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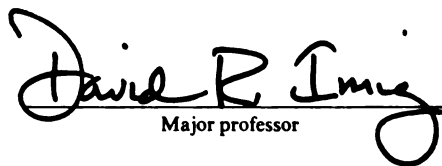
EMANCIPATORY LEARNING: AN EXPLORATORY STUDY
OF CRITICAL REFLECTION IN INTERNET FAMILY

STUDIES STUDENTS
presented by

Deborah C. DePoole Bailey

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in ~~Family &~~ Child Ecology


Major professor

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**EMANCIPATORY LEARNING: AN EXPLORATORY STUDY OF CRITICAL
REFLECTION IN INTERNET FAMILY STUDIES STUDENTS**

By

Deborah C. DePoole Bailey

A DISSERTATION

**Submitted to
Michigan State University
In partial fulfillment of the requirements
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DOCTOR OF PHILOSOPHY

Department of Family and Child Ecology

2001

ABSTRACT

EMANCIPATORY LEARNING: AN EXPLORATORY STUDY OF CRITICAL REFLECTION IN INTERNET FAMILY STUDIES STUDENTS

By

Deborah C. DePoole Bailey

Little is known about the process of critical reflection in interpersonal relationships. The process of critical self-reflection, the personal application of critical thinking, is believed to be a necessary component of learning, especially in facilitating changes in personal beliefs and perspectives (Brookfield, 1987, 1995a; Ennis, 1992; Kitchener & King, 1994; Mezirow, 1981, 1991, 1996, 1998; Norris, 1992; Schön, 1987). Using Habermas' theory of emancipatory interests in knowledge, Brown (1993) identified the ability to critically reflect as an essential skill necessary in the profession of human ecology. The ability to critically reflect empowers the ecologist to examine the construction of personal meaning as formed by family, social and cultural environments and to identify and question those meanings that inhibit one from becoming authentic or self-fulfilling (Brown, 1993; Morgaine, 1992, 1994). Brown proposed that human ecologists facilitate this process in the families that they serve.

Interpersonal Relationships, FCE 444, is an Internet course designed to facilitate critical reflection in students. Using a qualitative research model of grounded theory and a general theoretical framework for critical reflection, evidence of critical reflection was documented within the students' semester papers and analyzed. From this analysis, a conceptual model of critical reflection was developed

that accommodates multiple methods of emancipatory learning and critical reflection.

It is hypothesized that no one model of critical reflection can adequately describe the process that individuals might utilize when critically reflecting on an intimate relationship or integrating a formal course of study with personal beliefs.

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Dedication

With sincere appreciation and deep gratitude I dedicate this work to my family. To my mother, Doreene DePoole, whose celebration of life sustained me in my studies. To my husband, Edmond Bailey, whose love and attention nurtured my soul. To my sons, Scott, Erik and Adam, whose humor and unabashed need for attention anchor me to reality.

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ACKNOWLEDGMENTS

There were many Human Ecology faculty, staff, and students who assisted me in the process of researching and writing this dissertation. With hopes of not offending someone by not mentioning their contribution, I would like to acknowledge a few people specifically. To Stephanie Perentesia, for never growing weary of my questions or perturbed with my failure to return library materials on time. To Dr. Barbara Ames, for being a mentor and preparing me for the classroom. To Dr John Dirkx in the School of Education for introducing me to the works of Habermas and Mezirow. To Dr. Francisco A. Villarruel, for questioning, correcting and encouraging the research process. To Dr. Norma Bobbitt, who gave me words for what I was seeking and permission to pursue my interests. Finally, words fail to express the joy and gratitude that I feel in having had the opportunity to work for with Dr. David Imig, so I will simply say, Thank You.

I am indebted to every fellow student I have sat next to in class and stood in front of as a teacher.

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Chapter I

STATEMENT OF THE PROBLEM

Background of the Problem

Family and Child Ecology is a course of study that prepares students to work in the fields of child development, family and youth services, family therapy, community services and family life education. The core curriculum includes courses dealing with human growth and development, marriage and family relationships, and parent education. These courses are designed to introduce students to families as ecosystems within the socially constructed systems of culture and technology, all contained within the natural environment. Graduates of Family and Child Ecology are trained in the practical application of family study concepts to work in public and private settings to help families improve their interpersonal, social, and economic life experiences.

The field of human ecology works towards the enhancement of the well-being of families and in improvement in the conditions of their existence (Sontag & Bubolz, 1988). Home economists were the forerunners of the human ecology movement. Beginning with the late 1800's and early 1900's, home economists were charged with trying to help families adjust to an industrial society. The movement from rural agriculture to congested urban communities was believed to be eroding the fabric of family life. Many of the problems that impinged on a family's sense of well-being in the 20th century continue to plague the 21st century families. Though there exists a proliferation of family life education courses and community service programs, marital distress and parenting deficiencies continue to flourish, eroding well-being and contributing to emotional distress. Little can be said about the overall effectiveness of

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the intervention programs designed to teach families healthier ways of being together since assessment and evaluation has historically been limited to participant satisfaction with little if any evaluation of long-term improvements (Fine & Henry, 1991; Small, 1990; Thomas & Arcus, 1992). Yet some participants in these courses and programs do experience long term benefits while a few secure permanent improvements over their initial difficulties (Olsen, 1983; Stanley & Markman, 1998; Stanley, Markman, St. Peters & Leber, 1995).

This study proposes that the human ecologists take a different perspective when approaching families and addressing their needs. It does not negate traditional forms of preventive or intervention services; rather, it shifts the focus from simply transmitting technical and communicative life skills and looks additionally to assist individuals toward emancipatory learning, the acquisition of self-knowledge, as a key to achieving transformation in life. Self-knowledge, knowing how one came to believe as one does, can allow a person to step out of the restrictive beliefs and behaviors and respond to situations in more authentic ways that are empowering and life-enhancing.

To be such a facilitator the human ecologist must first become an emancipatory student. Such learning requires the students to critically reflect on their personal experiences in relation to the concepts being taught in the family studies courses in colleges and universities. By doing this, students clarify personal beliefs and perspectives and become free from imposing these as truths for others to follow. Emancipatory teachers and program facilitators allow their students to discover their own truths and provide them the opportunity to become emancipated learners in return.

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Purpose of the Study

This study examined how students critically reflected in an internet family studies course from the perspective of emancipatory learning and self-knowledge. Since little is known about the process of critical reflection in interpersonal relationships, this class provided an opportunity to examine how students use critical reflection to understand intimate relationships and to relate course concepts to real life experiences. Specifically, this study explored student experiences of learning as presented in semester papers with the intention of gaining insight into how the concepts taught in this family science class, *Interpersonal Relationships*, triggered students to reflect, evaluate, adapt or reject principles that could increase their sense of well-being and improve their relationship with another person.

Significance of the Study

With expanding access to collegiate education through the internet, there exists a need to study the academic quality of the virtual student's performance. This study examined how virtual university students critically reflected on the material presented in the course. As comparative analysis research, evidence of critical reflection as presented in the papers was documented and compared with other theories. In some instances the data verified previous research but new emerging theory also became apparent.

This knowledge will contribute to the field of family life education and family studies by providing some insight into thinking and reflective experiences by individuals when they recognize something is wrong in their family or within other

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intimate relationships. For human ecologists, this information will assist in understanding the variation in acceptance and application of presented material by participants in community service programs and life skill classes. Such knowledge could be useful in program development and facilitation by providing insight into the learning processes of students.

For the profession of human ecology, this study is built upon the work of Marjorie M. Brown¹, and will contribute to the development and training of future human ecologists by exploring Habermas' concepts of human interest with a focus on the process of critical self-reflection. This knowledge will assist all who prepare for the profession of human ecology and family life education, by creating an awareness of the reflective skills necessary to fulfill Brown's vision by addressing the personal beliefs, communicative misunderstandings and social discrepancies that interfere with a family's ability to nurture its members to self-realization and achieve a greater sense of well-being.

¹ **Philosophical Studies of Home Economics in the United States: Basic Ideas By Which Home Economists Understand Themselves** (1993).

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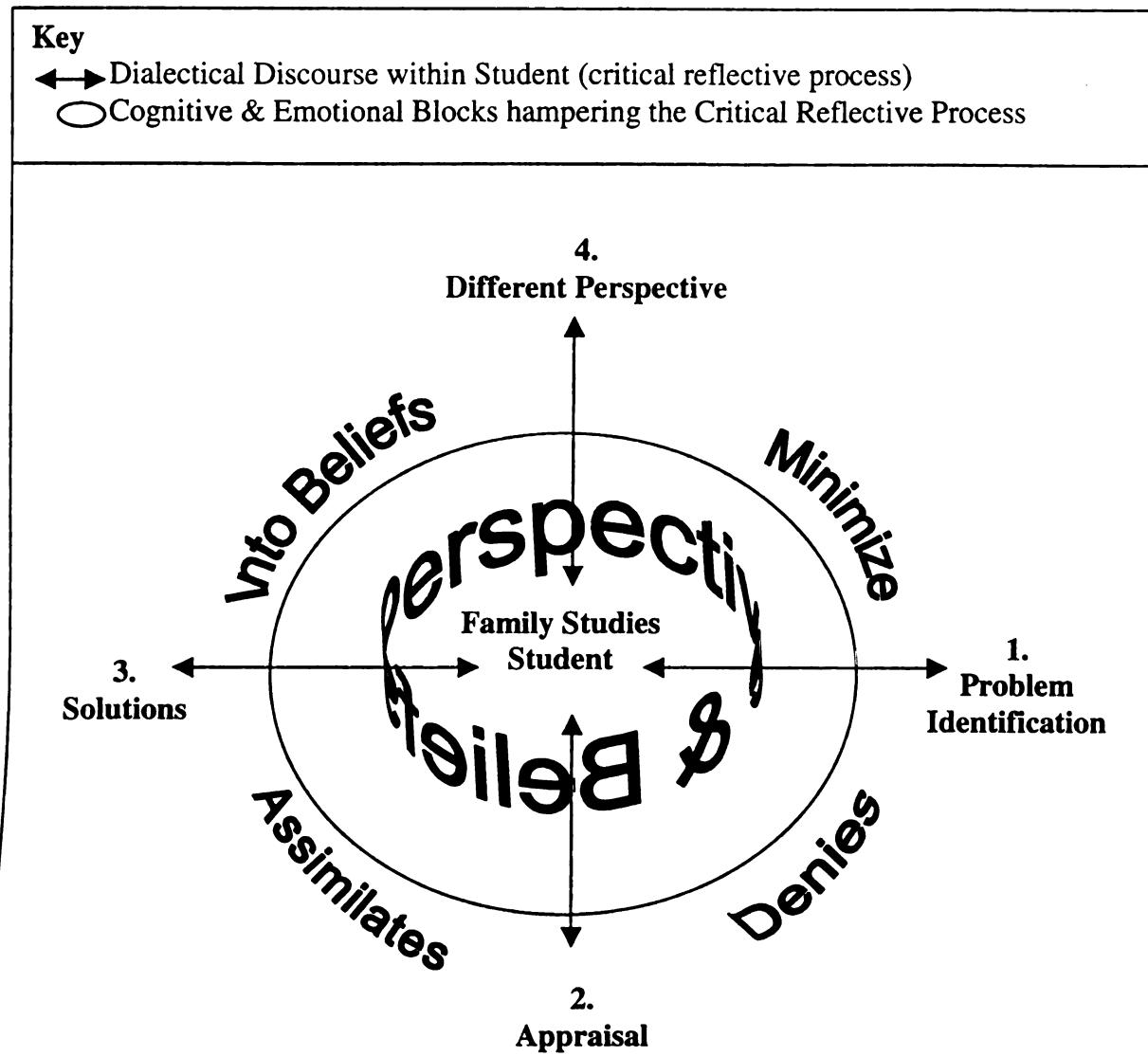


Figure 1. The conceptual map illustrates students' critical reflection of information received from the interpersonal relationship course that is filtered through beliefs and perceptions. 1. Students *recognize a problem* resulting from a conflict with a belief or perception and the incoming information. 2. They *appraise the problem* and *critically reflect on personally held beliefs*. 3. They *generate solutions* to the problem evaluating effectiveness by 4. *Developing a different perspective* to the knowledge and the problem (Mezirow, 1991; Brookfield, 1987; Schön, 1987). At each step students choose to reflect on deeper levels or halt the process by *denying* the existence of the problem, *minimizing* the significance of the conflict, or *assimilating* the opposing information into something that can be more easily understood with less conflict. Critical reflection can lead to emancipatory learning if they *integrate this new knowledge into their perceptions and beliefs* (Mezirow, 1991, 1998; Brookfield, 1987).

Figure 1. Conceptual Map of Critical Reflection in Family Studies Students

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Discussion of Cognitive Map

The proposed cognitive map (see Figure 1.) is a generic model of critical reflection based on the theoretical work of Brookfield (1987, 1995a, & 1995b), Dewey (1933), Kitchener & King (1994), Kolb (1984), Mezirow (1981, 1991, 1996, 1998), and Schön (1987, 1994, 1995). It illustrates the potential process of critical reflection of a family studies student. The process has at its center the *beliefs and perspectives* by which a student makes meaning of incoming information. When this information does not support the student's current understandings, a problem arises. *Problem identification* is the first step in the process of critical reflection (movement 1 in the model). With the identification of a problem the student begins to *appraise* the meaning of the problem in relation to beliefs and perspectives, *Critical Self-Reflection* (movement 2 in the model). At this point the student can *deny* the existence of the problem, *minimize* its meaning, or *assimilate* it into current beliefs. By doing any of these things the process of critical reflection becomes restricted. If critical reflection continues on the construction of thoughts, feelings, actions and beliefs, insight into meaning schemes and perspectives is gained, increasing the ability to resolve the problem. This insight can guide the student to the realization that old ways of thinking, feeling, behaving and believing will not resolve the problem, leading to the *exploration of new solutions* (movement 3 in the model). The final, but certainly not the last step in the critical reflection process is, *development of different perspectives*, which enables the student to view the problem from a new perspective (movement 4 in the model). This new perspective reframes the situation or information that instigated the original problem and broadens the student's ability to resolve the conflict.

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Philosophical and Theoretical Framework

Philosophy of Habermas and Brown

As qualitative research this study is interested in how family studies students assimilate course concepts into beliefs using the philosophy of human interest in learning as developed by Jürgen Habermas. In Knowledge and Human Interest, Habermas proposes that humans generate interest in knowledge through technical /instrumental, practical /communicative and emancipatory means of learning. Each area of interest determines how the individual approaches the need for learning and subsequently influences how acquired knowledge is implemented. The highest level of interest, emancipatory learning, generates interest in self-knowledge. At this level the learner explores how meaning has been generated within oneself and questions socially constructed meanings that limit one's perception and potential (1968).

In 1993, Brown used Habermas' philosophy to explore professional application of human ecology values in the work of home economists / human ecologists. According to Brown, historically the profession of home economics was designed to teach life skills that could improve a family's sense of well-being. Over time she recognized that this process was insufficient and needed to be coupled with the human ecologist's commitment to transform the social inequities that oppress families. It is believed that human ecologists must work as agents of change in teaching families to redefine their perceptions and to challenge the political and social policies that prevent humans from achieving an authentic sense of self (1993). Brown presents the learning interests of emancipatory knowledge that Habermas identified as a call to professional ethics for the human ecologists. This is the philosophical grounding from which this

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research begins. This study is not intended to prove or test a theory but rather to explore the presence of critical reflection. From this exploration, new theory will be constructed to assist human ecologists, family life educators and university professors in teaching family study concepts and facilitating emancipatory learning.

Human Ecology Theory

Human ecology theory views families as energy transforming systems that interact with larger systems consisting of the natural, physical, human constructed and sociocultural/behavioral environments. The family is identified as the envired unit exhibiting interdependence between the natural and the cultural/behavioral environments (Andrew, Bubolz & Paolucci, 1980; Bubolz & Sontag, 1994; Bubolz, Eicher & Sontag, 1979). Ecological study recognizes envired units as a part of the larger ecosystem requiring the researcher to become cognizant of the whole when examining the smaller units of family and individuals.

Following a constructionist's framework consistent with human ecology (Brown, 1993; deGroot, 1988), data from student papers was examined from a hermeneutical perspective. Such a perspective recognizes the construction of knowledge in the papers resulting from the students' lived experiences within the context of family life as envired units, within schools, churches, and neighborhoods as cultural/ behavioral environments contained within the larger physical/ natural environments of their community and the world.

The underlying theoretical framework for this research is based on this human ecological model. The objectives of ecological research encourage investigations that

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are concerned with generating knowledge for the improvement of home life (Brown, 1993; deGroot, 1988; Sontag & Bubolz, 1988). Multiple applicability and generalization should translate to field application and professional preparation (deGroot, 1988; Westney, Brabble & Edwards, 1988). In other words, what is learned in research should be usable in the classroom where human ecologists are being trained, as well as in the public domain of workshops, seminars and popular publications. From the standpoint of multiple applicability and generalization, this study fulfills this requirement in that it views family studies students as being individuals in an intimate relationship (enviromed units) within a cultural environment with the potential of shaping the cultural / behavioral environment of future generations.

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Chapter II

RESEARCH CONTEXT

Family Life Education Specialists, Home Economists and Human Ecologists as Agents of Change

The concept of offering courses on how to raise a family, today known as family life education, was first documented at the turn of the 20th century. Such courses were designed to help families deal with the rapid changes in society that were believed to be eroding the fabric of family life (Allen & Crosble-Burnett, 1992; Arcus, 1992; Brown, 1993; Morgaine, 1992, 1994; Sollie & Kaetz, 1992; Sontag & Bubolz, 1988; Westney, Brabble & Edwards, 1988). Despite historical efforts, these types of educational programs continue to be a prominent need (Arcus, 1992; Schvaneveldt & Young, 1992).

A primary goal of family life education is to instill a sense of well-being in individuals and to strengthen and enrich families (Sontag & Bubolz, 1988; Hughes, 1994; Schvaneveldt & Young, 1992). As a component within the discipline of human ecology, family life education is born out of the concept of home economics as a professional field of study specializing in preventative education. In the *Lake Placid Report*, Paolucci and Hook introduced the term, *human ecology*, as a new direction of home economics that expands the study of family beyond the traditional boundaries of homemaking (Brown, 1993). The traditional science of home economics has given way to human ecology as a multidimensional social science that seeks to integrate theoretical and conceptual knowledge with organizational knowledge and professional practice (Sontag & Bubolz, 1988). Within this ecological framework, families are recognized as being essential for nurturing individuals within society. There exists an interactive

relationship between families, their members, society, culture and the natural environment that defines an ecosystem in which human behavior takes place. Human Ecologists as home economists or family life educators, recognize the inter-relationships of these systems and seek to help families maximize their well-being while contributing to the overall good of the larger ecological perspective. As an applied science, human ecology recognizes the innate value of human beings and seeks to identify and promote those things which enhance human development, actualize human potential and improve the human condition and quality of life (Westney, Brabble & Edwards, 1988).

The fundamental premise of human ecology is helping human beings to develop their capacity to manage their lives in a rational and effective manner; to develop an understanding of themselves in relation to the forces and counter forces that impinge on their capacity to become fully functioning. (Westney, Brabble & Edwards, 1988, p.130)

Family Life Education, as a profession, does this through a variety of instructional methods ranging from brief workshops through more intensive classes offered through schools, churches, community mental health institutions, hospitals and universities. There are some questions regarding how well family life programs achieve these goals, but there seems to be general agreement that some programs do achieve this purpose (Markman & Floyd, 1980; Olsen, 1983; Russell, & Lyster, 1992; Stanley & Markman, 1997).

In Philosophical Studies of Home Economics in the United States, Brown uses Habermas' work on practical / communicative knowledge to explore the future of home

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economists. Home economists, as human ecologists and family life educators, have a foundational mission in their profession.

The mission of home economics is to enable families, both as individual units and generally as a social institution, to build and maintain systems of action which lead (1) to maintaining in individuals self-formation and (2) to enlighten, cooperative participation in the critique and formulation of social goals and means for accomplishing them. (Brown & Paolucci, 1979, pp.117-8)

The mission of human ecology is to empower family life educators to initiate change within individuals as a process towards self-formation with a greater sense of well-being. The process of initiating change takes place within an educational context. Family Life Educators provide models for healthy communication and effective life skills. The information presented is based upon research from multiple fields within social science. The educator acts as a facilitator or conduit, making knowledge available while use or application of this knowledge is left to the discretion of the participants. Of concern is the resistance some participants display by not adopting the offered knowledge and applying it to their lives.

However, it is recognized that improvement may not always be within the realm of the individual's own resources and may in fact be controlled by social institutions. Using the work of Habermas, Brown argues the need for home economists to become change agents of the social institutions that repress individuals and families and prevent them from achieving self-fulfillment (1993). Traditionally, home economists provided workshops and classes designed to improve a family's ability to handle problems such as nutritional food preparation, communication and financial responsibility. In reality, such problems may not be within the realm of the family's resources, but rather the

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result of inadequate food distribution and moral indifference to the needs of others (Brown, 1993; Morgaine, 1992). Work to address these problems extends beyond the teaching of homemaking skills, requiring instead, an empowerment of families. Brown states:

Families must be empowered and participate in self-determination regarding their own lives and the kind of society that will contribute to the needs of all families and development of individuals...All participants [home economists] should seek to develop in themselves and to encourage in others the attitudes and competencies necessary for rational discussion. (Brown, 1993, pp. 486-7)

Human Ecology as a social science is multidisciplinary. It addresses the needs of individuals within families, but it also questions the social contexts upon which families are dependent for survival. Brown redefines that the home economist of yesterday as today's human ecologist and as an ecologist, is responsible to become *self-reflective about one's own beliefs* and critically reflective of the social institutions and practices that shape social misunderstandings. Such reflection, according to Brown, illustrates Habermas' philosophy of emancipatory learning.

