personal/Practice Values

CHAPTER SIX

DISCUSSION

Introduction

This chapter reviews the purposes of the study, describes how these purposes were met, expands upon the processes leading to the development of a curriculum module, incorporates selected rationale for action, summarizes implications of the study, and offers suggestions for future research.

The purposes of the study were to:

Describe the needs of a unique group of health care recipients, adolescent mothers;

Identify undergraduate nursing students' perceptions of adolescent mothers; and

Design a maternity nursing Adolescent Parenting curriculum module, which is infused with strategies to stimulate critical thinking and which builds on the strengths and meets selected needs of both nursing students and adolescent mothers.

The unique problems and needs of the client population of adolescent mothers were identified in Chapter One and described throughout the paper. Chapter Two (Young, 1988a), the author's prior publication, identified developmental characteristics of young, mid, and late adolescents that affect competent parenting. Table 1, derived from theory synthesis, suggests limitations that exist for younger teen-aged parents. Discussion of common problems and needs is found throughout this paper.

Undergraduate nursing students' perceptions of adolescent mothers were presented in Chapter Three. The qualitative pilot study, a second prior publication (Young, 1988b), summarized survey and interview responses of nursing students to questions about these perceptions. Responses yielded the following information about students: most understood that perceptions may affect personal attitudes towards this specific client population; they viewed the trusting relationship as basic to interactions with adolescent mothers; and they reflected upon and identified characteristics of a competent parent. Written comments in response to an adolescent parenting case study indicated that most junior students could suggest developmentally appropriate nursing interventions to foster parenting competence. Additional strengths, needs, and problems of nursing students were also identified in Chapters One, Four, and Five.

Critical thinking research and theory were reviewed in Chapter Four as a basis for meeting the needs of both nursing students and adolescent mothers. A synthesized operational definition was formulated after reviewing the diverse meanings given to critical thinking and problem solving by scholars in varied disciplines.

> **The active learner uses a content knowledge base and applies general skills to resolve real problems, make decisions, and form judgments. Continued growth in cognitive and affective domains depends upon ongoing reflection and self-evaluation.**

While there is consensus among theorists on the need to enhance learners' critical thinking skills, most disagree about assessments, methodologies, and optimal outcomes. Drawn from the researcher's operational definition and extensive literature review of critical thinking and implications for nursing education, key components of critical thinking were identified for this study. These are:

1. **Active learner involvement**
2. **Application of specific content knowledge**
3. **Use of general thinking skills**
4. **Resolution of real problems**
5. **Decision making**
6. **Judgment formation**
7. **Ongoing reflection**

8. Self-evaluation

9. Delivery of competent nursing care, within the nursing process framework, by the undergraduate nursing student to an adolescent mother.

In Chapter Five, application of critical thinking research findings and Tyler's curriculum principles provided direction for development of the **Adolescent Parenting Module.** Consistent with other clinical courses, the nursing process served as the care-giving framework. Selected professional role development concepts: the helping relationship, communication, and the teaching/learning process formed the organizing threads.

Aspects of the module development process, which incorporated knowledge of development, critical thinking, and the needs of nursing student learners and adolescent mothers, are included in this chapter. Rationale for design of selected module components: learners, studies of contemporary life, goals and objectives, and learning experiences are summarized.

Rationale for Design of Selected Module Components

Learners

A detailed description of learners' entry level cognitive, affective, and psychomotor characteristics set the stage for module development. Several sources contributed to this description of learners' attributes and broadened the researcher's understanding of adult

development. These included developmental theory and research, responses to open-ended questionnaires and interview questions, and the author's personal observations; these were then viewed through the lens of experience.

Life span and stage theories suggested dimensions for the composite student profile. While viewing development from different perspectives, they provided insights for the researcher into the wide variations possible among learners. Among the relevant sources were stage theorists who have addressed development in young adults, e.g. Erikson (1978), Piaget & Inhelder (1969), and Marcia (1980); and life span researchers who have contributed to understanding adult transitions, including Loevinger and Sheehy (1976), Neugarten (1977), Gilligan (1982), and Becker (1987).

