INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

University Microfilms International
A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
313-761-4700  800/521-0600
The development of learning for nontraditional adult students: An investigation of personal meaning-making in a community college reading and study skills course

Becker, Karen Ann, Ph.D.
The Ohio State University, 1993

Copyright ©1993 by Becker, Karen Ann. All rights reserved.
THE DEVELOPMENT OF LEARNING FOR
NON-TRADITIONAL ADULT STUDENTS:
AN INVESTIGATION OF PERSONAL MEANING-MAKING
IN A COMMUNITY COLLEGE READING AND STUDY SKILLS COURSE

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy in the Graduate
School of The Ohio State University

by

Karen A. Becker, B.A., M.Ed.

The Ohio State University
1993

Dissertation Committee: Approved by:
Dr. Frank Zidonis
Dr. Becky Kirschner
Dr. Daniel Rosenberg

Advisor
College of Education
ACKNOWLEDGEMENTS

Sincere appreciation goes to the students who participated in my courses during the Autumn quarter of 1992. Special thanks goes to the five students who agreed to participate as case studies: "Michael", "Priya", "Moe", "Carla", and "Mike P." — without whom this study would not have been possible or as interesting as it was.

I would like to take this opportunity to also thank all the friends, family, professors, and colleagues who have encouraged throughout the pursuit of my degree. I want to thank these people for putting up with my single-mindedness as I focused so intensely on this study. Trusting that I will do what’s best for myself is the greatest encouragement these individuals gave me.

I would especially like to thank the few who went a step further in this endeavor and got involved by listening, thinking, reading, and proofreading. I want to thank Cynthia Rush for the hours of griping she heard at the back fence and for doing my graphics. Sincere gratitude goes to Norma Hall — especially for the cards, kind words, and support through the years. I want to thank Barb Wookey for making me feel important enough to inspire her to start her Ph.D. program, for the phone calls and dinners over the last few months — and for sharing her "braining" with me. I must also thank Linda Yodzis for the long hours of proofing and being my second brain as we cleaned up this document and others. Her friendship and encouragement
since we began working together at The Ohio State University has been very precious to me. Loads of appreciation go to Natalie Clark for the many hours at the computer working with me and for me. Her humor, warmth, and patience in the height of what seemed to be insanity was yet another example of the kindnesses shown to me throughout this endeavor.

Lastly, I must acknowledge my committee, more affectionately known as "The Dream Team:" Dr. Frank Zidonis, Dr. Johanna DeStefano, Dr. Becky Kirschner, and Dr. Dan Rosenberg. These people predicted great things when I wasn’t sure to what they were referring. Their predictions and advice, as well as their constant assurance that all was well — that they had confidence in my work — provided me with the stamina to complete this degree. I must acknowledge the long hours Becky spent helping me dream up this plan, and the frequent phone calls to check on my progress. And finally, my eternal gratitude goes to Dan Rosenberg for joining the "Team," for the many hours of polishing, and for finding the deep meaning in this study. Your friendship, kindness, expertise, and dedication must stem from a place of unconditional giving that I hope comes back to you many times over.
April 9, 1963 .............................................. Born - Wickliffe, Ohio
1985 ............................................................ B.A., Allegheny College, Meadville, Pennsylvania
1986 ............................................................ M.Ed., Allegheny College, Meadville, Pennsylvania
1985-1987 ................................................... High school teacher - English and speech, North Royalton, Ohio
1987-1988, 1990 ......................................... Instructor, Researcher, Townsend Learning Center, Chagrin Falls, Ohio
1988-present ............................................. Graduate Teaching Assistant, Educational Studies Dept., Educational Theory and Practice Dept., The Ohio State University, Columbus, Ohio
1989-present ............................................. Adjunct faculty, Developmental Education Department, Columbus State Community College, Columbus, Ohio
1990 ............................................................ Cognitive Interventionist, Excellence in Learning, Upper Arlington, Ohio
1993 ............................................................ Adjunct faculty, Master's of Education Program, University of Dayton at Capital University, Bexley, Ohio
RESEARCH/PUBLICATIONS

1993, The Development of Learning for Non-Traditional Adult Students: An Investigation of Personal Meaning-Making in a Community College Reading and Study Skills Course, Ph.D. Dissertation, The Ohio State University, Columbus, Ohio.