Emancipatory learning, though most closely aligned with social or structural injustices (Brown, 1993; Freire, 1970; Habermas, 1968; Morgaine, 1994), can also be applied to intrapersonal perceptions (Brookfield, 1995a; Mezirow, 1991). Emancipatory learning begins with the desire to become self-reflective. Before human ecologists can rise to Brown's call to become agents of social change, they must first become cognizant of their own personal restraints. This study explores Habermas' concept of emancipation as a human interest as a key to gaining insight into the thinking

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Habermas and Human Interest

In 1968, Jürgen Habermas introduced the concept of a multi-level acquisition of human knowledge which shapes learning through interest. In Knowledge and Human Interest, he proposes that humans generate interest in knowledge based on their perceptions of what is worth knowing. What is of value to the student determines the interest towards technical /instrumental, practical /communicative or emancipatory means of learning. Each area of interest determines how the individual approaches the need for learning and subsequently influences how acquired knowledge is implemented.

Technical Instrumental Learning represents the level of interest needed for obtaining fundamental information or skills for performing a specific task or job. Practical / Communicative Learning represents human interest in developing multiple abilities for creating and maintaining personal and professional relationships as well as implementing technical /instrumental knowledge. Emancipatory Learning represents a human interest that reaches beyond relationships and instrumental knowledge and takes the learner into the realm of self-reflection, questioning how one came to know what is worth knowing and questioning the larger social structure that shaped these beliefs and values (Brown, 1993; Kreber & Cranton, 2000; Habermas, 1968; Mezirow, 1991).

Habermas is a critical theorist, social scientist and philosopher who focused his studies on the manner in which humans construct knowledge. He has explored the processes by which humans come to know what is considered to be a truth and

challenged the positivists' construction of absoluteness. What is offered is not a theory of learning; rather it is a philosophy that has its foundations in Kant, Hegel, and Marx (Brown, 1993; Edgar & Sedwick, 1999; Habermas, 1968, 1971; Thompson, 1981). As a philosophy, his work provides insight into the qualitative aspect of learning by giving meaning to the paradigms through which a learner must move: instrumental, communicative and emancipatory.

Recognizing that society historically has placed greater value on technical/instrumental truths, Habermas builds argument towards cultivating the higher levels of knowing. Instrumental knowledge represents deductive logic as something which is true and testable. Instrumental knowledge can be memorized and duplicated from one generation of students to the next with little change. The concepts taught in the empirical sciences are excellent examples of this type of knowledge. For learners who seek instrumental /technical knowledge, there is a level of security in knowing the right answers and comfort in learning material in an absolute manner.

Habermas identifies instrumental / technical interests as an essential component of knowledge with communicative / practical interests as being a higher level of interest. In communicative learning the focus is on learning to communicate through understanding and discussion. Communicative interests are based on the desire to understand, get along and be with others. For learners, communicative learning is the process by which social norms and expectations are transmitted and behavior is shaped. Through rational discourse, knowledge is constructed and shared meanings are created. Unlike instrumental knowledge that has its focus on objective problem-solving, communicative knowledge is more subjective, with culture, social norms, and political

interests influencing the perceptions that collaborate in determining knowledge (Habermas, 1968; Mezirow, 1991; Brown, 1993).

The highest level of acquiring knowledge, according to Habermas, is the ability to critically reflect on one's beliefs and the acquisition of previously learned knowledge. The learner who seeks this level is moving within a paradigm of emancipatory learning. Emancipation comes to the learner through critical reflection on each of the lower levels of knowing, instrumental and communicative, and examining how one has come to believe, think, feel and behave (Kreber & Cranton, 2000). The learner examines personal experiences as formed by parents, family, friends and social institutions. The learner examines the process by which thinking has been shaped and brings conscious beliefs, fears and hopes. This leads to reflection on how one comes to know something, how knowledge is used, and redefines the perception of self in relation to others. Such a level of learning frees one from assimilated beliefs formed in the early years of life, which in turn shape behavior (Habermas, 1971; Mezirow, 1981, 1991).

I mean the experience of emancipatory power of reflection, which the subject experiences in itself to the extent that it becomes transparent to itself in the history of its genesis. The experience of self-reflection articulates itself substantially in the concept of a self-formative process. Methodologically it leads to a standpoint from which the identity of reason with the will to reason freely arises. For the pursuit of reflection knows itself as a movement of emancipation. (Habermas, 1971, p. 197-8)

Habermas and Family Life Education

As facilitators of knowledge, Family Life Educators work with families in securing technical / instrumental and practical / communicative knowledge. When a

family life educator facilitates a program on financial management, technical / instrumental information is presented. Practical / communicative knowledge is also provided, since the participant's ability to interpret and communicate the use of financial resources within the family becomes key to the ability to improve a sense of well-being. This information is given to the family as a tool to assist them in building financial skills (instrumental knowledge) that will reduce interpersonal stress (communicative knowledge) by providing better resource management skills.

It may not be enough for a family life educator to teach these skills to a family. Too often these skills are taught, but the workshop participants seem unwilling or unable to implement what has been learned. If instruction adequately addresses the application of technical knowledge and assists the participant in the communicative or practical application, the next level of inquiry would lead to Habermas' emancipatory knowledge (Brown, 1993; Morgaine, 1994).

Emancipatory knowledge is self-knowledge. It is the desire to understand who one is as a means of coming to know truth. If the student is unable to implement what is being learned, the task is to determine what is blocking the student from adopting the needed behavior. Habermas believes that individuals must reflect on themselves as learners and use knowledge to uncover what is not known about the self. Self-reflection uncovers assumptions and meaning perspectives that inhibit the individual from achieving full potential, which Habermas calls becoming the "authentic self." Family Life Educators, as human ecologists, have an ethical obligation to assist families in achieving this sense of "authentic self" by examining cultural and social understandings of knowledge that are oppressive (communicative interests), as well as their individual

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perceptions and meaning schemes (emancipatory interests) that are inhibiting the ability to become authentic (Brookfield, 1995a; Brown, 1993; Habermas, 1968; Mezirow, 1991; Morgaine, 1992, 1994). To do this the family life educators must be capable of doing what it is they ask of constituents. Human Ecologists must critically self-reflect on their own feelings, thoughts, beliefs and behaviors that prevent them from becoming authentic. They too must become emancipatory learners (Brookfield, 1995a; Brown, 1993; Morgaine, 1992, 1994).

Emancipatory Learning and Critical Self-Reflection

Emancipatory learning or interest is described by Habermas as being self-reflective. Like psychoanalytical counseling, the individual explores personal thoughts and beliefs for distortions of truth and redefines the self in pursuit of becoming authentic. The authentic self is self-formulating and free of cultural, social, environmental influences that blindly and falsely instill feelings of inferiority (Brookfield, 1995b; Brown, 1993; Freire, 1970; Habermas, 1968; Mezirow, 1991; Morgaine, 1994). *Critical Self-Reflection* is the key activity in emancipatory learning and involves evaluating what the learner has come to know of the self (Habermas, 1968; Mezirow, 1981, 1994).

Critical Reflection is an examination of beliefs and meaning perspectives acquired through lived experiences (Mezirow, 1981, 1991, 1998; Brookfield, 1987, 1995a). One's parents, friends, extended family, teachers and society shape these experiences and create within the individual "lifeworld knowledge." This knowledge is constructed by the individual in relationship with others, thereby becoming meaning

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schemes and perspectives that are held as truths. All thoughts, beliefs, and behaviors are shaped by these constructed truths until they become challenged when some contradictory truth is presented. At first the individual may choose to filter out opposing information or assimilate it into current understanding. In time however, some experiences may cause a crisis in self-perception, leaving the learner disoriented. By critically reflecting on ones' experiences and assumptions the learner is able to make conscious beliefs that shape perceptions and influence behavior. When beliefs become conscious, the learner is able to discern distorted perceptions based on childhood experiences and cultural bias and come to recognize what is really true. Transformation implies consciousness and ownership of what one believes and in turn what one's actions will be (Mezirow, 1981, 1991, 1998).

Historically, the field of education has not placed a value on this type of learning because it cannot easily be measured or understood (Brookfield, 1994; Habermas, 1968; Kitchener & King, 1994; Schön, 1987). Critical thinking, which is different from critical self-reflection, is a highly valued skill in the field of education; however, both approaches are greatly underutilized in personal application (Dewey, 1933; Ennis, 1992; Kitchener & King, 1994; Kolb, 1984; Norris, 1992; Schön, 1987). Critical thinking can be understood as an analytical process that identifies a problem and in a systematic manner generates and evaluates possible solutions until the problem is resolved (Brookfield, 1995a; Dewey, 1933; Ennis, 1992; Kitchener & King, 1994; Kolb, 1984; Norris, 1992; Schön, 1987, 1994, 1995). Critical thinking is best applied to closed-ended problems in which a single or "best" solution can be applied. Critical reflection, though similar in process, is used with open-ended problems, or poorly structured

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problems that have multiple confounding variables and lack positivist solutions (Kitchener & King, 1994).

Critical Reflection is an active process of using some form of knowledge to examine a belief or problem as a means of determining future beliefs and actions (Dewey, 1933; Yost, Sentar & Forlenza-Bailey, 2000). Dewey describes this process as a cycle of problem identification, reflection, exploration, and action (1933). The individual becomes aware of a currently held belief or problem through a variety of means such as in a classroom, a life experience or in an interpersonal relationship. The experience creates a discrepancy between what is held as a truth, i.e. college professors know everything about the classes they teach; with an encounter that challenges this belief, i.e. the professor gave information that was not consistent with the assigned reading. At first glance this discrepancy may not seem important and for many students such inconsistencies may be ignored or accommodated into their perception that professors are “all knowing,” i.e. she must have just misspoken. However, if the professor continues to give contradictory information the student may begin to question the experience and his understanding. This questioning becomes critical self-reflection when he begins to examine understanding as it relates to his perception: *Why do I think professors know everything about the classes they teach? Where did I get this belief? What if this is not true, what does this mean to me as a student? How does this make me feel? Why does this make me feel confident? Less confident?* The process of critical reflection in this example focuses on the student’s perception of what is true and his understanding of what this truth means and how it came to be a truth within his mind (Brookfield, 1981, 1994; Mezirow, 1981, 1994, 1998).

How should one view college professors? As a subjective question there is no single answer. As a subjective problem the student has multiple perspectives from which professors can be viewed, but as an individual he has come to recognize only one of these perspectives. *Critical Reflection* becomes emancipatory when the student, after critically reflecting on previously held assumptions about professors, becomes conscious of how this perception was instilled and is able to view the professor from a different perspective. Through critical self-reflection the student makes conscious beliefs and feelings that prevented him from questioning the professor's information discrepancies. Such reflection allows the student to recognize his own competencies and achievements. In other words, the student becomes transformed from a passive receptacle receiving knowledge to an active participant capable of co-constructing knowledge (Brookfield, 1994; Habermas, 1968; Kitchener & King, 1994; Mezirow, 1991, 1994).

Critical Reflection is a skill that can be taught (Brookfield, 1987, 1995a; Freire, 1970; Ennis, 1992; Kitchener & King, 1994; Kolb, 1984; Norris, 1992; Schön, 1987). The field of adult education has been studying the process of critical reflection as it relates to emancipatory or transformative learning (see *Critical Reflection Theory*, Appendix A.). Much is known about the critical reflection process as an experience in adult education, but little is known about the application of the process outside of an adult learning classroom. Knowledge about the process of critical reflection as it applies to interpersonal relationships and family dynamics is nonexistent and has been identified as an area needing research (Brookfield, 1987; Brown, 1993; Mezirow, 1991).

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The Internet *Interpersonal Relationships* Class as a Prompt for Critical Reflection

Interpersonal Relationships is a Human Ecology course that focuses on the dynamic nature of families. With a Human Ecology focus, families are studied as complex interacting units made up of individuals. An interdependent relationship between the individual, the family, and the larger environment is recognized and explored using an ecosystems model. As an ecosystem, the family is composed of organisms (enviored unit or family members), contained within the social environment (culturally and technically determined by humans) and the natural environment (all of nature not transformed by humans) (Paolucci, Hall & Axinn, 1977; Sontag & Bubolz, 1988).

Interpersonal Relationships explores the enviored unit by examining the internal structure of the family using the theories of family paradigms as developed by Kantor and Lehr (1975), Constantine (1986), Imig & Phillips (1992), Imig (1999). The course has been a requirement for several of the human ecology disciplines for many years. In the Spring 2000, the course became part of Michigan State University's Virtual University offerings. The course curriculum was adapted for internet instruction allowing students interface and branching abilities to complete the requirements at their own pace. An e-text was developed by the professor to replace the conventional classroom lectures and the *Relational Assessment Scale* software was included in the course web page to provide students with the ability to score a questionnaire.

FCE 444, *Interpersonal Relationships*, is a course that introduces students to the concept of paradigmatic family structures also referred to as family paradigms. Family paradigms can be understood as four different designs that families construct to achieve

homeostasis or balance: Hierarchal Prescribed: ***Closed***, Individualistic Autonomous: ***Random***, Consensual Reflexive: ***Open***, and Naturalistic Programmed: ***Synchronous*** (Constantine, 1986; Imig, 1999).

Each of the paradigms represents a family's systems approach to achieving goals and using resources. In *Closed* families, the pursuit of goals and the use of resources are determined by those in power, the parents. Hierarchal patterns of authority, divisions of labor among family members, and clear role delineation also characterize the *Closed* paradigm. The parental hierarchy determines the rules and boundaries that help in determining who is a member of the family. For these families, tradition is valued and used as a guide for planning activities.

Random family paradigms thrive on spontaneity and cooperation. Goals are determined by the individuals and resources are used by whoever is in need. Rather than ruled by hierarchal lines of authority, the *Random* paradigm values individuality, creativity and nonconformity. Boundaries are diffuse with rules used as guidelines to be ignored. *Random* families are highly adaptable and like the *Closed* family paradigm, are very common in American society.

Families operating from an *Open* paradigm are flexible and adaptable like the *Random* family, but unlike the *Random* family the focus is on the family as a unit not on the individual. *Open* families use disagreement and dissidence to seek a common belief that all members can share and each member is expected to contribute. Goals are determined by consensus (all members must agree and for the same reasons), with everyone having access to resources as needed.

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The *Synchronous* paradigm follows a naturalistic – programmed approach to family. Members follow a structured pattern of life that is dependent on the needs of survival with an unspoken emphasis on harmony, perfection and tranquility. Children learn through example and things are understood with no need for discussion. Conflict is minimal within this type of family.

Paradigms are created by the image, structure and behavioral patterns of the family members. Members co-construct an image of what it means “to be a family” while also defining what it means, “not to be family.” Within the family, specific behaviors or player parts develop that support the paradigmatic image and structure. These behaviors and structures become the process by which families develop and utilize resources in their pursuit of goals: control, affect, meaning and content. The resources used in achieving these goals are time, energy, space and material things. Students are introduced to each of these concepts and asked to integrate this knowledge into their personal experience. An assessment tool, the *Relational Assessment Scale*, is taken by each student with a significant partner to assist in this process (Appendix B).

The *Relational Assessment Scale* was developed by Imig (1999) to be used in helping couples understand their paradigmatic perception of family and to identify specific player parts used in the relationship to achieve the goals of control, affect, meaning and content using the resources of time, energy, space, and material. The scale is comprised of ten questions that ask the respondent to identify how they currently see their relationship, how they would like their relationship to be, how they think their partner sees the relationship and how their partner would like the relationship to be. Respondents are asked to choose from statements that best describe each of these

perspectives by giving them a numerical value of 1 through 10. By designating a statement as a 10, the respondent is stating that the statement best reflects their perception. Following each of the ten questions is a section asking the respondents to identify what role or behavior they exhibit in achieving the activities that the question addresses. There are four roles or player parts in a family's relationship dynamic: *Initiating / Moving, Questioning / Challenging, Agreeing / Supporting, and Reflecting / Commenting*. As with the questions, the respondents are asked to identify what behavior or player parts they currently display, what behavior they would prefer to play, what behavior they think their partner plays and what behaviors they think their partner would prefer to play.

The students are required to take this *Relational Assessment Scale* with a significant partner. Students often choose spouses if they are married, dating or engaged partners, roommates, siblings, parents or a close personal friend. The information from the questionnaire is entered into a computer program that analyzes the results and creates a *Relational Assessment Scale* that provides quartile and vector chart information illustrating similarities and differences within the student's personal preferences, those of the partner and the projections that each made regarding the other's perception. By examining the quartile and vector information with the conceptual training provided by course readings, students are introduced to complex models of family which illustrate the concept of paradigm as it relates to one's perception. Students are challenged to identify their understanding of family and to then look at family from different paradigms. By using the *Relational Assessment Scale*

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they are given insight into how their perception was formed and how it is similar or different from that of their partners.

Through structured assignments, students become aware of the many experiences that helped to shape their current perceptions. It is common for the students to become aware of discrepancies in what they believe their current relationship is and what they are learning about healthy relationships. For many students, this provides an opportunity to acknowledge a personal belief, recognize a relationship problem, or experience a challenge in their beliefs and perceptions of who they are. Sometimes they find that their partner does not share their beliefs, they find that they do not like the belief that they operate within, or they become aware that their current situation is problematic and they need to make a change. A semester paper requires the students to explore what they have come to understand about family paradigms, player parts and the achievement of goals using resources as they relate to their interpersonal relationship.

As an internet course, special written assignments are given throughout the semester. The students are asked to critically examine what is being presented with how they have experienced it in their lives. These assignments give the professor an opportunity to gauge how well the students understand the course material. Since there is no personal contact with the students as in a conventional classroom, these written assignments are vital in judging how well the students understand. The action of writing about their experiences and understanding helps prepare the students for the final paper with an added benefit of encouraging transformative learning since the writing is similar to that of journaling. The act of writing about oneself creates the

conditions for transformative learning in that writing requires the students to reflect on their behavior and beliefs and take ownership of who they are (Meyer, 2000).

In these semester papers a dialectical discussion takes place with the student and the course material. Students explore what they have learned about themselves from the course and the *Relational Assessment Scale*. They compare their experience of family and their interpersonal relationship with what they have learned about successful interactions and disabled family systems. As a course, *Interpersonal Relationships* illustrates for the students four distinct perspectives from which families operate and challenge the students to expand their definition and perspective of what a family is and what an intimate relationship can be.

As a family and child ecology course, *Interpersonal Relationships* offers students the opportunity to experience critical self-reflection. The complexity of the concepts presented and the personal application creates an environment for the student to safely explore personal experience with research-based theory. As a course for preparing family life educators, *Interpersonal Relationships* holds all of the components needed to assist the student preparing for the profession by allowing the student to integrate course concepts into one's personal life, much as the professional family life educator asks of program participants (Brown, 1993; Morgaine, 1994).

It is believed that the student papers can offer insight into the critical reflection process as it applies to interpersonal relationships. The learner-content engagement of the papers presents an opportunity to study the thought processes of the students as they examine their understanding of family, their experience of a specific intimate relationship, and the application of course knowledge into this understanding. By

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qualitatively examining the papers, it is believed some insight will be gained about the critical self-reflective process that a person experiences when faced with a problem in an intimate relationship. This process of critical self-reflection becomes emancipatory for the student in that it makes conscious beliefs and perspectives which challenge the students to become more knowledgeable of who they are as individuals.

Synthesis of Family Life Education and Critical Reflection

Emancipatory learning, which can emerge from critical reflection, has been identified as a desirable goal toward which family life educators should strive (Brown, 1993; Hughes, 1994; Morgaine, 1994, 1992). Emancipatory learning presents teaching as a means of helping the student to critique values, beliefs, behaviors and justifications challenging how one knows these things to be true. Emancipatory learning creates an atmosphere where the learner reflects on these hidden truths and comes to know something which frees him/herself, and allows the learner to question artificial or societal proposed standards that oppress the individual's ability to become authentic (Brookfield, 1995a; Brown, 1993; Freire, 1970; Habermas, 1968; Morgaine, 1994).

Morgaine (1994) calls on those who teach family studies students to become cognizant of their own hidden false truths and to find ways to bring students to the experience of emancipatory learning. Such learning will be passed on to the families with whom they will work.

Family life educators can facilitate opportunities for participants to reflect on the ways in which their life experiences intersect with their personal value systems rather than manipulate circumstances to achieve a pre-established desired end.

...As a result, participants' life problems may begin to seem more manageable, thus motivating change. (Morgaine, 1992, p.14)

Morgaine goes on to discuss how families are oppressed by unconscious societal influences which leave individuals bound and unable to act freely, and thus unable to love and care for their family members in authentic ways. Instead, parents ask for classes on discipline so they can better raise their children, and couples struggle with communication skills as a means of healing violent and obtrusive relationships because society places a high value on stable marriages. What is missing is a conscious understanding of current beliefs and a full acknowledgement of what one would really like life to become. Without this awareness, family life education programs are remedies that can only address symptoms and not the actual problem.

The students in this undergraduate course are consumers of the same knowledge they will later teach. Therefore, it becomes important to instruct in a manner that generates this third level of interest, emancipatory learning. In family life education, this could mean encouraging students to examine what it is that is known about family, how this has come to be known, and what is true in this knowledge. To do this, the student will need skills in critical reflection.

How an individual uses the skills of critical reflection in relation to intimate relationships is not known. Previous researchers have constructed an understanding of how one might think critically in solving closed and open-ended problems, but relationship problems, so prevalent in families, have not been the subject of critical reflection research (Brookfield, 1995a; Ennis, 1992; Kitchener & King, 1994; Mezirow, 1991; Norris, 1992).

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It is believed that this research will assist those who teach family studies and family life education in that these results can be used in the development of instructional methodology. For university professors, insights into critical reflection can be used to structure student learning activities to increase the likelihood of such experiences. Family life educators who are emancipatory learners, will empower their constituents to enter the process of critical reflection and assist in securing truly desired changes that will improve one's resiliency of society while increasing a pleasurable experience of family.