Analysis of demographic data, survey responses, and interview notes confirmed personal observations that rich diversity exists among junior nursing students at one midwestern university. Among the data gathered from sixty-three respondents in two consecutive junior classes was information on age, family position, prior course work, employment, and volunteer history. Perceptions of positive interactions with clients and comfort with varied age groups were also obtained. Refer to the Appendix A, B, and C to review the survey tools used for the separate studies.

A concurrent faculty pilot survey, conducted by the researcher, elicited their perceptions of junior students'

entry level conceptual knowledge. Faculty were also asked to identify and suggest reasons for students' apparent comfort with specific age groups. The faculty survey tool is found in the Appendix D.

Studies of Contemporary Life

Studies of contemporary trends and morbidity statistics provided a basis for understanding the common problems of teen-aged mothers. Although a curriculum module based on critical thinking research would apply to other clinical courses, the researcher's knowledge, interests, and a readily available adolescent parent population facilitated development of the Adolescent Parenting Module. Developmental theory learned in earlier psychology courses suggested ideal learning experiences to reinforce maternity nursing content within the module. This content provided a knowledge base for critical thinking activities. Health care professionals and educators have long expressed concern about the multiple risks affecting adolescent mothers and their newborns. Consumer awareness of this continuing problem has been heightened by numerous media presentations and recent publications. A special edition of Newsweek (The New Teens,1990) featured several relevant articles on unique approaches to risk-reduction and described successful parenting programs. The current morbidity statistics summarized in Chapter One and the developmental theory overview in Chapter Two suggest the complexity of early

parenting problems. Examples, integrated throughout Chapter Four, presented reality-based situations in which the young mother and novice student might interact within today's health care system.

Goals and Objectives

Broad module goals and measurable objectives, flowing from the conceptual framework, were separately identified for nursing student learners and adolescent mothers. As learners' attributes and desired behavioral changes were identified, ways in which critical thinking could foster professional and personal growth were envisioned. Opportunities for reflection, dialogue, and problem solving by both the student and young mother were incorporated into objectives.

Learning Experiences

The design and selection of learning experiences were based on theories, dialogues with Dr. Tyler, and the nursing education knowledge base. The selection process was influenced by several factors. Course time constraints and the limitations of a six hour clinical day were considered; however, module content in reconceptualized form appeared to require no additional class hours. Records kept over several years confirmed that adolescent mothers represented at least one-fifth of all maternity clients in selected settings. During each seven week clinical rotation, all students provided care to these young clients. Thus,

available clinical learning experiences were appropriate.

Specific learning experiences were initially designed and field tested in conjunction with a one semester independent study elective with Dr. Tyler. Students enrolled in the traditional maternity course selected from a number of activities which might match interests and learning style. For example, some students taught infant safety to teen-aged mothers during a bath demonstration, shortly after personally mastering those skills. Observation of modeling met the young mother's needs and fostered reciprocal learning. Some students chose an adolescent client for the day's clinical assignment, subsequently recounted a critical incident and described approaches that facilitated communication or teaching. Other students were encouraged to share in the discussion, maximizing the learning for one clinical interaction.

Observations of their active involvement suggested that students found selecting learning experiences particularly satisfying. Several strategies were repeated, to reinforce learning; others were subsequently modified based on student feedback. Reflection on the effectiveness of activities, feedback from Dr. Tyler, and informal evaluation of students' behavioral changes towards adolescent mothers led to refinement of learning experiences. Subsequently, many of these were incorporated into the Adolescent Parenting Module. Selected learning experiences were influenced by

writings of developmental and cognitive theorists. These included activities such as gathering and organizing accurate data, focusing on issues, and observing an advanced learner model competent behaviors. The reciprocal nature of the nurse-client relationship within the curriculum module is illustrated in Table 10. Nursing student initiated actions ideally result in client behavior changes.

Post conferences held at end of each clinical day traditionally employ debriefing, processing of experiences, and discussion of patient problems. Module implementation incorporated dialogue to enhance learning within these conferences, peer sharing to help students develop insights, and reflection on satisfactions/difficulties with client interactions to foster self evaluation. Discussion of case studies was identified as a non-threatening strategy in which both reading critically and solving realistic problems could be fostered. Asking thought provoking questions, recognized as an effective Socratic approach, was suggested as one way to stimulate critical thinking about content specific problems. Since many students identified discomfort in initial care-giving to adolescent mothers, these activities were relevant.