Publication pending, Thinking Skills: An Annotated Bibliography of Resources (with Dr. M. Languis), National Association of Secondary School Principals.


FIELD OF STUDY

Major Field: Education

Studies in: English Education
Learning
LIST OF FIGURES

FIGURES

1. Conceptual and Theoretical Framework ....................... 19
2. Nested Contexts for Data Collection ....................... 32
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLES</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learning Perceptions Model</td>
<td>121-123</td>
</tr>
</tbody>
</table>
## TABLE OF CONTENTS

ACKNOWLEDGEMENTS ........................................................ ii

VITA ......................................................................................... iv

LIST OF FIGURES ............................................................. vi

LIST OF TABLES ................................................................... vii

CHAPTER

I. REVIEWING THE LITERATURE WHILE IDENTIFYING
   THE PROBLEM .......................................................... 1
   Introduction: The "At-Risk" Non-Traditional Adult ................................. 1
   The Research Question ........................................................................ 7
   The Adult Learner as Characterized in the Literature: In Search of a Framework ........................................................................ 7
   The Course and the Theories ................................................................ 17

II. DEVELOPMENT OF LEARNING PERCEPTION: AN
    APPLIED MODEL ......................................................... 20
    Introduction ........................................................................ 20
    First Perspective ................................................................ 21
    Second Perspective .......................................................... 22
    Third Perspective ............................................................. 23
    "Triune Brain Theory" and the Non-Traditional Learner's Development ........................................................................ 25

III. METHODOLOGY ............................................................. 28
    Introduction ........................................................................ 28
    The Setting .......................................................................... 29
    The Subjects ......................................................................... 30
    Data Sources ........................................................................ 31
    Research Plan ........................................................................ 40
CHAPTER I

REVIEWING THE LITERATURE WHILE IDENTIFYING THE PROBLEM

Introduction: The "At-Risk" Non-Traditional Adult

The Ohio Board of Regents reported that in recent years one in five freshmen in Ohio's colleges and universities was in need of remedial math or English courses, with a higher percent of these students enrolled in two-year community and technical colleges (Doulin, 1993). Often these students come from educational backgrounds that place them at a disadvantage in terms of achieving success in traditional college classrooms. For instance, their family moved a lot, the schools were inferior, or the students did not consider going to college, and therefore did not take college preparatory courses in high school. These developmental students enter the college setting feeling insecure regarding their own success (Stone & Miller, 1991).

Among these first year students are returning adults, or non-traditional students who made up 34 to 41 percent of the undergraduates enrolled in institution of higher education in recent years (Hill, Krolczak & Froomkin, 1982; U.S. Department of Education, 1990). Non-traditional students are those aged 22 (Cameron, 1984) or 24 and above (Epstein, 1986; Schmidt, 1984; Weil, 1986) who have returned to school.
after a hiatus in which they have typically taken on responsibilities as workers, spouses, and/or parents.

What little research that has been done on this population generally consists of demographics and motivational factors in returning to school (Houle, 1961; Roberts, 1982; Williamson & Greenwood, 1989). However, just as elementary, middle, and high school populations each receive separate attention in educational research, so should the non-traditional adults in higher education. In fact, this population has only been recognized by the U.S. Office of Education since the mid-1940's and by the U.S. Bureau of Census since the early 1970's (Epstein, 1986).

To accommodate the needs of these non-traditional students who are often at-risk for success in college level courses, many colleges have developed support systems to reduce their risk of failure (Bullock, Madden, & Mallery, 1990; Scott, 1987). The courses have been designed to help students enhance their study skills. Research done to determine the effectiveness of these developmental reading and study skills courses offer mixed reviews -- some claiming growth and change leading to retention of students (Ast, 1987; Garstka, 1984; Starks, 1987; Watson, 1980) while others relate successes with instructional strategies (Doughty, 1990; Droege, 1983; Stone and Miller, 1991; Whitt, 1980) and still others claim there is little significant success or retention for these students (Garth, 1983; Watson, 1980).