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Chapter III

RESEARCH METHODOLOGY

Research Objectives

The purpose of this study has been to identify and explore the process of critical reflection in family studies students. Specifically it has explored student experiences of learning as presented in semester papers with the intention of gaining insight into how the concepts taught in the internet class has triggered students to reflect, evaluate, adapt or reject principles that could increase their sense of well-being and improve their relationship with another person. With this purpose, the following objectives have been identified:

1. To explore the process by which family studies students critically reflect on course concepts as they relate to an intimate relationship.
2. To identify, code and analyze the components of critical reflection as presented in the student papers.
3. To compare the critical reflection processes demonstrated within the student papers with current theories and to modify and expand current understanding as warranted by the data.
4. To obtain clarity in understanding how Habermas' philosophy of human interest and knowledge is present in student learning.

Research Questions

Based on the objectives of this study the following research questions have been developed:

1. How do family studies students critically reflect on intimate relationships in response to information learned from participating in an interpersonal relationship course?
2. How are course concepts used by the students to understand relationship problems?
3. What components of critical reflection can be documented in the student papers?
How are these components presented?
4. How do the student papers demonstrate Habermas' concepts of human interest and knowledge: technical/instrumental, practical/communicative, and emancipatory?
5. What conceptual framework or hypotheses might be constructed from the documentation of indicators found in the student reflection papers that will expand our understanding of critical reflection and emancipatory learning?

Assumptions

Assumptions are the presuppositions that the researcher carries into the study. Some of these assumptions are necessary to provide contextual framing of the phenomena to be investigated, while others need acknowledgement as they may pose bias (Creswell, 1998; Denzin & Lincoln, 1998; Maxwell, 1999). This study was based on the following assumptions grounded in the theoretical framework of Brookfield

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(1987, 1995a), Ennis (1992), Kitchener & King (1994), Meyer (2000), Mezirow (1991, 1998), and Norris (1992).

Assumption 1: *It is possible to identify the presence of critical reflection in the semester papers of students from the Interpersonal Relationships internet class.*

Because of the nature of the course material and the personal application of the *Relational Assessment Scale* data to a significant relationship, it is assumed that the students will display evidence of critical reflection in regard to their perception of their relationships. It is further assumed that the experience of the class will trigger challenges within students, providing them opportunity to examine their beliefs and question their perception of the relationships (Brookfield, 1994, 1995a).

Assumption 2: *It is expected that the student papers will present multiple abilities and variations of critical reflection.* As a fourth year family studies undergraduate class, the majority of student papers will be twenty to twenty-four year old females. It is assumed that the quality and the process of their critical reflective activity will be different from males and more mature adults. However, the nature and reputation of the course attracts students from multiple disciplines, increasing the number of male participants and graduate students, thus increasing the potential variation in reflection abilities available for study (King, 1992; Kitchener & King, 1994).

Assumption 3: *It is believed that deeper levels of personal reflection are achieved through writing.* As an internet course, *Interpersonal Relationships*, involves a great

deal of writing and reflection on personal beliefs and experiences. The technique of writing can bring basic assumptions by an individual into conscious awareness, allowing for new insights into the self. Therefore it is believed that these students will display personal depth to their understanding of the course materials and with more intimate reflection of how they view their relationships (Meyer, 2000).

Assumption 4: *The definitions of concepts presented in FCE 444, Interpersonal Relationships, will be regarded as conceptually true for the purpose of constructing an assessment of student understanding.* Constructivism views knowledge as being dependent on human perception and practice. Meaning is constructed from social interaction that takes place between the individual and the world, the knower and the known. Things can exist independent of the person but meaning can only be known when it is socially constructed. The definitions presented in the *Interpersonal Relationships* course were designed to illustrate specific concepts in family paradigmatic structure. It is recognized that student interpretation may vary from the course definition. For the purpose of this study, any use of a course term by a student in the context of describing or explaining one's relationship will be judged as consistent or inconsistent within the course's conceptual definition. Concepts used that are inconsistent with course definition, will be identified as being misused or incorrect (Knapp, 2000).

Assumption 5: *This is an important area of study.* How an individual uses the skills of critical reflection in relation to intimate relationships is not known. Previous

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researchers have constructed an understanding of how one might think critically in solving closed and open-ended problems, but relationship problems, so prevalent in families, have not been the subject of critical reflection research (Brookfield, 1995a; Ennis, 1992; Kitchener & King, 1994; Mezirow, 1991; Norris, 1992).

Pilot Studies

Prior to this research project, several pilot studies were conducted. In conjunction with UCRIHS projects 98-101, and 99-805, the researcher assisted with coding and evaluation of student papers from the *Interpersonal Relationships* course in the Spring semester of 1999 and the summer semester of 2000. From this experience, an area of expertise in family paradigms was developed. In addition, a paper on student learning and critical thinking was written and presented at the National Council of Family Relations Conference (Imig & Bailey, 2000).

In conjunction with the doctoral study, two research papers were developed for separate classes that dealt with critical reflection assessment. In the Fall of 1999, for Education Administration Development 904, Transformative Learning, a research study comparing critical thinking skills with a relationship assessment instrument was implemented. Married and dating couples were administered both instruments and then interviewed to assess if a relationship existed between an individual's ability to use critical thinking skills and understanding relationship problems.

In the Fall of 2000, for Family and Child Ecology 980, Qualitative Research Methods, a research study analyzing the critical thinking skills of undergraduate family studies students was conducted. In this study, students were interviewed and asked to

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share how they had used information in their personal lives from a class they had taken the previous semester. Semester summary papers from this class were studied for the presence of critical reflection. Data from the interviews and paper analysis were compared for consistency.

In each of these studies, qualitative methods of research were implemented sharpening the skills of the researcher. Also, an extensive literature review was completed with each study acquainting the researcher with a depth of knowledge regarding the process of critical reflection and interpersonal relationships.

Research Design

The phenomena being studied is the process of critical reflection as demonstrated in the student papers. As an abstract concept within the papers, it is embedded in the meanings that the students attribute to themselves and the course material they are studying. This is an important area to study since it exerts influence over the interactions of the students with their significant partners. As a social phenomena, it is believed that critical reflection exists not only in the minds of the students but is played out in the objective world and can be understood in some causal manner. Since it is unclear how such an abstraction can be measured, qualitative analysis is the most appropriate research methodology for investigating the phenomena (Denzin & Lincoln, 1998; Miles & Huberman, 1994).

Qualitative research is focused on understanding meaning within a particular social setting or event and not necessarily designed to prove or disprove a theory (Creswell, 1998; Denzin & Lincoln, 1998; Miles & Huberman, 1994). The focus of this

study has been on understanding how the students interpreted what was being presented in the *Interpersonal Relationships* course. Its purpose has been to expand the understanding of critical reflection in intimate relationships. It has not tested theory, but rather contributed to the current body of research. Qualitative methods are the best fit for conducting this research since they provide the structural designs to get beyond the initial concepts of critical thinking to uncover new insights in how this process transpires or is present in intimate relationships.

The primary method of investigating critical reflection in the student papers was grounded theory, a methodology within the discipline of qualitative analysis. Grounded theory is an inductive approach to theory construction that utilizes comparative analysis for identifying codes, categories, and themes from the data (Creswell, 1998; Denzin & Lincoln, 1998; Glaser & Strauss, 1967; Miles & Huberman, 1994). Though Glaser and Strauss (1967), credited for justifying scientific rigor to the qualitative process, argue for a loose approach with no preconceived constructs guiding the research, contemporary researchers propose modifications that allow theoretical frameworks to assist throughout the research process (Creswell, 1998; Denzin & Lincoln, 1998; Maxwell, 1999; Miles & Huberman, 1994; Rudestam & Newton, 2001). Based on the recognition of the value of coupling established theories on critical reflection / transformative learning with research inexperience, the recommendation of Miles and Huberman (1994) regarding the implementation of a conceptual framework was used in the design of this study to assist in the analysis process (see Figure 1).

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Research Process

Data has been systematically gathered and analyzed using a constant comparative method. A generic four-stage model of critical reflection using the works of Schön, (1987), Mezirow (1991), Brookfield (1987, 1995a), Kolb (1984), and Kitchener & King (1994) (see Figure 1) has been used as a theoretical framework for analyzing the data. The student papers were read by the researcher and coded for the presence of any of the four stages of reflection: problem identification, appraisal, solutions, and different perspective. During this process, detailed data, giving greater clarity to the students' thinking processes, has been noted and developed as categories.

The student papers have been read in batches of five. Notations from each batch have been analyzed, creating new codes to represent the emerging information. Papers have then been reread testing the emerging codes for significance by documenting their presence or absence in each of the papers. It had been anticipated that during this time new insights would either dismiss the existence of a coded concept or provide substantive support for recognizing a student's critical reflection process. Once categories became saturated and no new examples of critical reflection became apparent, no additional data was collected or analyzed.

Sampling

The ability to exercise purposeful sampling has been prohibited due to several circumstances. First, in accordance with the University Research on Human Subjects agreement, student anonymity prevented the researcher from obtaining personal information. Without such knowledge the researcher has been unable to employ

criterion sampling that would provide opportunity to select informants who could provide variation or corroboration of experiences. Therefore, a method of secondary selection of participants has been employed. Secondary selection implies that the researcher cannot select participants according to criteria considered to be beneficial to the investigation (Denzin & Lincoln, 1998). In this study such criteria would have included variations in age, gender, and ethnicity, to secure information-rich cases.

Using a secondary selection method, a random sample of twenty papers has been selected and prepared for analysis by the dissertation chair. Preparation has included copying the student papers and removing or blacking-out personal identification, such as name and student number, so that the researcher had no knowledge of student identity or academic ranking.

Reliability and Validity

The terms reliability and validity are most often associated with quantitative research and frequently believed to be missing in qualitative studies. It has been suggested that a new vocabulary is needed to understand the process of qualitative research that moves away from the empirical positivist perspective of quantitative analysis (Ambert, Adler, Adler, Detzner, 1995; Denzin, Lincoln, 1998; Maxwell 1999). Criteria needed to evaluate qualitative research are found in the researcher's procedures, ethics, sampling adequacy and appropriateness, analysis of the data and the validity established through internal and external means (Ambert, Adler, Adler, Detzner, 1995; Maxwell, 1995; Rudestam & Newton, 2001). Using adequacy and appropriateness as

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indicators for reliability, the following is offered as the documentation of “trustworthiness” for this study (Rudestam & Newton, 2001).

Criteria of Adequacy and Appropriateness

The purpose of this study has been to explore the process of critical reflection that internet family studies students have used in understanding an intimate relationship. The *Interpersonal Relationships* internet class has been chosen because of the assumption that as participants in an internet course, students would be more likely to express insight regarding their beliefs and perceptions. The ability to study the abstract nature of critical reflection necessitates the revelation of introspective and self-reflective thoughts, thereby insuring the selection of this sample as an appropriate population for study.

Adequacy of the study has been established using the method of saturation (Creswell, 1998; Rudestam & Newton, 2001). As indicators of critical reflection have emerged from the papers, categories of coding have been developed. Papers have been reread and coded as different insights emerged. After an initial twenty papers had been read and coded, patterns of saturation were noted. An additional ten papers have been purposively sampled from the remaining course papers and analyzed and coded. With no new critical reflection patterns emerging and a saturation of the previously identified codes, it has been deemed that sampling was sufficient enough to move into the next phase of the study.

Data Analysis in Establishing Validity

To establish “trustworthiness,” a record has been kept of all steps of the research process. Components of this process include:

- A learning journal of key theoretical concepts from related research
- A research log chronicling:
 - Daily activities relating to the collection of critical reflection concepts as found in the student papers with notations of how these related to previous research
 - Insights from personal reflection on the emerging data
 - Questions regarding the data and student activities within the papers
- An audit trail has been meticulously recorded tracing the development of early generic coding and the emergence of codes from the student papers.
- Matrices have been created to maintain a system of analysis and data management that would minimize the effect of “data overload” and act as transitions as the researcher moved from open to axial to selective coding of data.
- Throughout the course of the study the researcher has met with various committee members to corroborate findings and to seek alternative perspectives.

Data Triangulation

To assist in the process of establishing validity, a process of *investigator triangulation* has been implemented. In qualitative research, triangulation is the use of

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multiple methods or data to increase validity (Denzin & Lincoln, 1998; Miles & Huberman, 1994; Maxwell, 1999). A method of investigator triangulation has been used to reduce the risk of systematic bias on the part of the researcher and to increase the validity of the findings due to the limitations of the study (Denzin & Lincoln, 1998; Maxwell, 1999). Once coding had been developed, an un-coded paper was randomly selected and coded by the researcher and an outside trained investigator. The results from this validity test have been compared and used to adjust and strengthen the researcher outcomes.

Conceptual and Operational Definitions

Concept: Critical Reflection (CR)

Critical reflection is an inquiry into the nature of a problem, seeking truth, understanding, or resolution. (Mezirow, 1981, 1991, 1996, 1998; Brookfield, 1987, 1995a, 1995b; Kitchener & King, 1994; King, 1992; Norris, 1992; Ennis, 1992).

Operational Definition

Critical reflection presents itself as the process by which students question or interact with the course concepts, the *Relational Assessment Scale* and their relationship with their partner. This interaction may be presented as a problem or an awareness of a belief within themselves or the relationship.

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Concept: Critical Self-Reflection (CSR)

Critical self-reflection involves a personal inquiry into beliefs, values, and behaviors and the experiences that supported their development (Brookfield, 1987, 1995a, 1995b; Mezirow, 1991, 1998).

Operational Definition

The process by which students explore how they have come to think, feel and behave. This CSR demonstrates an ability to identify problems in the thinking, feeling and behaving activity as they relate to an identified problem or belief and the student's self-perception. *Critical Self-Reflection* differs from *Critical Reflection* in that the student looks to oneself and does not project blame or the need for change onto the partner.

Concept: Critical Self-Reflection on Assumptions (CSRA)

Critical Self-Reflection on Assumptions is the calling into question and examining the assumptions underlying a problem or belief. As a deeper form of personal inquiry the learner seeks to uncover the meaning of the beliefs in relationship to their origins, and discerns their truthfulness (Mezirow, 1998).

Operational Definition

The ability of the student to question why the identified problem exists through the examination of beliefs: how those beliefs were formed, how well they serve in understanding oneself and another person, how the beliefs may be distorted, and recognition of the need to alter beliefs or meanings. *Critical Self-Reflection on Assumptions* may encompass all or parts of this reflective process.

Conceptual Components of the Critical Reflection Process

Using the four-stage generic model of critical reflection, the following concepts were used as a framework for the initial coding of data.

Concept: *Problem Identification*

Problem identification is the explicit naming of a thought, belief, behavior, or feeling that causes the student to recognize incongruence between what is held to be personal truth or desire, with a conflicting experience or situation (Mezirow, 1981, 1991, 1996, 1998; Brookfield, 1987, 1995a, 1995b; Kitchener & King, 1994; Schön, 1987, 1994, 1995).

Operational Definition

The identification of a problem by the student. The problem could be related to the interpersonal relationship, an experience with the family of origin, or a discrepancy between beliefs and the course material.

Components of Problem Identification

From the data analysis the following conceptual components describing the students reflective processes concerning a problem emerged. These processes appear to correspond to the concepts taught in the *Interpersonal Relationships* class though not directly identified by the students. Definitions of these concepts are presented to assist the reader in understanding terminology used in the description of student critical reflection activity.

Concept: Control

The ability to get things done in the way that one wants them accomplished (Imig, 2001).

Operational Definition

From the *Relational Assessment Scale*, students identify problems in the ability to accomplish tasks. There is a disagreement between a student and partner with how things should be done (i.e. how time is spent, how the house is cleaned).

Concept: Affect

A sense of intimacy and nurturance (Imig, 1999).

Operational Definition

From the *Relational Assessment Scale*, students identify problems in the ability to express or receive affect (i.e. caring, belonging, sexual physical intimacy, non-physical intimacy).

Concept: Meaning

The shared understanding of what is of value in the relationship (Imig, 1999).

Operational Definition

From the *Relational Assessment Scale*, students identify problems in the ability to develop shared meaning (i.e. vision, purposefulness, connection). Meaning is expressed in continuity and is expressed in symbols and metaphors. They define what the couple holds of value (e.g., the sharing of religious beliefs).

Concept: *Appraisal*

The process of vacillating among the choices of denying, minimizing and embracing the incongruent information that has been identified as causing a problem within the student (Brookfield, 1987, 1995a; Schön, 1987, 1994, 1995).

Operational Definition

A discussion illustrating how the student has chosen to deal with the identified problem. (i.e., minimize the effects of the problem, not acknowledge the problem as really being a problem, acknowledge that the problem may be resulting from a personal perception that is now being challenged).

Components of Appraisal

From the data analysis the following conceptual components describing the students' reflective processes emerged.

Concept: *Thinking*

To form or conceive in the mind; to form or have an idea or conception of (a thing, fact, circumstance, etc.); to hold as an opinion (Webster's Unabridged Dictionary, 1996).

Operational Definition

A discussion within the papers of students' thoughts regarding the course material and / or the relationship. Three categories representing a reflection on thinking emerged (rational, analytical, judgmental) 1) The sharing of one's opinions about a belief or problem; 2) The sharing of how one came to an opinion; 3) The sharing of what effect this thinking has had on the relationship.

Concept: *Feeling*

An emotion or emotional perception of an attitude (Webster's Unabridged Dictionary, 1996).

Conceptual Definition

A discussion within the student papers of emotions relating to an identified problem or belief. Three categories representing a reflection on feelings 1) Reflection on how one feels about the problem; 2) Reflection on how one came to feel this way; 3) Reflection on what effect these feelings have on the relationship.

Concept: *Behavior*

The manner of behaving or acting (Webster's Unabridged Dictionary, 1996).

Conceptual definition

A discussion within the student papers describing their behavior in response to a specific problem or belief. Three categories representing a reflection on one's behavior (actions): 1) Reflection on what one's behavior is; 2) Reflection on how this behavior evolved; 3) Reflection on the effect this behavior has on the relationship.

Concept: *Belief*

Something believed; an opinion or conviction; confidence in the truth or existence of something not immediately susceptible to rigorous proof (Webster's Unabridged Dictionary, 1996).

Conceptual Definition

A discussion within the student papers that presented a personally held belief. Often these beliefs are presented as a metaphor or popular saying. Three categories representing a reflection on beliefs 1) Reflection on what one believes; 2) Reflection on how this belief came into existence; 3) Reflection on the effect this belief has on the relationship.

Concept: Exploration of Solutions

Finding alternative ways to think, feel, behave and believe (Brookfield, 1987, 1995a; Schön, 1987, 1994, 1995).

Operational Definition

Consciously identifying and writing what these alternative ways of thinking, feeling, behaving and feeling could be. May or may not identify course concepts in the development of a solution. May also use previously held beliefs for creating solutions to problems.

Subcomponents of Exploration of Solutions

From the data analysis the following conceptual components emerged describing the students' reflective processes concerning the development of a solution.

Concept: General Solutions or Course Concepts in the Solution

The process of determining the answer to a problem (Webster's Unabridged Dictionary, 1996).

Operational Definition

A discussion in a student's paper that suggests the resolution to a problem. The resolution can be based on concepts taught in the course making it "*Course Concepts in the Solution*," or it can be a "*General Solution*," originating from some source not affiliated with anything presented in the class. For example, a solution may be generated from the student's beliefs and represented in a metaphor.

Concept: *Developing Alternative Perspectives*

A paradigmatic shift from how the problem is viewed that results in a change in response (Brookfield, 1987; Schön 1987, 1994, 1995).

Operational Definition

The student identifies a different way to approach the relationship, to interpret behaviors of another, or to redefine personal beliefs regarding situations specific to the problem that was identified. *Also identified as having a different perspective.*

Subcomponents of Alternative Perspective

From the data analysis the following conceptual component describing the student's reflective processes concerning the development of an alternative perspective emerged.

Concept: *Blocks*

A state or condition of being obstructed (Webster's Unabridged Dictionary, 1996).

Operational Definition

A discussion in a student's paper describing or identifying an inability to change a belief, opinion, or perception.

Concept: Beliefs and Perspectives

Beliefs: Meaning schemes that define what is known and believed.

Perspectives: The construction of what one believes which in turn shapes how one approaches and assimilates information and experiences (Mezirow 1991; Brookfield, 1987; Freire, 1970; Habermas, 1968; Schön, 1995; Belenky, 1986) .

Operational Definition

Beliefs and Perspectives are filters by which the student receives information. Beliefs and Perspectives can be built on fallacies and epistemic distortions that inhibit the student's ability to respond in authentic ways. Critical reflection on how the student thinks, feels, believes, and behaves alters these filters and allows the student to be more present to the truth of the information being received.

Additional Concepts Defining Critical Reflection

The following concepts assist in the understanding of the critical reflection process.

Concept: Introspection

The awareness of one's thoughts (Mezirow, 1991).

Operational Definition

A discussion of the student's thoughts without reflection on what these thoughts mean.

Concept: Assimilates, Minimizes, Denies

Processes in which individuals distort, deny, or redefine information that contradicts their personal beliefs and perspectives (Brookfield, 1995a; Mezirow, 1991).

Operational Definition

Student discussion of a concept that is inconsistent with the course's prescribed definition. Most often presented as: 1) A redefining of what a concept means so it confirms the student's beliefs or perception. 2) Misinterpretation of relationship assessment results so they confirm student's beliefs or perceptions. 3) Denial or minimization of the existence of an explicit or implicitly implied problem within the relationship.

Concept	Abbreviation / Code	Code Color¹
Critical Reflection	CR	Red
Critical Self Reflection	CSR	Red
Critical Self Reflection on Assumptions	CSRA	Red
<i>Problem Subcomponents</i>		<i>Yellow</i>
Control	A1.21	
Affect	A1.22	
Meaning	A1.23	
Content	A1.24	
<i>Appraisal Subcomponents</i>		<i>Pink</i>
Thinking	B2.30	
Feeling	B2.40	
Behavior	B2.50	
Beliefs	B2.60	
Introspection	B2.70	
Class Material	B2.90	
<i>Exploration of Solutions</i>		<i>Purple</i>
General Solutions	C3.10	
Course Concepts in Solutions	C3.20	
<i>Alternative Perspective</i>		<i>Orange</i>
New Perspective	D4.20	
Blocks	D4.40	
<i>Other</i>		<i>Green</i>
No Problem Reflection	E5.20	
Surprise	E5.30	
Uses Material to Support Beliefs	F6.10	
Alters Meaning of Course Material to Support Beliefs	F6.20	

Figure 2. The data from the student papers were coded using a generic four-stage model of critical reflection with the general headings of Problem Identification, Appraisal, Solutions, and Alternative Perspective. From these four general categories, 21 more specific reflective activities emerged.