Implications of this Study

The Adolescent Parenting Curriculum Module may be used to modify any existing undergraduate maternity nursing course. Successful implementation requires a faculty with

the content knowledge base and motivation to infuse critical thinking strategies throughout one unit of study. Faculty are urged to stimulate critical thinking by: seeking opportunities to foster content application in real life situations; guiding students in the clinical problem solving process; and helping them perceive the value of both inductive and deductive reasoning.

Curriculum revision might center on one course, apply to several, or lead to major program revisions. Requisites for implementation include: adequate numbers of adolescent mothers within agencies (current trends indicate this availability is nation-wide); flexibility for assigning and grading students; and a total faculty commitment.

Evaluation of student learning may be accomplished in several ways; ideally, growth is perceived by both faculty and learners. In addition to evaluation methods suggested within the module, such as using the school's clinical evaluation tool to document behavioral changes, module objectives may generate an evaluation check-list. Self evaluation, anecdotal notes within a journal, or written reflection on learning may provide rich data on module effectiveness. These are consistent with critical thinking research. A student may be encouraged to describe interactions with an adolescent mother and to identify reciprocal outcomes. Refer to table 10 for cues to behavioral changes as the learner gains expertise and

initiates actions that foster competent parenting.

Informal indicators of module effectiveness may be evident during analysis of oral or written reflections, group dialogues, and observations of clinical care-giving. Although changes along the novice to advanced beginner continuum may be subtle, some indications of professional role development may be quite evident. Helping students to appreciate personal and professional growth may be the initial step in their recognizing the need for life-long learning. Table 12 suggests module influenced growth or change in the developing nursing student. Selected entry level attributes of the novice professional are compared to optimal changes. Increased self-awareness may lead to enhanced personal and professional identity and synthesized personal and practice values. Each attribute is directly related to the potential module-influenced change across the row, progressive growth is suggested in each column as well.

Longitudinal data may be gathered by evaluating senior students who completed module activities as juniors. These learners have a second opportunity to provide care for adolescent mothers in community health nursing or synthesizing role development courses. Self-reports elicited during those advanced learning experiences, which may include practice in high school programs for teens, adolescent parents' clinics, and residential facilities, could provide valuable information on module learning.

Suggestions for Future Research

Needs and Problems of Adolescent Mothers

Some research applications were suggested in the prior publications. Within Chapter Two, focusing on adolescent parenting and development, the following researchable topics were suggested: replicate studies of mothering with adolescents; modify existing assessment tools to identify learning needs of teen-aged mothers; identify comparative studies across developmental levels; and investigate effective teaching approaches to adolescent mothers.

The theory synthesis in Chapter Two could be expanded to include other developmental dimensions: cognition, information processing, and moral reasoning. The ecological influences on adolescent parenting should be further investigated. For example, does an adequate support system contribute to competent mothering even among very young adolescents? Further research into factors that contribute to successful parenting, especially among young adolescents, is timely.

Two recently published works share this focus. Bliss-Holtz (1988) explored the impact of early hospital discharge on teen-aged parenting. Reis (1989) replicated Roosa's research comparing adolescent and older mothers. Expansion of both projects with larger samples could add significant valuable data. Grant monies currently exist to support such projects which benefit both young mothers and their infants.

Needs and Problems of Nursing Students

Suggestions for further research were incorporated into Chapter Three, which explored nursing students' perceptions of early parenting. Among these were: explore the relationship between the student's experiences with own parents and the ability to teach care-giving skills; investigate whether perceptions of a happy adolescence influence successful interventions with adolescent mothers; and identify teaching strategies that better prepare nursing students to care for these clients.

The **Adolescent Parenting Module** represents an action-based attempt to enhance student learning and to improve interventions for these mothers. Implementation and subsequent evaluation of the curriculum unit might lead to module refinement or expansion within the undergraduate program. Qualitative and quantitative data collected from a larger sample of nursing students might lead to generalizations, stimulating further research. Survey tool modifications may enhance identification and understanding of learners' characteristics. Although initial open-ended questions provided richly diverse information, subsequent use of a rating scale would yield more reliable data. Tools might be administered twice, a test and re-test method, at module entry and following course completion. Comparison of questionnaire responses with interview notes and observations of student-client interactions, using an

outside observer, would enhance reliability and could lead to additional research topics.