Carol Mishler (1984) even examined the feelings of students in mixed classes and found that non-traditional and traditional students co-existed happily. Studies such as this one, however, fail to account for the fact that there may be an assumption that
it is the responsibility of non-traditional students to "fit in" on their own, rather than to have their needs and unique styles recognized and accommodated in the classroom — an important issue when dealing with the at-risk adult.

Whether previously successful, or academically deprived or unsuccessful, adult students may not succeed upon re-entry due to emotional and psychological reasons particular to their age and roles (Roberts, 1989; Williamson & Greenwood, 1989). John Claus (1986) identified the following eight factors that affect students' abilities to manage their learning: 1) economic, 2) home and family, 3) transportation, 4) unique personal issues, 5) goal and commitment issues, 6) academic adjustment issues, 7) classroom issues, and 8) institutional issues. Each non-traditional student is unique. In order to ensure that this varied population of students achieve the maximum benefit developmental programs offer, it is imperative that information be gathered on what cognitive needs, knowledge, and initial assumptions non-traditional students bring with them when entering the college environment.

Before proceeding to investigate the issues and problem addressed in this study, it is necessary to define the terms that are used. The first set of definitions are culled from the literature. The second set, however, reflect my own understanding and assumptions about learning that emerged from this study.
non-traditional: refers to adult students who return to school after five years or more, during which time they have entered the work force and started new families.

at-risk: refers to students whose prior educational background was incomplete or insufficient to prepare them for learning at the college level, or whose prior education took place so long ago that they are or feel "rusty" about being a student; thus, they are at-risk for academic success without some intervention.

adult: educationally, Knowles (1980) defines this as one who has entered into social roles considered by the culture to be adult — such as employee, spouse, parent, or responsible citizen. Further, an adult is one who perceives oneself to be responsible for one's own life or is perceived to be an adult by society (Rogers, 1986).

personal meaning-making: Postman and Weingartner (1969) state that we do not "get" meaning from things, we assign meaning. . . . the meaning we assign is a function of the pattern or system of symbols through which we order and relate whatever we are dealing with (p. 99).

Meaning-making, then, is the process each individual person initiates to meaningfully connect the patterns and symbols of their world.

learner: an individual who engages in the process of constructing knowledge. Smith (1984) points out that "learning" can mean acquisition and mastery, extension and clarification of knowledge, or application of new ideas to new situations. "It is
used to describe a product, a process, or a function" (Smith, 1984, p. 34). The process of learning will be the focus of this study.

Emergent Definitions

Two aspects of the learner which are of primary concern in this study are:

the cognitive domain: the learner's intrinsic ability to process materials — to make connections between existing knowledge and experiences and the incoming materials of the course. The affective domain is subsumed and inseparable from this processing because the learner attaches personal meaning to the new material and to the process of learning as well.

the behavioral domain: the learner's extrinsic ability to demonstrate and use the incoming knowledge for the purpose of school learning and/or life-long learning.

the reading and study skills course: the course taught in this study was meant to give students entry into the culture of being a student/learner. The curriculum was designed for group and individual work on reading and study problems, note-taking, memory, test anxiety, objective and essay tests, and final exams, as well as individualized lab exercises designed to help students increase their reading speed and improve comprehension (see APPENDIX A: Curricular Notes and APPENDIX B: Sample Course Syllabus). The course objectives established by the department of Developmental Education were as follows:
1. To increase student's self-confidence.
2. To increase student's ability to use various reading skills on textbook material.
3. To increase student's reading ability to a minimum of 10th grade level or the level required by specific technologies.
4. To increase student's understanding of all study skill techniques.
5. To provide practical application of all reading and study skills in the course.