Figure 2. Critical Reflection Activity Data Codes

¹ Color Coding was limited to general coding with abbreviations noted to distinguish specific reflective concepts.

Researcher's Role

Human research does not take place within the confines of a sterile laboratory. In epistemology, the researcher works to achieve understanding of human thinking. In this research, the goal was to achieve a level of insight into the epistemological process that the family studies students used in understanding interpersonal relationships. It is believed that sincere critical reflection of relationships happens in the context of daily experiences. The role of the researcher is to explore this process in the most natural setting possible. Though the internet class on interpersonal relationships does not entirely fit the definition of a "natural setting," it does provide the researcher with an in-depth look at a naturally occurring critical reflective process.

In qualitative research, the researcher is the key instrument in the process of discovery and understanding. The researcher brings the personal belief that it is possible for undergraduate students to critically reflect and that this reflective activity can be identified within these student papers. These beliefs are viewed as being strengths in that they provide the impetus to pursue the area for study despite obstacles.

The researcher also brings preconceived assumptions regarding the nature of critical reflection that need to be "bracketed" and laid aside. Knowledge of previous theorists of critical reflection has greatly influenced the perception from which this study was originally designed. Critical self-reflection on one's own assumption was pivotal in being able to distinguish expectations from actual presentation of critical reflection contained in the student papers. This task was assisted through personal journaling, peer presentations and the critical analysis of committee members' perceptions of the initial conceptual map and proposed data coding.

Limitations

The entire process of critical reflection analysis is beyond the scope of this study. Throughout the coding process, questions regarding the nuances of thinking and beliefs became troublesome and bogged down the process. By choosing an internet class that had taken place in the spring of 2000, a major limitation was the inability to corroborate findings or distinguish thinking opinions from steadfast beliefs with the students who wrote the papers.

A second limitation was the use of secondary source data. By using a modified random sampling of the papers with student anonymity, the researcher is prevented from establishing wide generalizability from the findings. For example, it was not possible to determine students' ages. It is believed that age and social and emotional maturity could influence an individual's ability to critically reflect. By being unable to confirm ages of the student authors, it is unlikely that propositions relating age to the critical reflection process can be developed. This limit is further discussed in the Data Analysis section of Chapter IV.

Key

Arrows represent the flow of research activity.

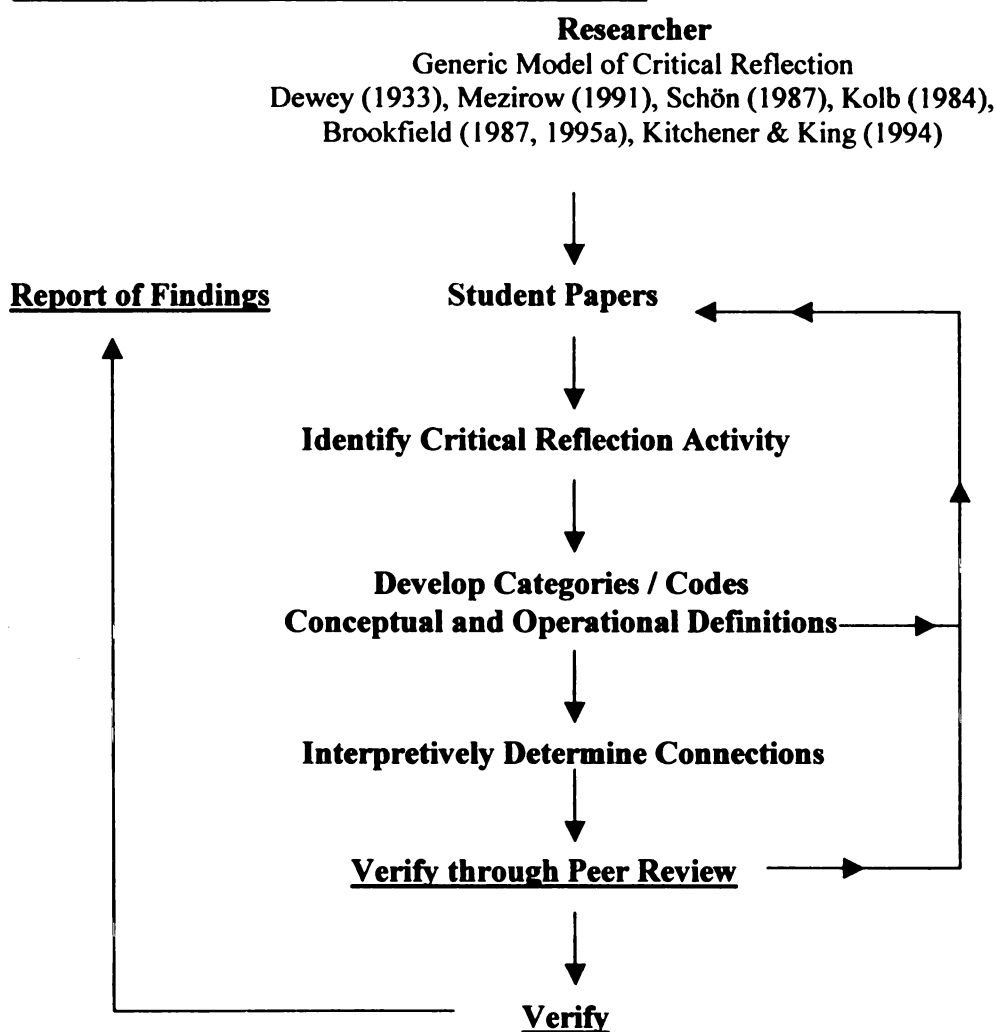


Figure 3. The Operational Map, adapted from Crabtree & Miller, (1992), (as found in Denzin & Lincoln 1998) illustrates the process of grounded research beginning with the researcher's use of prior critical reflection theories. The researcher discovers presence of critical reflection as presented in the student papers and codes the distinguishing features. Papers are reread and coded using emerging information. Analysis of information is verified through peers. New insights and clarifications are used to study the texts repeating the entire process. A final verification of interpretations culminates as the *Report of Findings*.

Figure 3. Operational Map of A Qualitative Exploration of Student Papers for Indicators of Critical Reflection

Chapter IV

RESULTS

Overview of Results

This chapter provides a presentation of what was found in the student papers. A description of the process of analysis and sample is provided. The results of the analysis are presented with detailed discussion in Chapter V².

Analysis

The student papers were analyzed from multiple perspectives utilizing grounded theory methodology with a theoretical framework for identifying *critical reflection*. The works of Dewey (1933), Mezirow (1991), Brookfield (1987, 1995a), Kolb (1984, Schön (1987) and Kitchener and King (1994), guided the development of the theoretical framework. The first wave of analysis coded the presence of any of the four stages of reflection: problem identification, appraisal, solution, and evidence of a new perspective. During this process, open coding was implemented noting the presence of more detailed data giving greater clarity to the thinking processes that the students demonstrated. Data from the papers were systematically gathered and analyzed using a constant comparative method.

The next wave of analysis utilized *Case Dynamic Matrices* (see Figure 7). For each student paper a matrix was constructed outlining the documented activity of critical reflection (Miles & Huberman, 1994). By examining the matrices, a

² “Results chapter contains JUST THE FACTS: tables, figures, transcript summaries, and the author’s description of what is important and noteworthy about these. Extended discussion of results, though very important, belongs in the discussion chapter (Rudestam & Newton, 2001, p.103).”

conceptually ordered mega-matrix was constructed grouping patterns of activity (Miles & Huberman, 1994). Multiple variations of the matrix were designed comparing the components of Appraisal and Problem Identification. From this analysis, distinct patterns of critical reflection began to emerge. Using the theoretical works of Mezirow (1991, 1998), and Brookfield (1994, 1995a), variations in critical reflection were determined: critical reflection, critical self-reflection and critical self-reflection on assumptions. With these categories a third wave of data analysis sorted the clusters of reflective activity that had earlier been identified.

With all of the data coded, sorted, and analyzed, a final *conceptually ordered matrix* was constructed. This matrix profiled the data by informant, highlighting the conceptual activity that was documented (see Figure 6).

Description of Sample

Of the thirty student papers studied, males wrote four with the remaining 26 being done by females. To summarize the profile of relationships, the four male papers contained one mother-son relationship, one husband-wife relationship, and two boyfriend-girlfriend relationships with one of these having duration of less than four months. The 26 females' papers contained 13 boyfriend-girlfriend relationships (two of which were less than six months in duration), four wife-husband relationships, three girlfriend-girlfriend relationships, two friend-boyfriend relationships, two life long friends, one daughter-mother relationship, one parent evaluation.

As it was not possible to profile students' ages, ethnicity or academic level, little personal information about the students could be obtained. Papers ranged in length

from 15 to 35 pages with four to ten pages being relationship assessment vector charts, cluster scales and quartile information. Content reflection sections of the papers ranged from 4 to 12 pages with many of the papers containing grammatical errors. Three papers had serious grammatical problems making it challenging to understand the intention of the authors.

Report of Findings

Research Questions

In answering research questions one, *“how do family studies students critically reflect on intimate relationships in response to information learned from participating in an Interpersonal Relationships course?”* and three, *“What components of critical reflection can be documented in the student papers?”*, an examination was made of the student papers to see how the students used the course concepts in their papers as part of their reflection process. The questions were broken into two components for analysis.

First, the student papers were analyzed for evidence of critical reflection. By using a generic model of four components to assist the researcher in distinguishing critical reflection from introspective thoughts, 34 different types of reflective activity were identified and later refined to a more inclusive and manageable 21 (see Figure 2). From this, three models of critical reflection emerged: critical reflection, critical self-reflection, and critical self-reflection on assumptions (see Figure 5).

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Critical Reflections

Critical Reflection (CR) represents the student's ability to analyze the course material in relation to his or her life experience. Student papers that demonstrated *CR* focused on personal understanding of course material. This understanding, though not always consistent with the designated course definition, gave students new insights into themselves and their relationships. *Critical Reflection* was seen as being present when the students gave personal examples to illustrate a concept.

Example

Expression in our relationship is another thing entirely. My mother and I rarely say I love(r) you nor do we hug and kiss. This is where I wasn't sure how to classify us. I was thinking closed but we are not even that because we are not very affectionate in private as well as in public. (01:10)

In this example, the student is sharing her understanding of the target goal *affect* and the paradigmatic pursuit of the goal using a *Closed* perspective. It represents critical reflection on course material because she is actively engaged in trying to understand what it means to be *Closed* while pursuing the target dimension of *affect*.

The next form of critical reflection found in the papers was **Critical Self-reflection (CSR)**. *CSR* showed the students' thinking processes as they looked at how they understood their relationship. This type of reflection often involved the identification of a problem or a surprise. Problems were situations in the relationships that caused the students a level of distress or unhappiness. Surprises were unexpected results in the *Relational Assessment Scale* that contradicted a preconceived idea about their partner, themselves or the relationship. The reflection often included course

material, was intricately involved in a student's understanding of the problem, and was always central to the experience of a surprise.

Example

Currently we are dissatisfied with this aspect of our relationship [control]. Unfortunately my ideal is J's current perception of our relational system, and what he wants to move away from. Therefore, this system is misaligned and disabled. J and I both have differing ideas about how things should get done. We both work during the day however, I have longer days than J, with me getting home at ten and him at five. Though it is more of a priority for me to have a clean house, I still feel like J should do some of the housework, especially since he makes at least half of the mess. However, he feels like he worked hard and deserves to come home and rest. So when I come home, I wind up doing the housework, and I do not get a chance to unwind like he did. (05:13)

In this example the student is critically reflecting on her perception of how the target dimension of *control*³ is carried out. Self-reflection is taking place as she examines why she believes their *RAS* scores differ.

Other examples of *CSR* illustrated the student's examination of thoughts, feelings, actions and beliefs.

Example

In my relationship, we seem to come back time and time again to the same thing sitting at home watching television and having sex. It is routine, we don't do anything that brings excitement and fun to our relationship. This patterned behavior is too steady for me; it makes me feel suppressed and it makes me feel as though he doesn't care enough for me to take me out. (12:7)

This example illustrates a student critically self-reflecting on the problem of how her boyfriend uses the resource element of *time*. The incongruence between what she would like and what is actually happening is presented in her critical self-reflection of

³ Control as a target goal refers to the manner in which things get done right.

how the behavior, sitting at home, makes her feel, suppressed, and creating a belief that he does not care enough for her.

The third form of critical reflection found in the student papers was ***Critical Self-reflection on Assumptions (CSRA)***. *CSRA* was the least identified form of reflection found in the student papers. *CSRA* occurred when a student reflected on assumptions, questions, the reasons for the questions, and the reasons for the problem. In the two papers where *Critical Self-Reflection on Assumptions* were found, the students discussed their thoughts, feelings, beliefs and behaviors as they related to the assumption being questioned. The activity demonstrating *CSRA* often covered several pages of the student paper as it weaved reflection on thoughts, feelings, and behaviors, understanding of course concepts and challenges to beliefs.

Example

Since we both were opposers, I first thought we could challenge each other and stimulate each other. So I thought our relationship was aligned...sometimes we have a hard time to find our legitimacy and a point of agreement. For example, one day we talked about our cultural differences. We found that though we were both from a (foreign country in the east), there were so many cultural differences or so many different ways of thinking towards certain things. Then, when we found our similarity in our culture, my partner seemed to differentiate its similarity....We talked about this topic forever until we got tired of talking to this topic. Reflecting on this conversation now, I think it was the one scene representing the character of our open-opposer relationship. I now understand I think our relationship is misaligned. (027:3-4)

In this example the student is demonstrating an awareness of how she came to believe that she and her partner were different. In this, the opening description of her relationship, she describes what she believes to be cultural similarities. Throughout the paper she discusses how she becomes more cognizant of who she is in relation to her experience of American culture and the eastern culture of her boyfriend. The process of

Critical Self-Reflection on her Assumptions of who she is takes place throughout the paper. With each example that she shares, she comes to a deeper awareness of her own beliefs and a clearer understanding of how she projected herself onto her boyfriend. The final moment of clarity comes when she realizes that he is not who she thought, but neither is she:

For my ideal, I wanted to completely make myself as a follower and make him as a mover in order to make our relationship in align[ment]. However, I understand that all family and relation[ships] are imperfect (chapter 10), which means it is impossible for one to completely put one's partner into the real world. I was thinking of the meaning of [this] statement. I then realized that it is impossible for me to change my partner or control my partner's mind because I cannot even change myself and control my mind easily. By looking at the element of meaning and affect, I recognize that I really need to know that he is not a mover. I also think he may also struggle with my challenge of making him a mover when I keep myself in mover or opposer player part. I also realized even though we could not completely establish our relationship as being mover and follower, there were alternative way[s] that we could work things well in our relationship. (27:12)

The second research question asked: *How do the students use course concepts to understand relationship problems?* This question sought to gain understanding of how the students used critical reflection in understanding relationship dilemmas. Many students identified relationship problems as the focal issue by which course concepts were explored. Relationship problems centered on interpersonal conflicts in achieving affect, meaning, context or control. Students identified problems that were often recognized before their participation in the course, while some problems were uncovered through the *Relational Assessment Scale* results and were identified by the students as surprises.

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Example

The quartile rank shows that both C and I have affect in quartile one, and that we are both movers. Technically both of us being movers constitutes a misalignment, but for us it really does not pose a problem....I do like to move...The only way my wanting to be a mover sometimes becomes a problem is if C always wants to be mover and never a follower or any other behavior style....Being that C ideally wants a more *Synchronous* structure, while I want a more *Random* could pose a problem. I have no particular opinion about this at this time because I am sure those aspects have changed a bit pending the changes we have now in the relationship. I will just say that relationships are always changing. (026: 6-7)

In this example the student is describing the results from the *Relational Assessment Scale*. She interprets the quartile rankings as setting-up opposition between structure, *Random* and *Synchronous*, and player parts of mover. Throughout her paper she identifies conflicts she experiences with her boyfriend regarding her desire to do something that he does not support. In this instance she demonstrates another phenomena found throughout many of the papers, the process of minimizing, accommodating and denying the existence of a problem in the relationship.

Not all of the papers had identified problems or personal dilemmas. Nine papers had no identified problems with six of these showing no appraisal activity. Four of the student papers implied relationship difficulties without directly identifying or acknowledging specific problems. These papers contained little, if any, reflective activity.

Example

The player parts designated in the cluster scores were pretty accurate. I feel that B is mostly an opposer. The main thing that we fight about is when he challenges something I say or believe. I would like this behavior to decrease and increase his behavior of mover. B would also like to decrease my role as an opposer. But rather than increase the mover behavior, he would like to see an

increase in the follower behavior. Because he is a person of the affect element, he needs reassurance and support. (003:7)

In this example the student is identifying what sounds like a problem in the relationship, however it is never acknowledged. There is some interaction of her thinking with the course material but it appears that course concepts are being misused or misunderstood. This excerpt also provides an example of introspection with no critical reflection of the self nor of the course material.

The fourth research question, “*How do the student papers demonstrate Habermas’ concept of human interest and knowledge: technical/instrumental, practical/communicative and emancipatory?*”, addresses the students’ abilities to use the concepts in ways that are consistent with the course definitions in creating knowledge. Though all of the students used course concepts in their critical reflection, they were not always consistent with the course definitions. Of the thirteen students who displayed evidence of critical reflection in their papers, nine misused course terms and appeared to change definitions of terms to fit their understanding. Two students, who displayed the lower level of *Critical Reflection*, used concepts consistent with the course definitions, as did the two students who displayed *Critical Self- Reflection on Assumptions*.

Evidence of practical/communicative knowledge was based on students’ abilities to provide examples of how they had personally experienced or witnessed the course material. Technical/instrumental competency was established by comparing the student’s examples, explanations of what these examples represented, and consistency in personal understanding with textbook definitions.

Example

In a disabled system they do not meet all the needs of the others in the system. This fact leads to thinking of T's family. By now we know that he doesn't like to ask for help and he only does things when he wants them done and that does not include any one else in the family. *Random* families are described as being creative compliments that desire to be unique and different (Kantor & Lehr, 1975). This also entails the ideas that T was having. The *random* background was all of the perfect reason for him to be involved in a disabled system. Since most *Random* families are considered to be disabled, because of their need to explore different alternatives, I now understand more about him. (013:13)

In this example the student provides her understanding of the term *Random family paradigm* using material from Kantor and Lehr (1975). Her initial definition provides correct instrumental knowledge but her application, a communicative or practical use of this instrumental knowledge, becomes distorted. Later in this paper, she used this thinking to support her decisions to break off the relationship.

Additional Findings

Non-Critical Reflection

Though this study focused on critical reflection as a necessary process for emancipatory learning, two papers showed evidence of emancipatory learning without critical reflection activity. In these papers the students do not identify relationship problems, surprises from the results, or discussion of thinking. Instead, both papers present a "knowing." One paper tells a story of a student's interaction with her husband that leads to a new perspective followed by a discussion that illustrates a different way of thinking. The second paper describes the shared parenting of the student's infant son with his mother. The student writes about needing to redefine the course concepts to fit his cultural understanding through which a new way of knowing emerges. These papers

do not follow a course of thought that examines feeling, beliefs, thinking or behaviors like the other papers. Yet they appear to present a depth in understanding, a “knowing,” that does not follow a pattern of analysis.

Serendipitous Findings

Paradigmatic Styles of Reflection

Analysis revealed patterns regarding the paradigmatic preference of the students corresponding to critical reflection activity. Most students had multiple paradigmatic preferences but more reflective activity took place within those who had *Open* preferences, within their paradigmatic structures. Five out of seven with an *Open* paradigm displayed appraisal activity (71%), four out of nine in the *Closed* paradigm displayed appraisal activity (44%), four out of 14 in the *Random* paradigm displayed appraisal activity (29%), and one out of five in the *Synchronous* paradigm displayed appraisal activity (20%), with the papers presenting the unusual “knowing” without critical reflection within this category. Discussion of this finding will be elaborated in Chapter V.