Additional Research Suggestions

Responses to surveys by staff nurses and advanced practitioners might provide additional insights to self for these practitioners, their unit managers, and agency staff developers. Field testing an appropriately modified **Adolescent Parenting Module** could lead to development of continuing education programs or units for graduate study.

Research projects might investigate the effectiveness of case studies to elicit problem solving. Elements of a case study or computerized clinical simulation that foster identifying and meeting the needs of adolescent mothers and their newborns should be further refined.

Other research questions suggested by the incorporation of critical thinking theory, developmental and professional role development research into the module include:

.Do existing tools to measure critical thinking predict clinical problem solving abilities?

.What is the relationship between general thinking skills and client based practice?

.What strategies for infusing critical thinking into content promote both mastery and learner growth in a rapidly expanding knowledge base?

.How can professional growth, from novice to advanced beginner to expert, be measured and fostered in

clinical nursing courses?

.What is the relationship between personal development, past experience, and the ability to empathize with adolescent mothers?

.What factors contribute to comfort in the helping relationship with developmentally diverse clients?

Clinical research into the effect of early discharge on patient teaching within a limited time-frame is sorely needed. Additional broad questions which might generate studies include:

.How does the nursing student/ staff nurse identify what a young mother knows and needs to learn?;

.What is the most effective approach to teaching parenting skills to an adolescent?;

.What strategies that enhance student learning correlate positively with optimal client outcomes?; and

.Can teaching programs begun in pregnancy and implemented through the next year improve parenting?

Summary

In summary, knowledge from multiple disciplines contributed to module development. Throughout the preceding chapters, the themes of critical thinking and development recurred in varied contexts. Concepts of trust, empathy, communication, and the teaching/learning process were viewed as equally important to the emerging professional nurse and

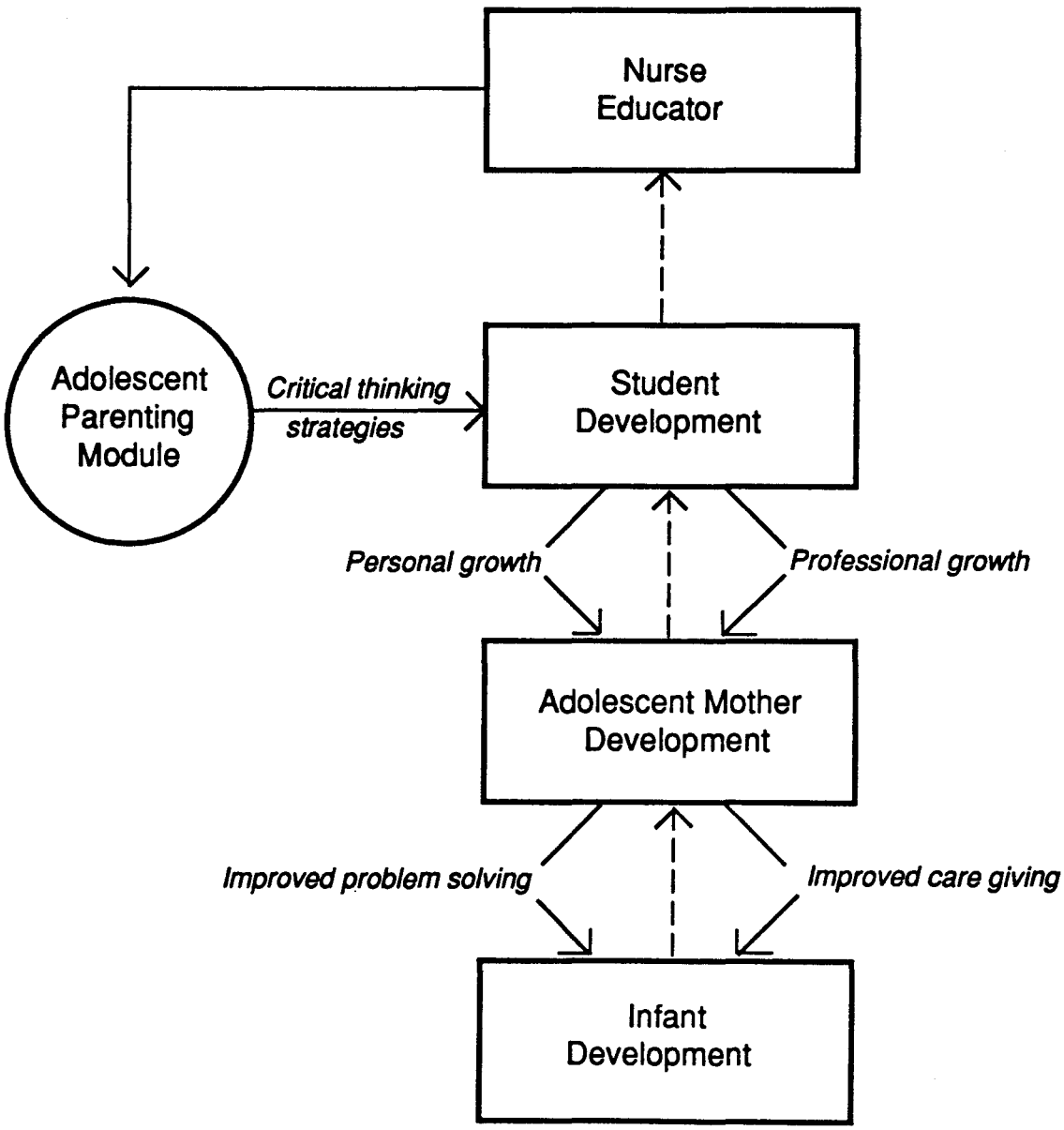
the competent mother. As nursing faculty interact with and identify problems and needs of nursing students and adolescent mothers, the following positive chain reaction may result: critical thinking strategies may facilitate personal and professional growth of the nursing student care-giver; parenting skills, taught in part by the novice nursing student, improve the adolescent mother's problem solving and care-giving; well-nurtured infants realize their developmental potential within the family system. Figure 1 illustrates ideal developmental changes. Faculty awareness of these changes, through feedback, contributes to evaluation of the **Adolescent Parenting Module.**

A theme of hope permeates this dissertation. Enhanced trust, autonomy, and a stronger sense of identity in the student and the adolescent mother are predicted to lead to positive change across ecological systems. The value of promoting growth may not be evident until the next generation begins childbearing 'on time' rather than 'too soon', or until today's novice nurses take on clinical leadership and research roles.

In effect, this nontraditional dissertation demanded of this researcher a wide variety of high level critical thinking skills as well as a highly creative approach. The challenge has led to personal growth during the process. The integration of theory and research involved both deductive and inductive reasoning. Perceiving the strengths

and needs of two very unique populations of learners, adolescent parents and nursing students, was a form of problem finding. In-depth discussions in earlier chapters, synthesized into a practical curriculum module, led to suggestions for problem resolution, with implications for the present functioning and the future maximization of potential for both groups.

Figure 1-- Implementation of Adolescent Parenting Module



APPENDIX A

SURVEY

Omit your name; Please write a "code number" known only to you that is NOT your social security #. _____
Directions for completion of this self-assessment:

Please reflect and respond to the following questions. These items focus on self-evaluation as a part of the learning process. The goal of the exercise is to increase your awareness of personal strengths, and to identify specific strategies which may be helpful to other nursing students working with individuals in one specific client population.

1. Reflect on your high school years. What was your life like when you were between 15 and 17 years?

2. Think about your personal strengths. Based on how you see yourself, react to the following terms:

creativity

objectivity

critical thinking

empathy

ability to instill trust

response to new ideas

communication

being a friend

being a family member

social awareness

3. What is your attitude toward the following:

adolescent sexuality

teen age pregnancy

a sixteen year old mother

4. What is a good parent?

5. From your own perspective as a son/ daughter, list what you feel are the essential characteristics of a good parent. Identify with a * the top three attributes.

6. What behaviors of your own parents would you most like to imitate should you become a parent?

7. Read the following case study:

Susan L., 15, has just delivered a seven pound daughter with her older sister present as a support person. Susan will keep the infant and raise her alone, with some assistance from the sister who lives nearby. She hopes to return to school if she can arrange day care.