	Example
Correct Use of Concept	Using our time more efficiently and effectively will enable me to achieve what it is we need in our relationship, which is <u>control</u> . When considering all subsystems- individual, relational, and unit-I consider my relationship as being <u>disabled</u> . C and I enjoy spending time together, agreeably our time spent together is not always spent in an ideal manner. Our goal is to spend more time enjoying the public aspect of dating such as movies, dinner, etc. Most of our free time is spent inside the home talking, watching television, or doing homework. (023:6,7)
Correct Use of Concepts	Behaviorally for affect, I want to be able to move into any of the player roles with a preference to being a bystander. J wants to be less of a mover and more of a follower. Unfortunately, we both want the relationship to be more open in this area, but neither of us wants to be a mover which is necessary in <i>Open</i> paradigms. After discussing affect, we realized that this would result in a misalignment, which could cause increased stress in the relationship, if we don't change our ideal behaviors to a more congruent way of relating in an <i>Open</i> paradigm. (007:11)
Incorrect Use of Concepts	My brother lives in a <u>closed-mover</u> family, a very strict on following rules family, a family that initiates for things to be done. You could say my father expresses himself as a <u>bystander</u> , for he brought the rules into the house and the new lifestyle. (002:2)
Incorrect Use of Concepts	My parents, while they did not have the best parents in the world, have done their best not to be their parents. When I asked them how they learned how to treat their children, they said they would look at how their parent handled them. Take the good, analyze the bad, and make it better for their children. I was raised in an <u>Open</u> family. While the parents were always the head of the household, there was a definite democracy to our family. (022:3)
Incorrect Use of Concepts	For our relationship, with our time and affect systems being <u>Open</u> , a <u>Random</u> strategy and player parts do not meet our needs. <u>We need to approach the relationship from an Open perspective</u> , and play <i>Open</i> parts, and this will meet our relational needs. Again, we need to play both an active and passive role. (005:11)

Figure 4. Demonstration of Instrumental Knowledge in Student Papers

Reflection Processes	Examples from Student Papers
No Reflection	In order to get started, let me identify the four interpersonal family [paradigms] which are: <i>Closed, Random, Open and Synchronous...</i> (010:4)
Non-Critical Reflection (Introspection)	She usually decides what we are going to do, where we are going, and not just with me is she like that, but with her friends too. I more or less care but I would rather see her happy and do something she likes to do, because if she is happy I am happy too. (002:4)
Critical Reflection	It is very difficult to spend time together because of our other commitments. This is probably the reason the <i>RAS</i> scale reflects time as being <i>Closed</i> -time. Everything has to be scheduled. I feel that if we increase the <i>Open</i> and <i>Random</i> paradigms from quartile 2 to quartile 1 this will make them more important in our relationship. I question my increasing the <i>Random</i> aspect of time, because this seems like it would complicate the situation. (019:3)

Figure 5. Critical and Non-Critical Reflection in Student Papers

Reflection Processes	Examples from Student Papers
Critical Self-Reflection	<p>I know there are times that I need to take the initiative to do and say what I think needs to be done, but I find myself being more of a supporter. In my daily life I try to listen to what J has to say and understand what his needs are and he tries to do the same for me. At times I get frustrated with myself because I try to meet his needs before I meet my own. This only results in an argument because I have so much anger inside of me that just keeps building instead of me taking the initiative and telling him how I feel about the situation and then solving it. (020:7)</p>
Critical Self-Reflection on Assumptions	<p>...One area where this is particularly true is the concept of changing our bond into more of a love relationship than a friendship... The area that I expected to have the most movement was the affect element because I want to take our relationship to the next level and N does not... Since this shows that I want to be a follower, I feel that I am sick of fighting over this situation and I just want to support my partner's decision. Although this does not have as much movement as other factors I feel that this is the hardest aspect of the relationship for me to work on. One of the biggest mountains we have to cross before we can be on this way to viewing our relationship in the same way is getting over our past. In the relational background I discussed the times in high school when N dated my friends. This is one of the hardest things for me to deal with in our relationship and it keeps the conversation from being fully open . . . In order to have the type of relationship that is ideal for us, we – or should I say “I” must get past this. Deep down I know that N is not going to change his opinion of women but on the surface I keep hoping for a miracle. Therefore, once I get beyond the past experience of Nick choosing B over me, I can work on accepting his views of women, and then opening EVERY line of communication. Getting the lines of communication open, then, is the key to getting on the same train of thought, and hence, getting into the same paradigmatic view of our relationship. (018:7,11,14,15)</p>

Figure 5. (continued)

Symbol	Description
G ♀ ♂	Gender: ♀Female Student Paper ♂Male Student Paper
C 001	Case Number
d:	Description of Relationship: bf : boyfriend, gf : girlfriend, m : mother, h : husband, w : wife, f : father, p : parents, rm : room mate, f : friend (same sex as student), mf : male friend
Paradigm R, C, O, S, ?	R - random, C -closed, O -open, S - synchronous ? – unclear which paradigm
Problem (frequency)	Problem identification within the student paper, Number of problems identified and discussed
S	Student indicates a surprise, an unexpected result of becoming aware of something
Appraisal T F B BI NA	Discussion of T (thinking) F (feelings) B (behaviors) BI (beliefs) I (introspective thoughts) NA (no appraisal activity reflecting student's personal opinions or experiences)
Critical Reflection CR, CSR, CSRA	Presence of specific component of critical reflection activity: CR (Critical reflection), CSR (critical self reflection), CSRA (critical self reflection on assumptions)
Solution G, C, No	G (solution from general knowledge not from course concepts) C (solution developed from course concepts) beliefs (solution from beliefs based on metaphor and adages) No (no solution offered)
New Perspective NP, No, block	NP (evidence of a new perspective, different understanding of the problem or partner) No (no evidence of new understanding or movement towards a new perspective) block (acknowledgment by the student of a block that prevents being able to understand or view the situation differently)
Alters Course Concepts Yes, No	Yes (student interprets course concepts incorrectly to fit understanding or perception) No (course concepts are presented accurately)
Comments	General comments of student overall paper or distinguishing characteristics

Figure 6. Description of Codes Used in Student Cross Case Matrix

Student Profile	Problem (frequency)	Appraisal	Critical Reflection	Solution	New Perspective	Alters Definition of Concepts	Comments
g:c:d							
♀:1:m R	yes (5)	T B B I I	CR CSR	G C	NP	Yes	Progression of thought
♂:2:gf: R	yes (4)	I B I T	NA	No	No	Yes	Can't understand what's wrong
♀:3:bf RO	indirect (1)	I	NA	No	No	Yes	Trouble understanding class
♀:4:bf R	yes (2)	I	NA	No	No	Yes	Misuse of concepts
♀:5:h C	yes (3)	T B I	CR CSR	G C	NP	Yes	Well developed thinking
♀:6:gf C	yes (2)	T B I I	CR CSR	C	NP	No	Well developed thinking
♀:7:h OS	indirect (1)	no	NA	C	NP	No	Story gives NP
♀:8:gf R	Indirect (2)	I (beliefs)	NA	beliefs	No	Yes	Lots of emotion
♀:9:h OR	Yes (3)	T B I B I	CR CSR	No	NP	No	Well developed thinking
♂:10:w ?	no	None	NA	No	No	No	Defines concepts

Figure 7. Cross Case Display Matrix of Data for Student Papers 1 Through 10.

Student Profile	Problem (frequency)	Appraisal	Critical Reflection	Solution	New Perspective	Alters Definition of Concepts	Comments
g :c:d ♀:11:bf RS	no	T I	NA	No	No	Yes	Personal thoughts
♀:12:bf RC	Yes (3)	T F B I B I	CR CSR	C	No	Yes	Poorly written
♀:13:bf R	Yes (2) S	T I	CR CSR	No	No	Yes	Ended relationship
♀:14:bf C	Yes (2)	I (beliefs)	NA	No	No	Yes	Uses metaphors to support beliefs
♀:15:h RO	no	None	NA	No	No	Yes	Affirms beliefs
♀:16:bf C	no	None	NA	No	No	Yes	Affirms beliefs
♀:17:f R	indirect	I	NA	C	No	Yes	Wants to end relationship
♀:18:mf C	Yes (2)	T B I F I	CR CSR CSRA	C	NP	No	Recognized block to NP
♀:19:bf RC	Yes (3)	I	CR	C	No	Yes	Lots of emotion
♀:20:bf O	Yes (2) S	T F B B I I	CR CSR	C	No	Yes	Progression of thinking

Figure 7. (continued) Cross Case Display Matrix of Data for Student Papers 11 Through 20

Student Profile	Problem (frequency)	Appraisal	Critical Reflection	Solution	New Perspective	Alters Definition of Concepts	Comments
g :d							
♂:21:m OS	no	I	NA	NA	No	Yes	Alters concepts to fit cultural
♀:22:gf OR	no	I	NA	NA	No	Yes	1 month relationship
♀:23:bf OS	Yes (1) S	I T	CR	C	No	No	4 month relationship
♀:24:p ?	no	NA	NA	NA	No	Yes	Parents' relationship
♀:25:bf OC	Yes (6)	I F T B	CR CSR	C	No	No	Shows inter-relationship of T F B
♀:26:bf R	Yes (2) S	T B F B I	CR CSR	NA	No	Yes	Illustrations in paper
♀:27:bf CO	Yes (2)	T B F I	CR CSR CSRA	C	NP	No	Insight into partner
♀:28:f S	No	NA	NA	NA	No	Yes	Defines terms no personal thought
♀:29:m R	No	NA	NA	NA	No	Yes	Vector chart filled out incorrectly
♀:30:rm C	Yes (1)	I	NA	NA	No	Yes	Views roommate as being inferior

Figure 7 (continued) Cross Case Display Matrix of Data for Student Papers 21 Through 30

Chapter V

DISCUSSION

Overview of Findings

Proposed Conceptual Framework

Students in this internet family studies course on interpersonal relationships displayed various levels of critical reflection in their semester papers. From the cross-case analysis matrix and the individual exploratory matrices used to categorize and sort the data, six patterns emerged within two generalized categories: students who *engage in questions* and *those who do not*. Engagement implies personal integration of the students' thoughts and experiences with the course concepts. Of the students who do not engage the course material from a questioning perspective there are three patterns of writing. One pattern presents the course information in a definition format. The student defines course terms within the context of the course. No application of experience or personal thought is present.

Example of Pattern 1: Defining Course Concepts With No Engagement

The major resources elements are time, energy, space and material. Time consists of three mechanisms; synchronizing, orienting, and clocking. These individual mechanisms are then broken down into smaller sub-mechanisms. (010:6)

A second pattern of student writing presents the course material with varying amounts of student self-description. Self-description is a student's thoughts and opinions with no questioning of what these thoughts might mean, where they came from or what effect they may have on the student or the relationship.

Example of Pattern 2: Self-Description With No Engagement

I am a mover when it comes to space. The scale results show my husband as having all four player parts in the fourth quartile for space, which is interesting. I'm not sure what it means, or if its accurate. I view him as a follower and a mover though. (015:6)

The third pattern of non-questioning activity is "Knowing." Within this group are students who present new perspectives, new ways of knowing, but do not display the critical reflective processes of those who engage the course material in a questioning manner.

Example of Pattern 3: "Knowing"

Personally, this evaluation has allowed me a new perspective on M's views of me and other family relations that has opened my eyes up to what she really knows that I am still trying to comprehend. As I began the final draft of these issues the *Open-Synchronous* paradigm was beginning to make sense, although I must admit that having to change ideas in mid-stride from *Closed-Open*), a result of the problems with the cluster scores, has caused me to feel a bit more frivolous than usual about my own values and insights revealed by these scores. (021:10)

Of the students who engage the internet course material from a questioning stance, there are three patterns of critical reflection: *Critical Reflection (CR)*, *Critical Self-Reflection (CRS)*, and *Critical Self-Reflection on Assumptions (CSRA)*.

Critical Reflection is a basic form of questioning the students use to make meaning of the course material. In papers that demonstrated critical reflection, students gave personal examples of how they understood the course material and discussed them. Between the display of self-description and critical reflection was a student's use of introspection. Introspection as defined by Mezirow (1991, 1998), is an awareness of one's thoughts, and is not seen as being a part of critical reflection. However, it appears

to be an important link to the process. For students demonstrating an entry level of critical reflection the progression from self-description to critical reflection was evident.

Example of Transition:

Self-Descriptive

I definitely feel that the relationship between J and I is very *Random*. Not only is it *Random*, but it is very enabled. Our relationship is very individually oriented and laterally structured....I am very involved in my studies and my own life, as J is in hers. Although this is the immediate state of mind, J and I share a special bond of love and closeness. We do what needs to be done independently... an example of this is J and her boyfriend. He is a roommate of mine also. J spends much of her time with him and they share a very different type of relationship. She spends the majority of her time with him, doing things he would like to do together. At no time do I question my relationship with J because of this. I feel this is something she devotes herself to independently and has no effect on our relationship, in the most general manner. I guess I should not say that because living with her and her boyfriend changes things, but it is not something I feel worthy of questioning the strength of our relationship. Our relationship is strictly based on freedom. (008:6,7)

Introspective

I do not talk about certain things with J that bothers me. I want to feel free to say what I want, when I want and feel confident that J will understand why I would say such a thing, not just be hurt and cry. Some conversations just are not had. Now is that healthy for J and I? I don't think so. It is like J and I have a fixed space. I do not intrude physically or verbally. And in some instance, the sub-mechanism of blocking is evident. Rooms separate J's boyfriend and me because the tension is so high. This is involuntary because I do not feel I should have to leave the situation to save J's feelings. (008:10)

Critical Reflection

As far as content goes, we are similar in the fact that we would both like to see ourselves as less *Random* and more *Open*. This is saying that we would like to question each other more by sharing our ideas with one another instead of just accepting what is done because it happened that way and we believe it to be true. An example of this would be J choosing to transfer to U of M... In an ideal situation J would like to be free to question each other and ask why... why did she choose that route...I do not agree with her choice but not once did I mention that to her...We do not make sense of things, we just accept them as

truths. Now that I think about it, that is not very logical. We make sense of the world by our experiences. That may not always be the safest bet. Sometimes I really wish J would question me because I feel it [is] a good way to see the pros and cons of a situation. If no one tells their opinion or questions a choice, the thinking is one sided and a bad choice could be made (but very preventable). (008:12-13)

In these examples the student is exploring the meaning of the course concepts with her experience of living with her cousin, who is also her roommate, and her cousin's boyfriend. During this exploration she defines the concept of closed-space and recognizes how it is present in her relationship. This self-description moves towards critical reflection in the form of introspection when in the second entry she begins to question her inability to freely talk with her cousin, recognizing that this is not right. In the last entry the student begins to use the course concepts to examine how she sees the relationship, recognizing that it could be different. She does this by expressing the desire to move from a *Random* to a more *Open* paradigm. The passage represents a form of critical reflection when she questions decisions made by her cousin as well as her own inability to share her concerns. The progression of thought and reflection seem to support a belief that writing can lead to deep personal insights (Meyer, 2000).

A second pattern was *Critical Self-Reflection*. In this reflective process students engaged with the course material to seek understanding of their partners as well as themselves. Students actively worked through an appraisal process that examined the effect a problem or belief had on the relationship. Advanced levels of this type of reflection included illustrating the interrelationship of thoughts, beliefs, behavior and feelings. This type of reflection focused on the "self" and included examples from the students' lives.

Example of Critical Self-Reflection

Expression in our relationship is another thing entirely. My mother and I rarely say I [love] you nor do we hug and kiss. This is where I wasn't sure where to classify us. I was thinking closed but we are not even that because we are not very affection in private as well as in public. So I am not sure, I guess we [do] not rely on expression. The extent of the lack of expression was made clearer to me one day when I was talking to my brother's girlfriend. She was complaining how he rarely said he loved her or that she looked nice. I was wondering why this was and then it came to me. It was quite obvious he had learned it from our family. I have only seen my parents kiss on about two occasions. We all just have a problem expressing our feelings and unfortunately it has been transferred to our relationships outside the family. Granted my mother and I have a strong sense of inner affect. We definitely know how much we mean to each other and we show it in the things we do for one another. But sometimes I wish I had more. I envy people who grew up hearing how much they were loved or how talented they were. I want to be able to do this in my other relationships but it is something I have great difficulty with. So I guess this would be one thing I would like to change about our relationship, our expression concerning affect. (001:10,11)

The third pattern of reflection was *Critical Self-Reflection on Assumptions*. In this pattern the students examined what they believed to be a truth, using the course material to gain insight. Through this examination they came to know something about themselves and why they perceived certain issues within the relationship to be a problem. In these papers the students used examples, they shared their thoughts, they showed the interrelationship between thoughts, feelings, beliefs, and behaviors.

Example of Critical Self-Reflection on Assumptions

In order to have the type of open relationship that is ideal for us, we – or should I say “I”- must get past this. Deep down I know that N is not going to change his opinion of women, but on the surface I keep hoping for a miracle. (018:14)

Critical Self-Reflection on Assumptions was found in student paper 018. In this paper the student identifies her desire to change a current friendship into a romantic relationship. By studying the *Relational Assessment Scale* data she systematically

examined her relationship with the boyfriend. There are pivotal moments of awareness that came as she examined how she felt, why she might feel this way and how her feelings shape her behavior and beliefs. As she used the course concepts to examine what all of this meant, she comes to the understanding that it is she who must change her assumptions if she is to maintain a friendship.

Conceptual Model of Critical Reflection

Proposed Hypotheses

No one model of critical reflection can adequately describe the process individuals might utilize when critically reflecting on a relationship or integrating a formal course of study with personal beliefs.

From these three patterns and the non-critical reflective pattern, a model was developed (Figure 8). The first level of critical reflection challenges students to identify a problem or belief that presents a conflict. The student must actively work beyond the temptation to deny, minimize or assimilate the problem into a previously held meaning scheme or to propose a solution that is distorted. This entry level of critical reflection focuses on gaining understanding of the course concepts and represents the lowest level of student knowledge.

If the students critically self-reflect, a process of examining thoughts, beliefs, feelings and/or behavior can begin. Here students use the knowledge gained from class to improve understanding of themselves and perhaps in turn improve their relationships with others. This level, the communicative level, is higher than the instrumental level. This process can lead the student to a solution but such a solution is at risk of being distorted by an incomplete examination of the self.

The third level of critical reflection, the highest level of interest and knowledge, is *Critical Self-Reflection on Assumptions*. As a parsimonious model it contains all of the components of critical reflection, the risk of denying, assimilating and minimizing the problem, all of the components of critical self-reflection, examination of thinking, feelings, behavior and beliefs, plus reflection on the underlying assumptions that created the awareness of the problem. It is speculated that *Critical Self-Reflection on Assumptions* holds the greatest potential for the student to achieve a new understanding of the self and the perceived problem. This type of understanding supports the activity of achieving a new perspective that could lead to a significant resolution of the problem. It is in this level of critical reflection that emancipatory learning takes place.

<u>Informant Data Codes</u> 000: Student Paper → : Flow of Discussion p__ : Page Number ♀: Female ♂: Male C-O-R-S: Paradigm	<u>A. Problem Identification</u> A1.21 Control A1.22 Affect A1.23 Meaning A1.24 Content A1.30 No Problem A1.40 Other	<u>B. Appraisal</u> B2.30 Thinking B2.40 Feeling B2.50 Behaving B2.60 Beliefs B2.70 Introspection B2.90 Uses Course Material in Thinking	<u>C. Solutions</u> C3.10 General Solution C3.20 Class Material in Solution	<u>D. New Perspective</u> D4.20 New Perspective D4.40 Block	<u>E. Other</u> E5.20 No Problem E5.30 Surprise F6.10 Uses Beliefs F6.20 Alters Meaning
♀ 001 R	p.9 mother's depression / breakdown A1.21 control A1.22 affect A1.23 meaning A1.24 content	Identifies 4 areas of conflict, gives her reflection on how hard this is on her – conflict in thinking and her belief of what a mother should be	C3.10 general solution since event took place before class	Sense of mastery Switched from self- needs to recognizing the needs of others	
	p.10 lack of demonstrated affection A1.22 affect A1.23 meaning	B2.30: What's wrong? Why don't we show affection? B2.60 We always have this problem B2.40 express envy			

Figure 8. Sample of a Case Dynamic Matrix Illustrating Components of Critical Reflection Found in Student Papers

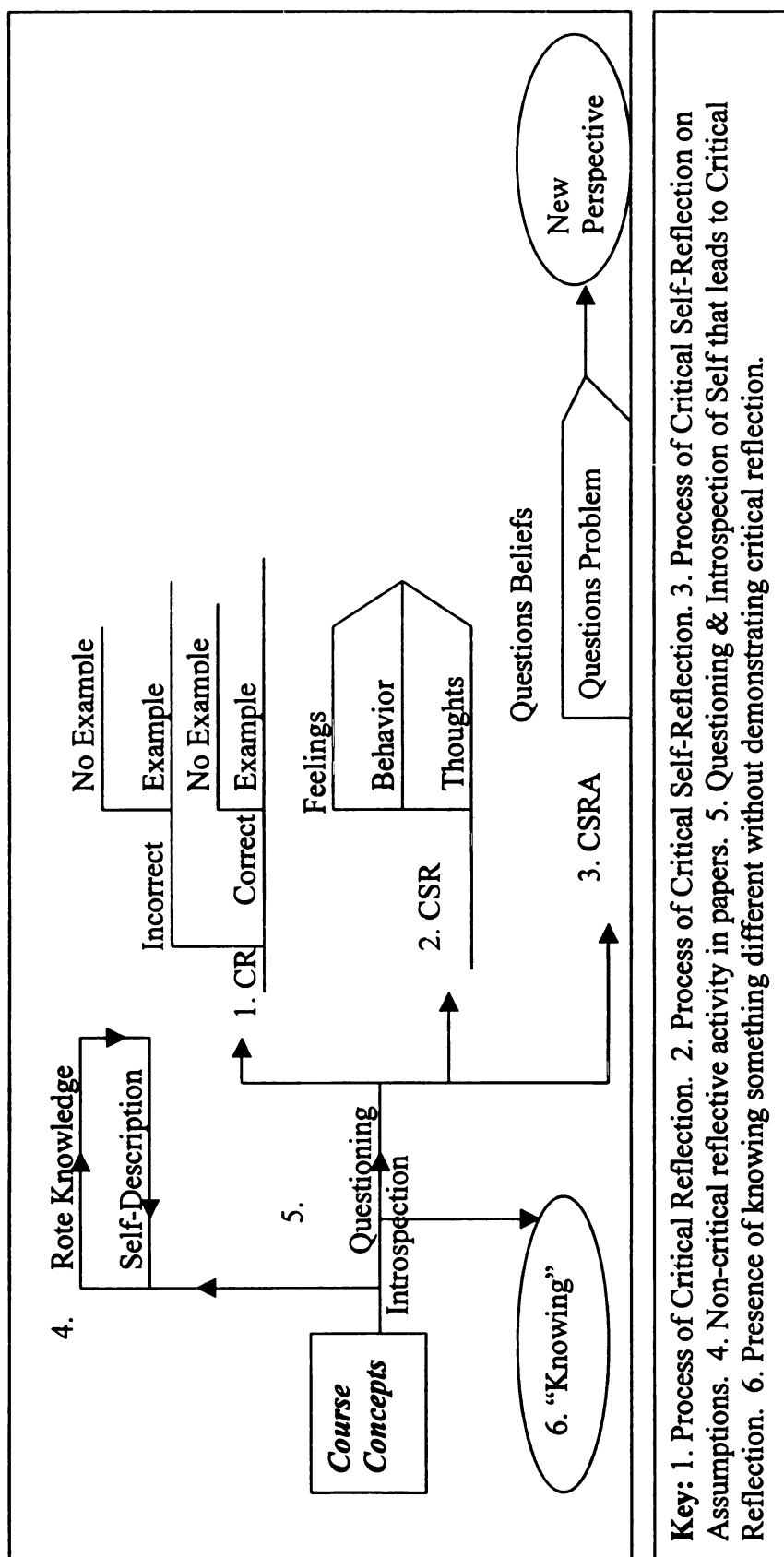


Figure 9. Conceptual Model for Emancipatory Learning as Found in Student Papers.