Select the three most important characteristics from your list of parenting characteristics (question 5). How would you intervene to assist this young teen to develop those parenting behaviors?

***

Year in college_____ Did you attend a co-ed high school?_____Have you experience as a baby sitter?_____
Did you complete a family life course in high school?_____
Have you a friend/relative who was an adolescent parent?____

Is this friend male____ female_____
Have you worked with an adolescent parent in your role as a nursing student?_____

APPENDIX B

INTERVIEW

READ INTRODUCTION ALOUD:

In order to better meet the needs of young mothers, I am speaking to students who have completed the maternity nursing rotation, and who have worked with adolescent mothers. Your name will not be recorded as part of this interview.

READ EACH QUESTION ALOUD WITH NO FURTHER EXPLANATION:

1. Tell me your initial feelings towards the young mother.
2. How did communications go for you?
3. What do you feel contributed to the communication?
4. How did you feel about yourself at the time?
5. When you focused on teaching infant care skills, what first approach did you use?
6. What worked well for you in the teaching?
7. What personal attitudes influenced your teaching?
8. How do you feel you influenced behavior change towards the young girl's infant?

APPENDIX C

STUDENT SURVEY

DIRECTIONS:

This questionnaire looks at the relationship between past experiences of the nursing student and comfort with patients of varied ages. Please respond to the following questions without indicating your name. When choices such as no or yes are given, or you are asked to specify an age group from a list, just **CIRCLE** your response. When a blank space is provided, fill in the information to the best of your knowledge.

PLEASE BEGIN THE SURVEY QUESTIONS NOW.

1. Did you take any high school courses that included growth and development content?

no yes

If No, proceed to question 2.

If Yes: 1a What was the general subject matter studied?

1b Was child care a part of the course? no yes
1c Was there a lab component? no yes

If No, proceed to question 2.

If Yes, 1d How many hours per week? _____
1e With what age group/groups?

2. How many college courses have you taken (prior to those in the nursing major) which included growth and development? _____

3. Was there a lab component for any developmental course?
no yes

If No, proceed to question 4.

If Yes:

3a How many hours per week? _____

3b With what age group/s? **(Circle all that apply).**

1 infant **2** toddler **3** pre-school **4** school-aged

5 adolescent **6** young adult **7** middle aged **8** elderly

4. While you may not remember the exact title, were films or media series used in your developmental courses?
no yes

If No, proceed to question 5.
If Yes:
4a How did films contribute to your understanding?

1 very little **2** little **3** unsure **4** well **5** very well

5. As a part of college courses, were observations of different age groups used to enrich learning of growth and development? no yes

If No, proceed to question 6.
If Yes: 5a What age groups were observed?

You have had an opportunity to care for patients of varied developmental stages during this semester. Please respond to the next questions by CIRCLING the letter that best answers the questions.

Key: I = infant T = toddler PS = pre-school S = school age
A = adolescent Y = young adult M = middle age
E = elderly

6. What age groups of patients have you cared for this semester?

I T PS S A Y M E

7. With which **ONE** age group of patients have you been most comfortable by the end of the rotation?

I T PS S A Y M E

8. What made you feel this way?

9. With which **ONE** age group were you the least comfortable?

I T P S A Y M E

10. What made you feel that way?

11. With which **ONE** group of patients have you found it easiest to communicate during clinical nursing courses this semester?

I T PS S A Y M E

12. Reflect upon your experiences in the last clinical rotation. Describe one interaction with a patient in which you felt very comfortable, giving the age of the individual.

13. What was it about the interaction that made you feel comfortable?

Please complete the following information about yourself. Do not include your name.

14. Age _____

15. Do you have siblings? no yes **If Yes:** list their ages: _____

16. Are you a parent? no yes **If Yes:** list the ages of your children _____

17. Which clinical rotations have you completed? (CIRCLE ALL THAT APPLY)

1 OB **2** Peds **3** Med Surg **4** Elderly

18. Have you had experience as a baby sitter? no yes

If No, proceed to question 19.

If Yes:

18a At what age did you begin to baby sit? _____

18b For how many years did you baby sit? _____

18c About how frequently did you care for children?

18d For what age groups did you baby sit? **(Circle all that apply).**

1 infant **2** toddler **3** pre-schooler **4** school-age

18e Do you presently baby sit? no yes

19. At any time in your life did you and your family live with a relative older than your parents? no yes

If No, proceed to question 20.

If Yes: 19a Was this person in generally good health? no yes

20. Do you have experience as a recreation worker? no yes

If No, proceed to question 21.
If Yes: **20a** How many years? ____
20b Part time? no yes
20c Summers only? no yes

21. Do you have experience working in a day care setting?
no yes
If No, proceed to question 22.
If Yes, 21a What age group did you care for?

22. Do you have hospital experience as a nurses' aide?
no yes

If No, proceed to question 23.
If Yes: **22a** How many years?
22b Part time? no yes
22c Summers only? no yes

23. Do you have Nursing home experience as a nurse's aide?
no yes

If No, proceed to question 23.
If Yes: **23a** How many year?
23b Part time? no yes
23c Summers only? no yes

24. Have you volunteered in a community agency? no yes
If Yes: **24a** Please describe the individuals with whom you worked.

Please think about your own past development and write 3-4 words that come to your mind as you reflect on your

25. early childhood

26. school age

27. adolescence

28. young adulthood

Note: Spacing has been altered to accomodate Appendix margins.

APPENDIX D

FACULTY GROWTH AND DEVELOPMENT SURVEY

As part of a needs assessment for curriculum development, I'd like you to take a few minutes to complete the following brief survey. (omit your name)

1. Please give your perceptions of the entry level knowledge of growth and development for students in rotation A

Rotation B.

2. During rotation A, did students have an opportunity to care for clients of all developmental levels within your specialty? _____ Exceptions_____

3. As students cared for a variety of clients, what developmental level presented the most problems for beginning junior students?

4. Is there one common problem you have observed?

5. With which age group are most students comfortable?

6. What do you feel contributes to this comfort?

7. Please write a brief anecdote describing a student problem or success in application of developmental theory during rotation A.

APPENDIX E

ADOLESCENT PARENTING RESOURCES

Recent Publications

Corbett, M. & Meyer, J. (1987). The adolescent and pregnancy. St. Louis: Mosby.

Garner, B. (1989). Workwise: A career awareness course for teen mothers and others. Cambridge, MA: Cambridge Community Services.

Lindsay, J. (1990). School age parents: The challenge of three-generation living. Buena Park, CA: Morning Glory Press.

McGee, E. & Blank, S. (1989). A stitch in time: Helping young mothers complete high school. Washington, DC: Academy for Educational Development.

Richel, A. (1989). Teen pregnancy and parenting. New York: Hemisphere Publishing Co.

Rodine, S. & Lindsay, J. (1990). Teen pregnancy challenge. Buena Park, CA: Morning Glory Press.

The need for a warming trend: A survey of the school climate for pregnant and parenting teens. (1988). Washington, DC: The Equality Center (1223 Girard St. NW. Washington DC, 20009).

Vecchiolla, F. & Maza, P. (1989). Pregnancy and the parenting adolescent: A study of services. Washington, DC: Child Welfare League of America, Inc. (440 First Street NW, Washington, DC, 20001-2085.

What you should know about teen parenthood. (1985). South Deerfield, MA: Channing L. Bete Co.

You are pregnant; You're in your teens; And you need help. (1988). White Plains, NY: March of Dimes Birth Defects Foundation.

APPENDIX F

SELECTED ADOLESCENT PARENTING PROGRAMS/INFORMATION

Adolescent Parent Employability Program, Cambridge Community Services, Cambridge, MA. (A mentoring program preparing working young parents for life skills).

BETA - Birth, Education, Training, Acceptance. 4680 Underhill Road, Orlando, FL. (Private agency providing educational and social programs for adolescents and teen-parents).

Arts of Living Institute. 721 N. La Salle, Chicago IL, 60610. (A program that combines educational, health, and social services to adolescent pregnant girls and parents).

Education for Parenting Program. 31 W. Coulter St., Philadelphia, PA, 19144. (Curriculum for parenting).