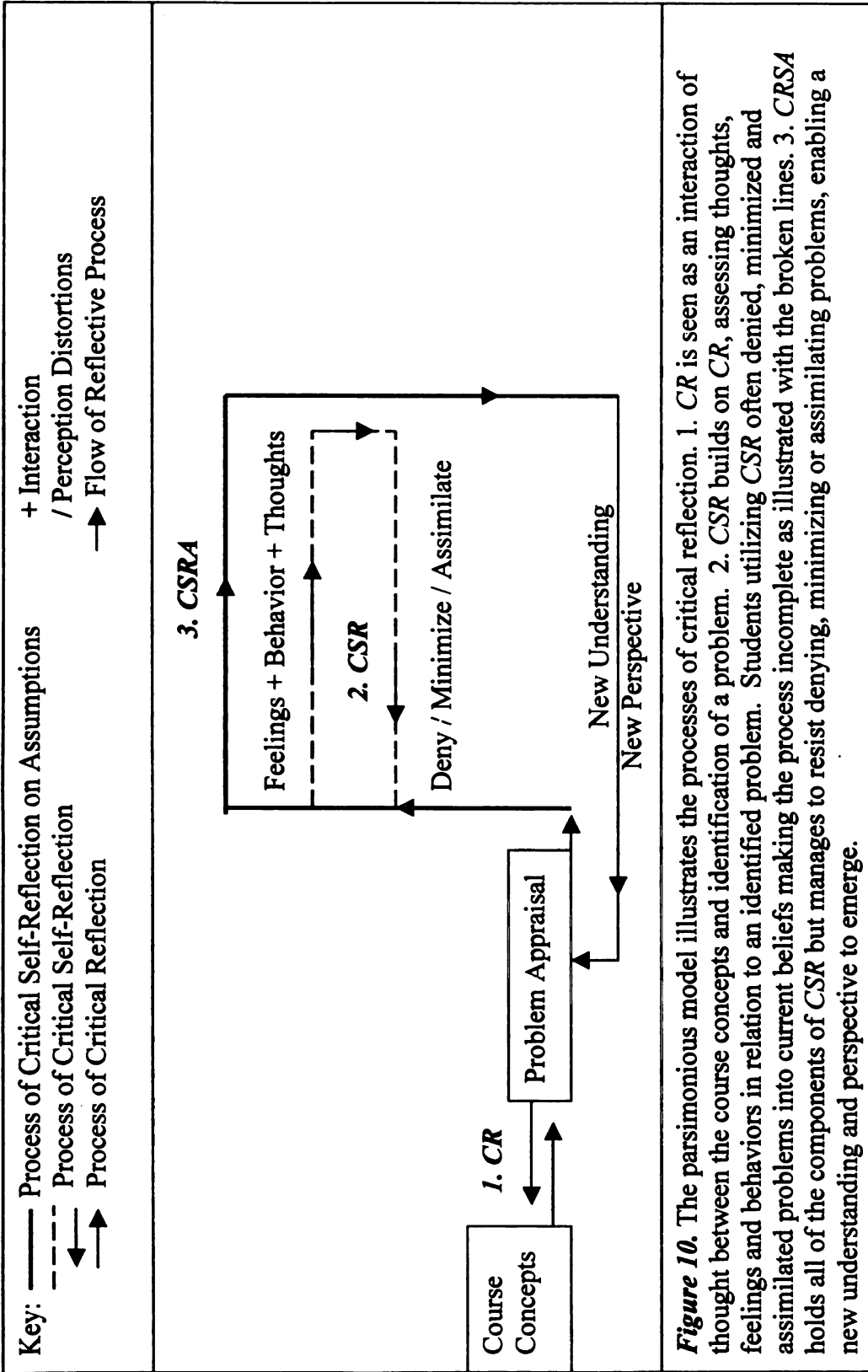


Figure 10. Parsimonious Model of Critical Reflection Process as Found in Student Papers

Discussion of Research Questions

Critical Reflection on Intimate Relationships Using Course Concepts

The students' abilities to engage with the course material and critically reflect on what was being taught in this class varied. Of the students who demonstrated critical reflective activity in their papers, two variables seemed to directly influence the quality of a student's engagement with the material. First, key to the reflective process was the student's ability to understand what was being taught. In order to engage with the material, students needed to understand the meaning of the concepts and how to interpret the vector charts and cluster analysis. Students who struggled with this aspect of the course expressed feelings of anxiety, frustration and anger.

Example of Inability to Understand Course

I don't think the scales enlightened me about the relationship, but in a sense left me in the dark about a lot of things. Why I say that, is because I don't completely understand the scales and how to perceive them, and then on the other hand the data might not have been accurate data. The results that I did get did allow me to have a plan of attack on those areas that need the most attention. My overall opinion of the class would be two thumbs down, I didn't really learn anything from this class, and at least from the way it was coordinated. (002:10, 11)

Though a lack of understanding was apparent, these students often attempted to critically reflect on their constructed interpretations. Such engagement with the course material resulted in redefining the course concepts in ways that made personal sense in light of how the student perceived the relationship (see Figure 4).

A second consideration in examining the presence of critical reflection in the data seemed to be related to the significance of the relationship about which the students' wrote. The longer the duration of the relationship, the greater the engagement

with the course material. Students whose relationships were of one year or more in duration displayed more interaction with the course material in trying to understand their partners. Students who had relationships of six months or less used the course material to support their perception of their partner. Also worth noting, students who had a preconceived outcome for their relationships, such as breaking-up or getting married, tended to use the course material to support their positions for ending the relationship or for getting married.

Example of 1 Month Relationship

So here we are today, on the brink of marriage. Taking this test with her, I kind of knew what to expect. If I had to label one thing as being our greatest assets, I would say communication is it. We communicate about everything. Admittedly it was me that was initially instigating all the communication, but L got to the point where she wanted it just as much if not more than I did. The evolution to *Open* was in full swing. Because of that, I knew we would come out very similar. It just seems the more open the lines of communication, the better off a couple will be. So this is how we got to where we are today and how I approached this project.... Not surprising to us, but Affect is very high on our scale [as] well. Affect for us is shown as both *Open* and *Random*. To me, *Open* and *Random* fit together perfectly. I look at *Open* being the democratic family as I stated earlier and Affect is always searching for the best way to do things. I think that discussing what is going on, in the process, you are discussing what is the best for you to do. This is definitely how Affect has broken down for L and I. (022:4-6)

In this example the student redefines the terms to fit his perception of the relationship. He incorrectly defines *Open* as being a democratic family model and sees *Random* as complimentary. In the reality of the course definitions there exists a tension between these two paradigms that comes in the realm of cohesion with *Open* preferring a connected relationship and *Random* choosing a separate. The student uses his definitions to support his early statement regarding a pending marital commitment to explain the *RAS* scores that in reality were indicating a potential area of disagreement.

The students who used the course material to support their perception of the relationship seemed to support Dewey's (1933) notion of reflective thinking. Dewey suggests that individuals define the nature of a problem with the end result in mind. This "fixed notion" shapes perception and controls the process of thinking. For these students, those who did not understand the course material and those who held preconceived notions regarding the nature of their relationships, it would appear that they constructed their understanding of the material in a manner that supported what they believed to be true about the relationship. For these students there may have been some evidence of *Critical Reflection* in the papers but the absence of *Critical Self-Reflection* was noticeable. To examine oneself would have placed the preconceived beliefs in jeopardy.

Misuse of the course concepts however, was present in almost all of the student papers. In *CSR* papers the students would often self-reflect on behavior, feelings, beliefs or their thinking, as they seemed to seek a deeper understanding of themselves or their partners. However, the questioning process would suddenly stop and move into a different topic or culminate into a course driven solution that was often simplistic. The simplistic solutions often implied a redefining or misuse of a concept without careful consideration on the part of the students as to the implications of their true meaning.

Example of CSR With Misused Course Concepts

I would like us to have a co-constructed meaning of Affect, so that we both understand how to make the other person feel cared for. To do this, we must both overcome our personal strategies and work toward having a common strategy. (006:13)

For some students, the course material was used to assist them in understanding themselves or their partners. In these instances, the course material was used to understand the behavior of the partner, which in turn gave the students insight into themselves.

Example of Gaining Insight Into Partner & Self

My partner's *random* personal strategy values [are] individualized, playful and spontaneous affection. These values are extremely apparent in my partner's family. My partner's father shows his affection for her and her sister through spontaneous wrestling and play...My partner attempts to incorporate the spontaneous wrestling and play aspect of her father's affection into our relationship. This type of display of affection makes me feel uncomfortable, however. I usually end up mad or hurt at the end of one of these wrestling sessions, so my partner does not get what she is looking for. (006:12, 13)

For the students who used the course material to gain understanding of their partner's behavior, insight about themselves also was received. However, a new perspective or reframing of the problem did not always follow. Often students dismissed differences claiming theirs or their partner's behavior or beliefs to be inferior and needing to change.

Example of Change

It is evident he needs to accept the fact that I am not the initiator when it comes to Affect or I need to make a change to become an initiator. (025:15)

Example of Viewing Partner as Inferior

For J I put control as the biggest change because I want him to be less *Random* and more *Open* also. *Random* families are very spontaneous. You never know what to expect from day to day. When it comes to getting things done in a time orderly and correct manner, *Random* seems to be a less organized approach. My personal background, of getting things done in a timely fashion, is what works for me in getting things done in my daily activities. I would like to see this same technique with J and I. (020:12)

Evidence of a new perspective that was found in student papers often showed a discourse with the course material. Students appeared to be talking with the course material and constructing an understanding of themselves or their relationship in the process. This was done through examples. Some of the students would present their thinking, illustrating it with an example, and then discuss how they understood themselves in relation to the material and the example.

Example of Constructing Understanding of Self / Relationship

My *Closed* personal strategy makes me feel that Affect should be regulated and formal. "To get something from the group you have to give something to the group. If you give something to the group you expect something in return from the group." (Chapter 6, page 24) When I do nice things for my partner, I feel that I am displaying my affection for her. I usually expect that she will acknowledge my efforts or rather the feelings. The text explains that there is a level of trust in the *Closed* paradigm that one will receive affection if one gives it. "The reward is being able to 'count on' getting what you need." (Chapter 6, page 24) This Closed strategy is not working for me in our relationship, because my partner does not share the strategy so she does not do what I expect. (006:11)

Another method by which a new perspective was presented was done through a story. Students would share their perception of a new perspective about a course concept through a story with no discussion of the thinking processes. Rather, the students presented a "knowing" that gave them a new insight into themselves or their partners.

Example of "Knowing"

While I was angrily relating what had happened from my point of view, he calmly pulled a handful of coins out of the change-holder and threw them on the floor at my feet. I stopped talking. He sternly said, "Pick them up." I almost smiled because we both knew that there was no way I took orders like that. He repeated, "I SAID, PICK THEM UP." Realizing that there was a point to this, I leaned over and started picking the change up from the floor. He started berating me with, "What's the matter, you don't have them picked up yet?!!

Hurry up and get them picked up!!” I sat up slowly and waited. He said, “that’s what vacations feel like to me. Everything was in a hurry. Nothing was ever done right.” He continued, “Today, while you were in the bookstore I went outside and sat on a bench and watched the sailboats on the bay. When I was growing up we would never just sit and enjoy the view.” That was the day we realized how important it was for us to communicate with each other what we were thinking and what we wanted to do. (007:9, 10)

Critical Reflection on Relationship Problems

For some students, their process of reflection followed the generic model of critical reflection (see Figure 1). They identified a problem, examined their understanding of the problem and proposed a solution. Few students showed evidence of realizing a new perspective that would enable them to achieve a different perspective or a solution.

For many of the students the process of problem identification and appraisal was not well delineated. The discussion in the papers weaved between appraisal, problem identification, more problem identification, and new appraisal, occasionally some insight towards a new perspective or a proposed solution. Most of the student papers seemed to support the perceptions of Dewey (1933) and Kolb (1984) on multiple entry points for critical thinking and reflection. However, unlike Dewey’s and Kolb’s models, these students did not propose solutions.

The identification of a personal dilemma or problem is believed to be central to the process of critical reflection. Mezirow (1991) identifies the identification of a problem on the part of the learner as the initial action that leads into transformative learning. The identification of the problem can be simple problem posing or unsettling

as in the form of a disorienting dilemma. Though Mezirow's model presents problem identification as central to the critical reflection process, his model does allow for the student to step out of the process without coming to full closure. In this process the student works with the problem as much as cognitively and emotionally possible with the likelihood of returning for further reflection at a later time.

It was common to find the students dismissing the significance of a relationship problem, assimilating conflicting information from the course by redefining a course concept and accommodating conflicts within their levels of tolerance. Kitchener and King (1994) relate a student's ability to accommodate opposing opinions and contradictory information as a measurable indicator of a student's cognitive ability to solve a problem. Brookfield (1987) and Mezirow (1991) describe this behavior as part of appraisal and an obstacle that must be worked through in the critical reflection process. Students who minimized, denied, or accommodated the problems in their relationship, often used beliefs to support their actions.

Examples:

Minimize

We as a couple have our problems coming to make sense of things. We are young and anyone our age can't expect to make sense out of everything. We are still growing up and trying to make sense out of life, on top of making sense out of our relationship. (002:8)

Accommodate

This still does not stop me from wanting to just scream at C sometimes. I think to myself "how can he honestly think that (that being whatever view does not coordinate with my own) way." But still, I continue to endure because marriage is what we have planned for in our future. Some people (i.e. my mother) would say that we are too young to be making such plans so soon. C and I would say

that it is God who has lead us into, and blessed us with, this relationship. (026: 11,12)

Deny

Normally, we go about our relationship without questioning certain issues or even mentioning things that make him or me uncomfortable...The one thing I believe about my relationship right now is if there's nothing wrong with it why change it. (014: 5,10)

Of the four student papers that did not identify a problem, two showed evidence of a new perspective in the form of a “knowing” without critical reflection. In one of these papers the student tells a story (see example 007:9,10, on page 97). Through the experience of the story the students came to a different way of understanding. There is no critical reflective activity in the paper, just a “knowing.” “Knowin”g implies the ability to see their partners, themselves, or the problem differently. The use of the story seems to support a transformative learning theory within a symbolic or mythopoetic perspective. Dirkx (2000) describes this process of transformative learning as arising from the day-to-dayness of life. In this tradition there is no disorienting dilemma triggering the critical reflection process. Rather, the process is ongoing, requiring a constant interaction with everyday events. Through this interaction the student becomes transformed by the ordinary experience of life. In a different excerpt from the same paper the student describes the sharing of an ordinary chore as an occasion of “knowing” her husband.

Example of Everyday Event as an Occasion of “Knowing”

Lately we have been chipping brush piles at our farm and using the wood chips on the path out there. When we get to the farm, J gets out the wood chipper and I get out the other supplies. I hand him the branches and he feeds them into the machine, and I make sure a thick branch is available when he needs to clear the

machine with it. He dumps the chips and while I rake them into place, he goes back and puts the bag back in place in the chipper. Little conversation goes into the process, yet in this case we end up working smoothly together. (007:8)

In another paper presenting a new perspective on the relationship with no problem identification, the student wrote about mundane experiences of the everyday that he shared with his mother in the co-parenting of his son. Yet within what appears to be introspective musings, he comes to a different way of viewing his mother and the needs of his son.

Example of Interrelationship of Thoughts, Feelings, and Behaviors

M and I spend a lot of time discussing child-rearing concepts and how we might better improve J's and our lives. One of the areas of focus is nutrition. J's weight has fluctuated a lot and it has become a "meeting place" (space) for us to discuss what food he should eat and other shopping issues on a regular basis (material). Interestingly, this relationship materializes in the kitchen. This is the space where we find common ground and share of lot of time with J...Fine lines separate categories in all levels and combinations of relations. Player part ranking compliments this analysis as well. Rating Mover with the goal element of Space has the highest resource goal for me is complimentary with M's Bystander Player part and her goal element of affection. M knows me well enough to see how distant I can be with affection and that I need a silent helper as I struggle to be a good father and son. (021:9,10)

The unspoken sharing of a task is a key signifier of a *Synchronous* family paradigm (Imig, 1999). The emergence of a new way of perceiving or knowing something without critical reflective activity appears to compliment the *Synchronous* paradigm. In the two student papers that present a "knowing" without critical reflection activity, both show a tendency toward a *Synchronous* paradigm. Of the five student papers with an identified *Synchronous* preference, only one showed evidence of critical reflective activity. Though these papers do not present the elements of critical

reflection as presented in the theories of Mezirow (1991, 1998), Brookfield (1995a), Kolb (1984), or Dewey (1933), they do seem to present evidence of an unspoken reflective process that seems to have great depth. This reflection appears to more closely align with Dirkx's (2000) theory of transformation emerging from the everyday experience of life.

Presence of Critical Reflection Components

The third question in this study analyzed the student papers for the presence of critical reflection components. Four categories of components were identified prior to the analysis of the papers: problem identification, appraisal, solution, and new perspective. Of these four categories appraisal was the most prevalent reflective activity, with problem identification often preceding, but not necessarily.

The process of appraisal sorted into the four categories: thinking, feeling, behaving and beliefs. Students demonstrated critical reflective activity in these domains by examining what they thought or believed, where these thoughts or beliefs originated, and the effect of these thoughts or beliefs on the relationship, their feelings, or their behavior. Not all students reflected this comprehensively. Some reflected only on their behavior, some only on feelings. Few students, however, identified their feelings in their reflective processes. Most students reflected only on their thoughts and beliefs.

Reflective activity that involved thinking, feelings, behavior, or beliefs, were often presented as interactions with the course concepts. A specific concept would be identified in relation to a problem and the students would explore their understandings of the material through their personal experiences and meaning schemes. Mezirow

(1991) defines meaning schemes as particular knowledge or beliefs or feelings by which judgments are made, and identifies the process of examining these schemes as being a necessary component of critical reflection. Papers that demonstrated well developed thought showed students examining their understanding of themselves by exploring their thoughts, feelings, behavior, and the interaction of these dimensions.

Example

In my daily life I try to listen to what J was to say and understand what his needs are and he tries to do the same for me. At times I get frustrated with myself because I try to meet his needs before I meet my own. This only results in an argument because I have so much anger inside of me that just keeps building instead of me taking the initiative and telling him how I feel about the situation and solving it. (020:7)

Evidence of Habermas' Concept of Human Interest and Knowledge

When the data from analyzing the student papers were sorted into a cross-case analysis matrix, patterns began to emerge. Some papers showed no personal thought or application of the internet course material. These students gave detailed definitions of the course concepts with no personal application. These papers initially were viewed as presenting Habermas' instrumental level of learning. However, after comparing them to other papers, some doubt arose. Though course concepts were often defined correctly, there was no real evidence that the student understood the concepts. The lack of personal examples created some doubt about comprehension of the course concepts. Verification of this would require follow-up interviews with the students who wrote such papers.

The remaining papers sorted into four categories, three of which seem to represent aspects of critical reflection as defined by Mezirow that follow Habermas'

human interests. Mezirow (1991, 1998) has interpreted Habermas' philosophy of human interest to encompass his theory of transformative learning. In transformative learning theory, critical reflection has three levels of inquiry which can reshape what the student knows. When the students reflected on how to do something, they were operating on Habermas' instrumental level of knowledge. When they reflected on what another person means or how to understand themselves, they were reflecting on a communicative level of knowledge. Most of the critical reflections presented in the papers were of these first two categories.

Critical Reflection: Instrumental Knowledge

My partner's ideal relationship focuses on material, content, energy, space and control. The material element has the following paradigms, *Random*, *Open* and *Synchronous*. From what I understand there is a real problem here. Our system levels would have a hard time integrating and our relationship would be misaligned. Meanwhile, we would expend a lot of energy and use a lot of time trying to make this work. The result would be a lot of stress and always feeling exhausted. (019:4)

Critical Self-Reflection: Communicative Knowledge

That's the problem, I feel that over all I think that a relationship should be more meaningful and he feels there is nothing wrong with the relationship and I am always looking for something to argue about. J is calm and peaceful and he hates to argue, that is the last thing he would rather do. I totally disagree with that if you believe in something your fight for your right. I will not stand and be walked over. This scale has helped us to understand that people have different views on things and the important thing is to learn how to deal with the diversity. (012:11)

The transformative level of knowledge would be emancipatory and requires one to reflect on underlying beliefs and assumptions contributing to the perception of a

problem. Only two students displayed this type of *Critical Reflection on Assumptions*.

Unlike the other papers, these two papers had no incidents of redefining the course concepts or misuses of terms. Students seemed to have used the concepts to probe their understandings, not to justify their beliefs.

Critical Self-Reflection on Assumptions: Emancipatory Knowledge

For my ideal, I wanted to completely make myself as a follower and make him a mover in order to make our relationship align. However, I understand that all family and relation systems are imperfect (chapter 10), which means it is impossible for one to completely put one's partner into one's ideal world. I was thinking of the meaning of this statement. I then realized that is impossible for me to change my partner or control my partner's mind because I cannot even change myself and control my mind easily. I always wanted him to be a mover and [have him] lead me to a certain direction in our relationship. By looking at the element of meaning and affect, I recognize that I really need to know he is not a mover. I also realized even though we could not completely establish our relationship as being mover and follower, there were alternative ways that we could work things well in our relationship. (027:12)

The fourth category that emerged from the cross-case analysis was the *Non-Critical Reflection* that was identified and discussed earlier as "Knowing" (see page 97). In this category the process of critical reflection seems present but not definable in Mezirow's or Brookfield's terms. Though identified earlier as perhaps aligning with Dirkx's (2000) mythopoetic / symbolic theory, the activity within these students may also be understood as following Schön's concept of the reflective learning (1987, 1994, 1995). In this model the student would be moving through life, interacting and adjusting on an as-needed basis. When a situation arises that does not respond to the student's normal interacting pattern of life, the student begins to reframe the situation until an alternative approach is secured. As with the mythopoetic concept of

transformative learning, this process just happens. Schön (1987) describes this process as one that architecture student's employ when they begin to study design. Little instruction is provided since it is necessary for the student to develop an intuitive sense for the process.

Additional Findings

Though not a part of the research design, a relationship between paradigmatic structure and styles of critical reflection emerged from the data. It appears that students who identified themselves as having an *Open* paradigmatic structure showed a greater propensity for critical reflection. These students gave more discussion in the appraisal portion of their papers, identifying their thinking, behavior and feelings. This appears to support Imig's (1999) description of the *Open* paradigm in that members of this relational structure work towards self-knowledge and strive to be authentic. For those in an *Open* paradigm, the ability to create a successful relationship is predicated upon self-knowledge and dialogue with others to develop shared meanings and beliefs. These students would be quite adept at recognizing their thoughts, feelings, beliefs and behaviors and writing about the interrelationships of these dimensions.

The students who presented the least amount of critical reflection activity were those who identified themselves as *Synchronous*. Again, this appears to support Imig's (1999) description of the *Synchronous* paradigm, since members of this structure experience life through observation, implicit communication and a knowledge base built on "just knowing." Children raised in a *Synchronous* family are not encouraged to question but to learn by doing.

Students who identified themselves as being from a *Closed* paradigm appeared to follow a progression of thought that closely aligned with the generic model of critical reflection. These papers presented a problem, gave insight into the meaning of the problem and offered a solution. In contrast, the papers written by students who identified themselves as being a *Random* paradigm, demonstrated great variety in presentation. Some of these papers crossed into other concept discussion areas, and what they lacked in organization they made up in variety. These papers also seem to support the paradigmatic theories related to *Closed* and *Random*: *Closed* being a structure that prefers organization with *Random* being more antithetical and spontaneous.

Findings Requiring Further Analysis

The scope of this research project was limited to analyzing the student papers for critical reflection activity. Within this analysis emerged a paradox that may be related to critical reflection but not entirely within the boundaries. As previously mentioned under the discussion of appraisal activity, few students wrote about their feelings in relation to the problems or dilemmas they identified. However, several papers that did not discuss feelings were filled with emotions: Anger, resentment, confusion and misery. This data showed little descriptive critical reflection activity. This may signify a causal relationship with the ability to identify and take ownership of emotions as being a pre-requisite to critical reflection.

Questions regarding the lack of critical reflection in half of the papers studied also raise concerns. By what cognitive process did these students construct their

papers? If the purpose of higher education is to train students to critically think, how did these students interpret the assignment? Related to this concern is the query, what if all of the student papers had been studied? Though categories of data were saturated this qualitative study cannot give a measure of probability or causal relationship. How likely are students in general to use skills of critical reflection in such a class? Along this same line, it would be interesting to see how grading correlated to a student's ability to critically reflect.

The occurrence of the non-critical thinking activity in the form of a story also warrants further research. How do these students differ from their internet classmates, if they indeed do differ at all? If one were to teach a critical reflective process to students, much like an analytical formula of the pop-psychology problem-solving models in marriage workshops, how would these "knowing" students respond? Would they be able to grasp the model and easily adapt their thinking and writing? Could their method of thinking, or "not thinking" be useful to others?

This of course brings up the serendipitous findings regarding paradigms. There are multiple theories regarding paradigmatic models, some that apply to learning theory and others directed toward personality or temperament. How does the family paradigm model correlate with the theories on learning? If family life creates the model by which individuals will perceive the world, what implications do the various paradigms have for education? For the workplace? For Human Ecologists?

Implications

The purpose of this study was to analyze how family studies students critically reflected on intimate relationships as a result of participating in an internet course on interpersonal relationships. The intent was to gain insight into emancipatory learning as a means of professionally preparing family studies students by examining how they processed course information. The importance of this study was based on the belief that these students, as future human ecologists, are called to become emancipatory professionals. For this to happen they must first become emancipatory learners.

In 1993, when Brown wrote about the movement of home economics to human ecology, she was pointing to a course of action. Her use of Habermas' work focused on communicative rationality that validates the experience of individuals in creating knowledge and challenged the supremacy of structural functionalism as the standard philosophy by which families should strive. Brown believed that families had been weakened by this technical approach to knowledge and recognized that teaching from such a perspective oversimplified their needs. Her response to this dilemma was to approach working with families from a communicative perspective with a goal of empowering individuals to "examine their ideas, comprehend and justify the methodological procedures for validating moral judgments and evaluative decisions through communicative interaction, appreciate the influence of social realities on moral and ethical perspectives, and participate collectively and politically in moral judgments." (pp. 224-5). Brown discussed the need for critical theory as essential for this transition to occur and viewed emancipatory critique as necessary for professionals to recognize personal distortions and to challenge structural functional authoritarian

social constraints (1993). This study continues Brown's exploration of the utilization of a critical reflection perspective in resolving issues and problems encountered by families and the professionals who assist them. Most of her work cited Habermas' communicative learning, and though she called for emancipatory objectives, she stopped short of identifying pedagogical strategies that could enlighten both students and professionals. The following implications are offered as an extension of Brown's work as application of the research results.

Implication #1: Emancipatory Learning and the Process of Critical Reflection

Emancipatory learning implies a change or transformation of knowledge in a learner that results in a different, broader understanding of self and society. Mezirow and Brookfield believe that this transformation takes place as a result of a dilemma or crisis. Habermas identifies critical self-reflection as being necessary for such a transformation of knowledge to occur. From this research, evidence of *Critical Reflection* and *Critical Self-Reflection* was found to support these theories but they were not adequate in fully describing how students were coming to know something different. Many of the student papers demonstrated levels of awareness that they defined as being different or broader than what they knew before taking the *Interpersonal Relationships* course. Some were able to describe the thinking that shaped this awareness while most did not.

Some who showed no evidence of critical thought did show evidence of knowing something different by using a story to illustrate new insight towards daily events or activities. These students might be displaying Schön's reflection-in-action

process of learning or Dirkx's mythopoetic way of "coming to know." These distinct variations in student thinking make it probable that there are multiple methods of emancipatory learning.

Perhaps the serendipitous findings of paradigmatic family structures and reflection patterns hold some insight into critical reflection. One could imagine that those preferring an *Open* paradigmatic structure would be more inclined to critically reflect in the manner that Mezirow describes as questioning and evaluating knowledge from a content, process, and premise perspective. Those of a *Closed* paradigm might be more inclined to critically reflect using a Dewey model that follows a linear process of problem identification that focuses on generating a solution that may closely align with a positivist perspective. *Random* paradigms would seem to be more inclined to gravitate to Schön's reflection-in-action and move in and out of reflection, trying out new insights and knowledge. While those of the *Synchronous* paradigm may prefer to use a method of conscientization to gain deeper knowledge of themselves and the lifeworld around them.

It is likely that there are four or more ways to experience emancipatory learning but it will take more research to determine if there exists a relationship with family paradigm theory. However, along with the family paradigmatic preference with which one aligns, comes the potential to develop multi-paradigmatic preferences and abilities. This would imply that everyone has the ability to experience critical reflection in each of what appears to be four distinct methods. More importantly, it implies that as a preference, students will gravitate to those methods that support and nurture that with which they feel most closely aligned, but with motivation and assistance they can

develop other means by which to experience emancipation through transformative learning.

Implication #2: Emancipatory Learning and Pedagogical Practice

Emancipatory learning may be a naturally occurring process of adult development. The daily activities of life move individuals through cycles of self-awareness instilling greater levels of maturity over time. Little if anything may need to be done by educators to facilitate the process. However, the premise of this study was predicated on the belief that human ecologists have an obligation to assist in promoting this process in hopes of addressing indifference, inequities, and injustices that weaken family life.

Research in the area of transformative learning and adult education provides a different perspective for such pedagogy. The work of Malcolm Knowles and Eduard Lindeman challenge the concept of teaching adults as pedagogical and use the term andragogical as being a more appropriate concept for this type of teaching. Lindeman who coined the term, and Knowles, who made it popular, recognized a difference between the way children and adults learn and believed that the methods for instruction should reflect these differences. In children there is an emphasis in teaching knowledge, in giving someone something they do not know. With emancipatory learning the emphasis is in revealing what is known and examining it with new knowledge in search of understanding (Knowles, 1990).

The self-knowledge that comes through emancipatory learning is an adult activity in need of different instructional methodologies. It is not an easy process in that

it requires the student to think and can be accompanied by emotional discomfort and distress. But it is not psychoanalysis. Its focus is not on dredging up unpleasant memories. Rather, it seeks to help students to question what they have come to know, and asks them to expand this knowledge.

Andragogy as an instructional perspective focuses on creating a humane environment that encourages the student to explore while providing an atmosphere of safety. Such an environment also allows for collaboration between instructor and student and requires trust and mutual respect (Knowles, 1990). Androgical instruction involves the students in both course planning and evaluation and allows for adapting the class agenda to emerging needs. Specific teaching strategies that support this philosophy would include reflection questions, purposeful readings / lectures, and learning communities.

Recognizing that there are multiple methods of emancipatory learning, there exists a need to develop methods of instruction to assist students with the process. Assuming that critical reflection is a teachable form of emancipatory learning, holding significance in higher education, how should one approach instruction? For some students the process of critical reflection will occur naturally while in others it will need prodding. The process of critical reflection is one of questioning. Strategic questions that probe students for understanding are essential components in instruction but the type of questions that critique personal knowledge are not traditional exam questions. Such questions ask students what they know but they will extend student thinking by asking: Why do they believe this to be true. What knowledge do they have to support such claims or beliefs? What is the validity of their knowledge?

To encourage personal reflection, a different format for reflective questions could be used in conjunction with a learning journal. Students can be instructed on how to keep a journal about the learning process that is occurring from their participation in the class. Structured questions can be given as a suggested format to help them begin the process. The personal depth that can be obtained through reflective writing often comes from the disciplined activity of weekly entries. Though it would be inappropriate to grade personal reflections, some instructors give graded credit to the frequency and duration of entries. The use of a personal learning journal provides a safe environment that can encourage students to explore feelings, beliefs, and behaviors, while challenging them to examine the process, premise and context of their cognitive and affective learning domains (Meyer, 2000).

Creating and presenting purposeful lectures is essential for emancipatory learning. Lectures that build or enhance course readings are needed to help students advance technical understanding to a communicative level and beyond. Too often readings are assigned around chapters in course textbooks with disconnected lectures. Students are subject to information overload, missing the interconnection between topics and activities, degenerating to the lowest level of comprehension by asking professors, “Will this be on the exam?”

Purposeful lesson planning designs course objectives and builds readings from multiple sources that are supportive. Emancipatory instructors are mindful of their own beliefs and perspectives. They are reflective teachers in that they critique course content in light of objectives and ask themselves, how this course enhances the well-being of their students as well as the individuals and families that these students will

soon serve. Knowing the needs of the students is imperative, requiring the professor to invite students into the shaping of course syllabi and adjusting presentations to match emerging concerns. Such teaching takes time. It is a mindful activity that requires teachers to be fully present to students.

A third teaching strategy that encourages emancipatory learning is the formation of small learning communities. A learning community that supports emancipatory learning differs from traditional group project assignments. Essentially, this type of learning community allows students to work independently using the group for support. Students read and critique each other's work within an atmosphere of trust and encouragement, with academic success dependent on the ability to critically evaluate the work of another and to receive and respond thoughtfully. To achieve its purpose, these communities need to be established at the onset of a course to allow students time to develop a sense of trust and the necessary skills for critiquing.

What has been offered here are recycled strategies. Many professors use variations of these techniques, unfortunately few recognize the importance of encouraging critical reflection and critical self-reflection. Essentially, to be an emancipatory teacher, one must be an emancipatory learner. Unlike an old adage that says, "Those who can, do, and those who can't, teach," emancipatory teachers cannot teach what it is they are unable to do.

Implication #3: Emancipatory Learning and Professional Application

A criticism that Brown held towards the teaching of home economists was their orientation towards empiricist knowledge (1993). Though the intent of the human

ecologists is to assist in the promotion of family well-being, curriculums are “packaged and repackaged” according to popular ideas and presented as grounded in research. This comes from the interdisciplinary approach of human ecology borrowing from all of the social sciences. Ideally, the human ecologist should approach each of the disciplines with critical inquiry, questioning the value of the knowledge being offered in respect to the needs of the families being served within cultural and societal structures. Instead, theory from every discipline is empirically adapted for use with little if any critique. The result is two-fold: human ecology lacks a cohesive theoretical framework resulting in a failure to critique the relativism of knowledge that would be appropriate for professionals in addressing the needs of families (Brown, 1993; Klein & White, 1996).

In 1975, Kantor and Lehr presented their theory of family paradigms as a means of understanding the complexities of daily life. Developing a language that illustrates abstract system cybernetics, Inside the Family combined theory with practical application. The concept of family systems, an essential component of human ecology, is defined in family paradigmatic theory. The operational model of families seeking and allocating resources, developing goals and interacting within the larger social, cultural and natural environments is much broader than the more empirical social science from which we currently borrow. The works of Constantine (1986) and Imig (1999) have furthered the understanding to include four distinct ideologies that challenge traditional models of healthy and unhealthy families. As a conceptual framework, family paradigms provide the scaffolding needed for critiquing knowledge borrowed from other disciplines.

Unlike other social sciences and human services who maintain a primary value of “do no harm,” Human Ecology holds a slate of virtues that are intended towards human betterment that provides economic adequacy, societal justice, freedom and peacefulness (Bubolz & Sontag, 1993). When designing future research or evaluating the usefulness of research from other disciplines, questions regarding the application of findings towards the betterment of humanity could be framed within the parameters of these virtues and tested against the paradigmatic structures of families.

Using this research as an example and the virtue of peacefulness, being able to live one’s life in peace in contrast to warfare and strife, the following questions could be used as a critique in assessing human ecological value: How will emancipatory learning of interpersonal relationship concepts make family life more peaceful and less plagued by strife? Will this research provide insight to this process? Finding that family studies students redefine course concepts in ways that fit their perceptions, how can this information be used in helping families establish a peaceful home? Using the ecological framework of family paradigms, the questioning is extended to ask: How does this finding enable each of the four paradigms? Does it favor one paradigm over another (implying the perpetuation of structural functionalism)? How does this finding support family goals? Attainment of resources? Use of time? How does this finding support the community in which families live? Does it encourage stewardship of the environment or exploitation?

In determining the value and applicability of research, these types of questions need to be addressed for each of the virtue areas. The term human ecology implies interconnectedness between individuals, families, communities and natural

environment. Though we recognize interdependence, we too often focus on individual and didactic needs. Unfortunately, this study failed to develop the broader scope for which it was being called. However, the awareness of the need will serve to facilitate the researcher to continue the investigational process.

The ability to critique knowledge in respect to the needs and values of families is foundational to the development of human ecology as a profession. This skill has been identified as invaluable to the preparation of students (National Council on Family Relations. Tools for ethical thinking and practice in family life education, 1999). How then, does one promote the development of a skill that appears to be dormant in today's profession?

As scholars and practitioners, human ecologists need to become unified. Using the work of Habermas as a guide, the profession needs to map out a strategy outlining what a human ecologist is and does (technical / instrumental interests) with the theoretical constructs by which it serves families (communicative / practical interests). These processes need to be guided by self-reflection and critical theory (emancipatory interests) that challenge the societal structures and personal distortions that warp opportunities for families to achieve self-actualization. By having a shared conceptual framework and philosophy, ecologists can evaluate knowledge from other disciplines and shape research interests into a distinct and recognizable theory that enhances the quality of life for all.

Conclusion

The ability to critically reflect on oneself and one's beliefs is paramount to working in the field of human ecology. Emancipatory interests, as defined through Mezirow's model of transformative learning, challenges the perception of the individual. Through such challenges, the individual becomes free of unconscious desires, beliefs and meaning schemes that inhibit achieving self-fulfillment. In this analysis, it was found that in a class designed to empower students to engage in the process of critical reflection, only half of the internet papers studied displayed any level of critical reflection. Of the thirty papers studied, only 6%, two papers, showed evidence of critical self-reflection on assumptions indicating movement towards emancipatory learning. These numbers may appear to be low and may beg the question as to why bother. Why bother trying to understand emancipatory learning? Why bother structuring curriculum to encourage critical reflection? Why bother putting energy into an area that has such a low return?

Brookfield addresses these questions by recognizing the consequences of its absence. Not to be reflective is to see oneself as a victim of fate, to be open to exploitation, to live with no sense of promise or forward movement, to be unable to say why what you're doing is important, and to think that what you do when you show up to teach makes little difference to anyone or anything. (Brookfield, 1995a, p.263).

APPENDICES

Appendix A
Models of Critical Reflection

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Models of Critical Reflection

Mezirow: Transformative Learning

Using the work of Habermas, Mezirow (1981, 1991, 1998) has constructed a model of learning for adults that illustrates a process of emancipatory learning.

Mezirow proposes that adults develop meaning and perspective schemes by which they filter incoming information. Individuals construct meaning and perspective schemes with parents, siblings, extended family members, teachers, friends and societal norms. Since the process of this construction begins in infancy, some of the information contained within the meanings and perspectives can be distorted due to immature sensory and processing skills. Information can also be purposely skewed within societal norms to maintain the societal status quo (Habermas, 1968; Mezirow, 1991; Freire, 1970; Brown, 1993).

As the individual develops into an adult, he experiences contradictions in what he has come to believe as truths. Often he will ignore, minimize or assimilate these contradictions into his currently held beliefs. In time though, he may be presented with a contradiction, which causes a “disorienting dilemma” or crisis. In this experience he finds that his old patterns of beliefs and responses are ineffective in resolving his difficulty. Being unable to continue he begins a process of critical reflection on the assumptions keeping him from resolving the problem. This is a critical self-reflection on the way one perceives, feels, understands, and behaves based on beliefs and meanings constructed from life’s experiences.

Mezirow's process of critical reflection begins with problem posing. ***Problem posing*** is awareness on the part of the student when a belief becomes challenged. What results is a progressive process of reflection that leads the student from ***introspection***, simply being aware of one's thoughts and feelings, and evolves to deeper levels of thinking: ***Reflection on Prior Learning*** (remembering what was learned in a previous situation and reflecting on how it might be related to the current situation), ***Process Reflection*** (an examination of how one performs the functions of thinking, feeling, acting, and perceiving), ***Premise Reflection*** (questioning of our judgment and becoming aware of why we think, act, feel and perceive as we do and the consequences of such habits and beliefs) and, ***Theoretical Reflection*** (awareness and critical evaluation on epistemic, social and psychological presuppositions).

Mezirow identifies ten movements in the process of transformative learning that work towards shifting the perspective from which the adult receives and responds to information.

1. A disorienting dilemma.
2. Self-examination with feelings of guilt or shame.
3. A critical assessment of epistemic, sociocultural, or psychic assumptions.
4. Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change.
5. Exploration of options for new roles, relationships, and actions.
6. Planning a course of action.
7. Acquisition of knowledge and skills for implementing one's plans.
8. Provisional trying of new roles.

9. Building of competence and self-confidence in new roles and relationships.
10. A reintegration into one's life on the basis of conditions dictated by one's new perspective.

Brookfield: Process of Critical Thinking

Critical thinking is a skill that everyone uses everyday in implicit and explicit manners. Some do this well while others need encouragement and assistance.

Brookfield (1987) identified critical thinking as praxis of alternating analysis and action (p. 23). The adult reflects and analyzes her thoughts and seeks alternatives to the problem by acting on the resolutions. In turn, the adult refines her understanding or perception which regenerates the process of reflection and application. Critical thinking, later identified by Brookfield as critical reflection (1995a), is a process best done in dialogue with others since it reduces self-doubt and increases clarity.

Brookfield (1987, 1995a, 1995b) identifies five steps in the critical thinking process:

1. ***Trigger Event:*** An unexpected experience that causes the adult to question previously held beliefs.
2. ***Appraisal and Self-Scrutiny:*** A period of reflection for the adult where he alternates between minimizing and denying the challenges with clarifying and evaluating the concern as they relate to self- perception.
3. ***Exploration:*** Admitting to the discrepancies, the adult explores new ways of thinking and explaining life.

4. ***Developing Alternative Perspectives:*** With the new insights gained from critically reflecting on oneself and exploring alternative paths of thought, the adult is now capable of viewing life from a different perspective and receiving new information.
5. ***Integration:*** Process of praxis.

Schön: Reflection – in – Action

Using his experience at MIT and working in human organization management, Schön developed a model of critical reflection that places the emphasis of adjusting one's perception of the problem as the best means of creating a solution (1987, 1994, 1995). Schön recognized that resolving dilemmas often required processes that could not be taught with words. For example: as architecture students struggle to learn the art of design, the process of critical thinking through the problem may not follow a linear process of resolution. Rather, the process becomes one of framing the problem in various ways as a means of perspective taking. From the new ways of perceiving the problem, various solutions are generated and tried.

Schön offers the following Reflection-in-Action as an alternative process to a cognitive model of critical reflection/thinking:

1. A situation brings a ***surprise***, something unexpected and challenging. This surprise upsets the “knowing-in-action” which is the routine behavior, thoughts, feelings and beliefs of the student.

2. The surprise leads to ***reflection-in-action***. This is a conscious, critical analysis of what the student knows and does not know as related to the experience of the surprise.
3. As the student critically reflects on what is known, she ***reframes*** the problem to gain a different perspective on its resolution.
4. This reframing creates different strategies for understanding which leads to tentative ways of solving the problem. ***On-the-spot*** experimentation, or ***hypotheses testing***, may or may not work and can lead the student back to further reflection and experimentation.