Family Life Information Exchange PO Box 10716, Rockville, MD. 20850.

Illinois Caucas on Teenage Pregnancy, 100 W. Randolph, Chicago IL, 60601.

National Organization on Adolescent Pregnancy and Parenting (NOAPP). PO Box 2365, Reston, VA, 22090.

Parents of the Future. March of Dimes Speakers Bureau, Chicago, IL. (312-407-4007). (Seminars for adolescent parents-to-be; contact local chapters for information on programs in other cities).

Parents Too Soon. Affiliated with local chapters of the March of Dimes and American Red Cross.

Parent Express Series. ANR Publication of the University of California, 65701 San Pablo Avenue, Oakland, CA 94608-1239. (Newsletter series for adolescent parents).

APPENDIX G

CRITICAL THINKING RESOURCES

Recent Books and Articles

Boswell, A. (1990). Annotated bibliography of critical thinking skills. San Diego: Harcourt Brace Jovanovich.

Browne, M. & Keeley, S. (1990). Asking the right questions: A guide to critical thinking. Englewood Cliffs, NJ:Prentice Hall.

Preisseisen, B. (1990). At risk students and critical thinking. San Diego: Harcourt Brace Jovanovich.

Totten, S. & Sills, T. (1989). Selected resources for using cooperative learning. Educational Leadership 47, 66.

Faculty Resources

Critical Thinking Forum 1990. Series of PBS Adult Learning Satellite Service Programs. Phone: 800-ALS-ALS8.

The Foundation for Critical Thinking. A newly formed nonprofit benefit corporation to support research, education, publication, media production, and professional organizations. In cooperation with the Center for Critical Thinking and Moral Critique at Sonoma State University and other research centers. Contact the Foundation at 4655 Sonoma Mountain Road, Santa Rosa, CA 95404. 704-546-4926.

1990 Critical Thinking Audio/Videotape Catalog. Center for Critical Thinking and Moral Critique, Sonoma State University, Rohnert Park, CA 94928.

Newsletters

While there are many newsletters addressing needs of scholars in many disciplines at varied educational levels, these publications are relatively recent and welcome articles and program information:

Teaching Thinking and Problem Solving. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Thinking and Teacher Education Newsletter. Upper Montclair NJ: Montclair State College.

APPENDIX H

PERMISSIONS TO REPRINT PUBLISHED WORKS

September 7, 1990

Dr. Corinne Barnes
Editor, Maternal-Child Nursing Journal
Pittsburgh, Pennsylvania 15261

Dear Dr. Barnes,

I am the author of "Parenting during Mid-Adolescence..." published in the journal, volume 17, number 1, Spring 1988. Permission is requested to include the article and table in a non-traditional dissertation nearing completion. Acknowledgement will be given to the source journal. If a particular format is required, I will follow your directions.

Apparently my original request, mailed early this summer, was not received. I will appreciate your attention to this matter.

Sincerely,

Marybeth Young

Marybeth Young
Assistant Professor, MCH Nursing
Phone no 312-508-2903
Fax number: 312 508-3241

Permission granted, with the following acknowledgment to be included:

Article originally published in the Maternal-Child Nursing Journal. Spring 1988, 17(1), 1-12. Reprinted with permission of the Editor.

Corinne M Barnes

Corinne M. Barnes, PhD, RN, FAAN
Editor, Maternal-Child Nursing Journal
University of Pittsburgh School of Nursing
24 September 1990

Graduate Academic Unit
West Virginia University
School of Nursing

September 17, 1990

Marybeth Young, Assistant Professor
The Marcella Niehoff School of Nursing
Loyola University of Chicago
6525 North Sheridan Rd.
Chicago, IL 60626-5385

Dear Ms. Young,

You have my permission to include your paper entitled: "Perceptions of Adolescence and Early Parenting" appears on pp. 49-53 of "Nursing: Power through Excellence, Proceedings of the West Virginia Nurses' Association 1988 Research Symposium in your non-traditional dissertation.

Since our publication is a limited one, I see no problem to reprint this material.

Sincerely,

Janet F. Wang, Associate Professor
Editor of 1988 WVNA Symposium Proceedings

JFW/tld

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Note: Refer to additional references in previously published articles, Chapters Two and Three.

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