Kitchener and King: Reflective Judgment

Though not models like Transformative Learning, the Process of Critical Thinking / Reflecting, or Reflection-in-Action, Reflective Judgment provides insight into the process of critical reflection from an abilities perspective. Kitchener & King (1994) propose a developmental sequence of perceptions about the nature of knowledge and the construction used to resolve ill-structured problems. It is assumed that all students are capable of critical reflection, however, not all critical reflection is equal. Of importance is the ability of students to increase their reflective judgment through critical thinking training.

The seven stages of reflective judgment are:

1. Single concrete category of knowing: Knowledge is gained by direct personal observation and needs no justification.

2. Two concrete categories of knowledge: A person can know with certainty through direct observation or through an authority.
3. Several concrete categories of knowledge are interrelated: Knowledge is assumed to be either absolutely certain or temporarily certain. Justification is based on what authorities state or what “feels right.”
4. Knowledge is understood as a single abstraction: Knowledge is certain and knowledge claims are assumed to be idiosyncratic.
5. Two or more abstract knowledge claims can be related: Knowledge is seen as being contextual and subjective. Beliefs are justified by using the rules of inquiry for the appropriate contexts.
6. Abstract concepts of knowledge can be related: Knowledge is actively constructed by comparing evidence and opinion on different sides of an issue; solutions are evaluated by personally endorsed criteria.
7. Abstract concepts of knowledge are understood as a system: Knowledge is the outcome of the process of reasonable inquiry for constructing a well-informed understanding.

Reflective Judgment theory provides insight into the cognitive abilities of students by illuminating differences in students’ abilities to assimilate information into the critical reflection process.

Kolb: Experiential Learning

Using the work of Dewey, Lewin and Piaget, Kolb developed a model of learning that incorporates a cyclical process (Svinicki & Dixon, 1987). Though not specifically labeled as critical or reflective thinking, experiential learning presents what appears to be a sequential activity.

In Kolb's theory, true learning or problem solving, requires the student to work through a cycle of four processes. The point of entry begins with a student's experience (Kolb, 1984): What has the student seen? What has the student done? Specific experiences in life root learning in a concrete dimension and provide the student with the "facts of the situation." Next the student reflects on these facts to gain understanding of what they might mean. In this stage, reflective observations, the student is looking for patterns, similarities and differences in what this experience brought in comparison to other experiences (Kolb, 1984).

Step three requires the student to generate a theory or hypothesis about what has taken place. Compared with what the student has learned through life, what might this experience mean? At this point, using the information generated during the reflective observation, the student explains, writes papers, or creates analogies within the abstract conceptualization of the experience (Svinicki & Dixon, 1987). This step is followed by active experimentation, empowering the student to try out what has been hypothesized. With action, the student re-enters the concrete experience of learning by testing what was learned from the reflective observation and abstract conceptualization.

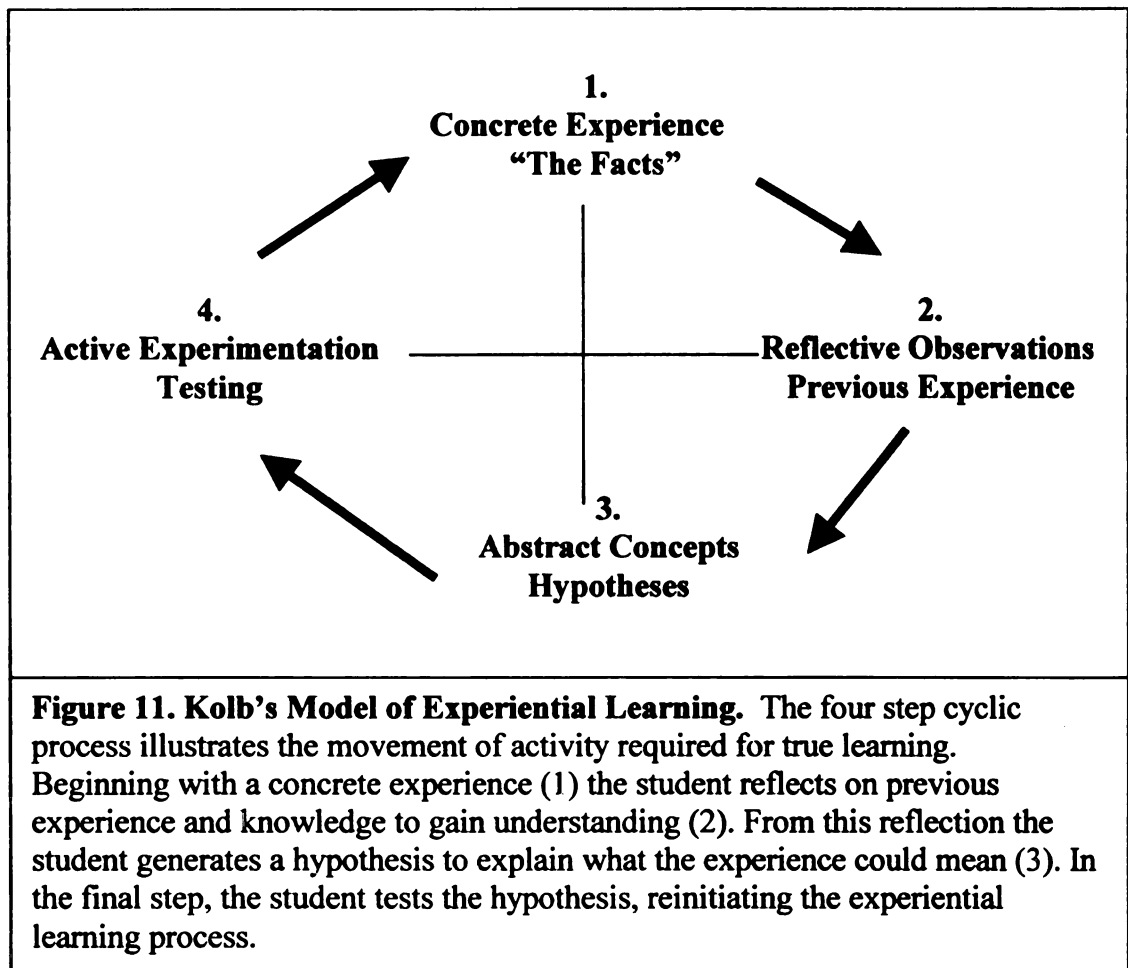


Figure 11. Kolb's Model of Experiential Learning

Summary of Critical Reflection Models

The models presented for critical reflection are not the only theories of critical reflection or transformative learning. Other theories that could be used to explore the student papers for the critical reflection that Habermas identifies as being necessary for emancipatory learning could include, Freire's conscientization (1970), Belenky's women's way of learning through relationships and connections (1986), Dirkx's individuation through symbolic and mythopoetic traditions (Boyd 1991, as cited by Dirkx, 1998; Dirkx, 2000). The theoretical models that have been chosen represent theories that have been developed enough to operationalize into conceptual definitions for identification. Each comes from a constructional context that recognizes that individuals co-construct meaning within themselves, in relationship with family, friends, the society in which they live and the natural environment. This perspective situates well within human ecology theory.

Appendix B

The Relational Assessment Scale

The Relational Assessment Scale

The purpose of this questionnaire is to assess your present understanding of your relationship.

..... Instructions

Complete the questions on the next pages by assigning a value of 10 to the ONE choice (A, B, C, D) in the C (SELF) column which most accurately describes your **CURRENT** (C) understanding of your relationship. From the three remaining choices in the C column assign a value ranging from 0-9 to the 2nd most descriptive choice. Repeat for the 3rd and 4th choices. All values (0-9), except for the number 10 may be repeated any number of times. Remember, that there must be and should be only one 10 in the C column (See example below).

Life in relationships is not always what we would like for it to be. Please repeat the process as described above for the column marked I (under Self). Assign a value of 10 to the ONE choice (A, B, C, D) that most **IDEALLY** represents how you would like for this aspect of your relationship to be. As before, assign values to the three remaining choices. All values except for 10 may be repeated any number of times.

How do you think that your partner would answer these questions? Repeat this process again by answering the questions as you think that your partner would - what do you think that your partner thinks for both **current** and **ideal** relational situations. Below, is an example question with the numbers filled-in. Again, note that there is one 10 per column, but not more than one 10 per column.

EXAMPLE - In our relationship we generally tend to communicate with each other in the following way.	Self		Partner	
	C	I	C	I
A - In a direct and factual manner	10	6	10	2
B - In a tactful and less direct manner	4	8	8	6
C - In a questioning and engaging manner	8	2	1	6
D - In a humorous and understanding manner	4	10	2	10

Relationships also involve behavior. In any relationship someone or something starts, initiates, causes or determines what will take place and when. These are called **INITIATING-MOVING** behaviors. In your relationship you or your partner may comment on the action taking place and have a range of suggestions for how things might be changed for a variety of reasons. These are called **QUESTIONING-CHALLENGING** behaviors. Sometimes someone doesn't initiate, challenge or support any actions taken, but instead act as a kind of guide and conscience by providing a balanced, accurate and non-blaming sense of reality, insight and wisdom about what

they have observed. These are called **REFLECTING-COMMENTING** behaviors. And finally, someone may agree with and confirm the behaviors of one, any or all of the other behaviors (initiating-moving, questioning-challenging, reflecting-commenting). These are called **AGREEING-SUPPORTING** behaviors. Following the same directions provided above, please assign current (C) and ideal (I) values for both Yourself and your partner's behaviors. Please see the examples below.

EXAMPLE What behaviors describe how you contribute to communication in your relationship?			EXAMPLE What behaviors describe your partner's contributions to relational communications?		
Self	C	I	Partner	C	I
Initiating-Moving	10	6	Initiating-Moving	4	10
Questioning-Challenging	6	10	Questioning-Challenging	5	8
Agreeing-Supporting	4	4	Agreeing-Supporting	10	6
Reflecting-Commenting	2	8	Reflecting-Commenting	9	4

Thank you for agreeing to complete this questionnaire - Please continue

<i>1a. In your relationship, how do the important things that must get done, get done?</i>	Self		Partner	
	C	I	C	I
A - We just know what needs to get done & how to do it				
B - By being well organized, using successful & structured routines, and perhaps most importantly having a plan we can count on				
C - Each person does what they think needs to get done and how to do it				
D - By regularly discussing and agreeing with each other what needs to get done and how "best" to work together to get things done				

<i>1b. What behaviors do you play in contributing to getting done what has to get done?</i>			<i>What behaviors does your partner play in contributing to getting done what has to get done?</i>		
Self	C	I	Partner	C	I
Initiating-Moving			Initiating-Moving		
Questioning-Challenging			Questioning-Challenging		
Agreeing-Supporting			Agreeing-Supporting		
Reflecting-Commenting			Reflecting-Commenting		

<i>2a. How do you show your affection, care & support for one another?</i>	Self		Partner	
	C	I	C	I
A - We share our love & affection for each other in an intimate, expressive, emotionally shared and somewhat private manner				
B - We demonstrate our love & affection for one another in a somewhat conventional, regulated, modest and always private manner				
C - We show our love & affection for each other in a playful, spontaneous, uninhibited and sometimes public manner				
D - We share our affection in an unspoken manner - because we just know without saying it that we deeply love & care for each other				

2b. What behaviors do you use when showing affection & caring in your relationship?			What behaviors does your partner use to show affection & caring in the relationship?		
Self	C	I	Partner	C	I
Initiating-Moving			Initiating-Moving		
Questioning-Challenging			Questioning-Challenging		
Agreeing-Supporting			Agreeing-Supporting		
Reflecting-Commenting			Reflecting-Commenting		

3a. Within your relationship what contributes to providing you with a sense of purpose & meaning?	Self		Partner	
	C	I	C	I
A - By each of us having the freedom & autonomy to engage in a personal journey of Growth, exploration & self-discovery				
B - By valuing the relationship more than ourselves as individuals, making decisions that benefit our common good, and valuing the virtues of organization, discipline & responsibility				
C - When our personally unique experiences & insights result in a shared, implicit & unspoken sense of unity, harmony & way of knowing				
D - By working together in our relationship to "go beyond" what has always been to create new and different ways of living life				

3b. What behaviors do you play in determining what is meaningful and has purpose?			What behaviors does your partner play in determining the meaning & purpose of things?		
Self	C	I	Partner	C	I
Initiating-Moving			Initiating-Moving		
Questioning-Challenging			Questioning-Challenging		
Agreeing-Supporting			Agreeing-Supporting		
Reflecting-Commenting			Reflecting-Commenting		

<i>4a. How in your relationship do you go about "making sense" out of what you experience in life?</i>	Self		Partner	
	C	I	C	I
A - By sharing our ideas with each other, by asking each other questions, and listening to the opinions & thoughts of others				
B - Each of us subjectively relies on ourselves and our own ideas to personally make sense out of what it is we experience in life				
C - By using "the" time-tested & established rules & truths of life, and by having learned how to look at any situation in an objective and factual manner				
D - We just seem to know without much discussion how to understand and make sense out of what we experience in life				

<i>4b. What behaviors do you play when trying to make sense out of life experience?</i>			<i>What behaviors does your partner play when trying to make sense out of life experiences?</i>		
Self	C	I	Partner	C	I
Initiating-Moving			Initiating-Moving		
Questioning-Challenging			Questioning-Challenging		
Agreeing-Supporting			Agreeing-Supporting		
Reflecting-Commenting			Reflecting-Commenting		

<i>5a. From a relational point-of-view, what emphasis do you feel is being placed on the following areas?</i>	Self		Partner	
	C	I	C	I
A - The importance of our being able to understand & make sense out of our life experiences in an accurate & realistic way				
B - That our relationship is guided by a greater sense of purpose and meaning in life				
C - That in our relationship we provide each other with the amount & kind of affection, caring, love & support wanted & needed				
D - That the important & necessary things that need to get done –get done- in order to have a quality relationship				

<i>5b. What behaviors do you play in determining the importance of these areas?</i>			<i>What behaviors does your partner play in determining the importance of these areas?</i>		
Self	C	I	Partner	C	I
Initiating-Moving			Initiating-Moving		
Questioning-Challenging			Questioning-Challenging		
Agreeing-Supporting			Agreeing-Supporting		
Reflecting-Commenting			Reflecting-Commenting		

<i>6a. In your relationship, how is time generally used?</i>	Self		Partner	
	C	I	C	I
A - In a flexible & adaptive manner - it can be changed as needed				
B - In a planned, scheduled & organized manner				
C - In a spontaneous manner so that opportunities for unplanned, interesting & creative experiences can happen				
D - Without hardly any discussion, in our relationship we just seem to know how time is to be used				

<i>6b. What behaviors do you play in determining how time will be used in your relationship?</i>			<i>What behaviors does your partner play in determining how time will be used?</i>		
Self	C	I	Partner	C	I
Initiating-Moving			Initiating-Moving		
Questioning-Challenging			Questioning-Challenging		
Agreeing-Supporting			Agreeing-Supporting		
Reflecting-Commenting			Reflecting-Commenting		

<i>7a. In your relationship, how are questions and ideas handled?</i>	Self		Partner	
	C	I	C	I
A - In our relationship we can ask any questions. We can say anything to each other, no matter how personally intimate, confronting or just plain silly. It's OK to ask any questions - no matter what!				
B - Certain issues and topics are rarely discussed in our relationship because they are simply inappropriate. The discussions that we have are always constructive & conducted with mutual respect				
C - Within reason, most questions can be asked and ideas can be discussed - but differences causing conflict are to be resolved				
D - There doesn't seem to be any real need for us to ask questions of each other, we just seem to understand most things in the same way				

<i>7b. What behaviors do you play in determining how ideas & questions will be handled?</i>			<i>What behaviors does your partner use in determining how ideas & questions are handled?</i>		
Self	C	I	Partner	C	I
Initiating-Moving			Initiating-Moving		
Questioning-Challenging			Questioning-Challenging		
Agreeing-Supporting			Agreeing-Supporting		
Reflecting-Commenting			Reflecting-Commenting		

<i>8a. How is energy and effort used in your relationship?</i>	Self		Partner	
	C	I	C	I
A - In a steady, consistent, regulated and controlled manner				
B - In a dynamic, enthusiastic, spirited and vigorous manner				
C - In an peaceful, calm, serene and tranquil manner				
D - In a flexible, adaptive, changeable & accommodating manner				

<i>8b. What behaviors do you play in determining how effort & energy will be used?</i>			<i>What behaviors does your partner use in contributing to how effort is used?</i>		
Self	C	I	Partner	C	I
Initiating-Moving			Initiating-Moving		
Questioning-Challenging			Questioning-Challenging		
Agreeing-Supporting			Agreeing-Supporting		
Reflecting-Commenting			Reflecting-Commenting		

<i>9a. In your relationship, how do you relate to your possessions and belongings - the "things" of life?</i>	Self		Partner	
	C	I	C	I
A - "Things" are valued because we worked hard to get them, and for us they represent the "just" & deserving rewards of life				
B - "Things" aren't what's really important in life - it's experiencing & living life that's important - things often just get in our way				
C - "Things" are useful in life because we can use them to get other more important things done & to make life more convenient				
D - "Things" are to be valued and respected because of the personal meaning that they represent. Because of their importance they should be protected & kept as perfect as possible				

<i>9b. What behaviors do you play in determining how to relate to possessions and belongings?</i>			<i>What behaviors does your partner play in deciding how to relate to possessions and belongings?</i>		
Self	C	I	Partner	C	I
Initiating-Moving			Initiating-Moving		
Questioning-Challenging			Questioning-Challenging		
Agreeing-Supporting			Agreeing-Supporting		
Reflecting-Commenting			Reflecting-Commenting		

<i>10a. What emphasis is placed in your relationship on the following areas?</i>	Self		Partner	
	C	I	C	I
A - The importance of possessions and belongings				
B - The importance of effort & energy in our relationship				
C - The importance of time & how it will be used				
D - The importance of ideas, questions & information				

<i>10b. What behaviors do you play in determining the comparative importance of these areas?</i>			<i>What behaviors does your partner play in determining the importance of these areas?</i>		
Self	C	I	Partner	C	I
Initiating-Moving			Initiating-Moving		
Questioning-Challenging			Questioning-Challenging		
Agreeing-Supporting			Agreeing-Supporting		
Reflecting-Commenting			Reflecting-Commenting		

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MICHIGAN STATE
UNIVERSITY

June 27, 2001

TO: Deborah C. Bailey

FR: Dr. David R. Imig, Professor

A handwritten signature in black ink, appearing to read 'D. Imig', is written over the 'FR:' line of the memo.

**RE: Permission to Reprint Relational Paradigm
Assessment Scale**

**I grant permission for you to reprint the Relational
Paradigm Assessment Scale in your dissertation.**

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Appendix C

FCE 444 Semester Paper Evaluation Form

FCE 444 Semester Paper Evaluation Form

Student Name _____ **Student #** _____

Paper Format	0	1	2	3	4	5
Relational Statement & Top Ten	0	1	2	3	4	5
Accuracy & Correctness of Scale Data	0	1	2	3	4	5
Correct Use of Concepts	0	1	2	3	4	5
Range & Depth of Concepts	0	1	2	3	4	5
Appropriateness & Relevance of Relational Examples	0	1	2	3	4	5
<u>Overall Impression of Paper</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>

Total Score

Checklist of Included Concepts

- | | |
|--|--|
| <p>__Paradigms: C R O S</p> <p>__Alignment / Misalignment</p> <p>__Enabled / Disabled</p> <p>__Communication Patterns</p> <p>__Strategies</p> <p>__Compound Systems</p> <p>__Functional Goals</p> <p>__Distance Regulation Issues</p> <p>__Most Like</p> | <p>__Player Parts</p> <p>__Player Part Patterns</p> <p>__Boundaries</p> <p>__Mechanisms</p> <p>__Sub-Mechanisms</p> <p>__Compromise /Blended /Combined</p> <p>__System Rules</p> <p>__Views 1, 2, 3, 4</p> <p>__Least Like</p> |
|--|--|

Comments:

Appendix D

UCRIHS Approval

MICHIGAN STATE UNIVERSITY

December 22, 2000

TO: David IMIG
203E Human Ecology Building

RE: IRB# 00-830 CATEGORY:1-B, 1-E

APPROVAL DATE: December 21, 2000

**TITLE: AN ANALYSIS OF CRITICAL REFLECTION IN SEMESTER PAPERS OF
FAMILY STUDIES UNDERGRADUATE STUDENTS IN AN INTERPERSONAL
RELATIONSHIP VIRTUAL UNIVERSITY AND TRADITIONAL CLASSROOM
COURSE**

The University Committee on Research Involving Human Subjects' (UCRIHS) review of this project is complete and I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the **UCRIHS approved this project.**

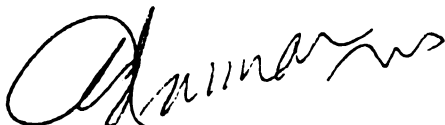
RENEWALS: UCRIHS approval is valid for one calendar year, beginning with the approval date shown above. Projects continuing beyond one year must be renewed with the green renewal form. A maximum of four such expedited renewals possible. Investigators wishing to continue a project beyond that time need to submit it again for a complete review.

REVISIONS: UCRIHS must review any changes in procedures involving human subjects, prior to initiation of the change. If this is done at the time of renewal, please use the green renewal form. To revise an approved protocol at any other time during the year, send your written request to the UCRIHS Chair, requesting revised approval and referencing the project's IRB# and title. Include in your request a description of the change and any revised instruments, consent forms or advertisements that are applicable.

PROBLEMS/CHANGES: Should either of the following arise during the course of the work, notify UCRIHS promptly: 1) problems (unexpected side effects, complaints, etc.) involving human subjects or 2) changes in the research environment or new information indicating greater risk to the human subjects than existed when the protocol was previously reviewed and approved.

If we can be of further assistance, please contact us at 517 355-2180 or via email: UCRIHS@msu.edu. Please note that all UCRIHS forms are located on the web: <http://www.msu.edu/user/ucrihs>

Sincerely,



Ashir Kumar, MD
Interim Chair, UCRIHS

AK: rj

cc: Debra Bailey
19700 Waterloo Rd
Chelsea, MI 48118



OFFICE OF
**RESEARCH
AND
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