College success: As a college instructor my perception of student success in college is built upon the following two interrelated goals:

1. Students learn course materials,
2. Students develop an understanding about their own learning processes.

The first goal can be measured by traditional observable behavioral means, i.e., worksheets, tests, etc. The second goal is affective and more subtle, falling within the cognitive domain. As a developmental process, this goal can be assessed through more individualized methods, i.e., journals, essays, class participation, and interviews. The interrelationship of these two goals begins to form the basis for both the theoretical and conceptual framework of this study.
The Research Questions

A series of questions are addressed in this study which stem from a frustration I have had teaching the reading and study skills course. The frustration is in not being able to adequately assess whether or not students were developing personal meaning of the concepts introduced in the course.

The first research issue, then, for this study was to examine the following question:

- Do these at-risk, non-traditional students interact with the course concepts to create surface and/or deeper personal meaning?

Two further questions emerged:

- How do students reconcile the tension between displaying surface knowledge and developing deeper personal meaning?
- What are the issues that influence the development of personal meaning in this course?

The Adult Learner as Characterized in the Literature: In Search of a Framework

Early research in the field of adult education set out to understand the adult learner by developing descriptions of the learner from an institution’s needs for demographic data — e.g. age, educational background, race. However, Cyril O. Houle (1961) studied 22 students to discover what made education meaningful to them. He was able to identify three types of learners: a) the goal-oriented learner who uses education to accomplish an objective, b) the activity-oriented learner who
primarily seeks social contact and activity, and c) the learning-oriented who seeks knowledge for knowledge’s sake. Similarly, Mary Endorf and Marie McNeff (1991) 30 years later characterized successful returning adult learners into five types:

1. confident, pragmatic, goal-oriented learners,
2. affective learners,
3. learners-in-transition,
4. integrated learners,
5. risk takers.

While Houle’s and others’ (Boshier, 1971; Burgess, 1971; Morstain & Smart, 1974) describe the basis for entering continuing education in terms of generic student characteristics and their motivation, they do not particularly address the question of how students make the learning meaningful -- a necessary component of college success. This is also necessary for teachers to know about their students. Further, many of these studies were done quantitatively and in a variety of educational settings, thus omitting the focus on unique differences of the returning adult in institutions of higher education. Frederick Erickson (1982) encourages educators to focus on the sequential organization of interactions in the educational encounter in order to describe the meanings constructed over time. The focus on sequential organization of interactions involves tracking individuals in the “commonplace” activities and settings before, during, and after the learning (Erickson, 1982). Nonetheless, the broader focus on adult education that has occurred in the past few decades does inform us about the characteristics associated with these adult learners.
Up until the late seventies, Malcolm Knowles and Abraham Maslow were two of the most cited authors in the research journals of adult education (Boshier & Pickard, 1979). Maslow (1968) is known for his hierarchy of basic human needs with the highest level, self-actualization, incorporating "the need to create, to appreciate, and a need to know and understand" (Rogers, 1986, p. 63). Maslow believed that if the lower level needs -- food, shelter and safety, love and belonging, and esteem -- are met, self-actualization will automatically be triggered. Perhaps non-traditional students, who have experienced and established a foundation in the lower level needs, are best suited for the development of self-actualization. As a mainstream humanist theorist, Maslow is one of the few to incorporate the adult changes into his hierarchy. Maslow, like other theorists later to be discussed, focuses on the broad issues of freedom and authority, while Knowles emphasizes a more individual freedom of the learner and its relationship to effective learning (Boyer, 1984).

Knowles began to formalize the discipline of adult learning in 1968 when he brought the term "andragogy" to the United States from Europe. Distilled from adult education, progressive education, developmental psychology, and humanistic psychology (Davenport & Davenport, 1985), Knowles' theory of adult learning is based upon five assumptions that distinguishes adult learning from more child-centered pedagogy. Knowles' (1990) assumptions about adult learners are these:

1. **The need to know.** Adults need to know why they need to learn something before undertaking to learn it.

2. **The learner’s self-concept.** Adults' self-concept of being responsible for their own decisions and lives needs to be honored by educators.
3. **The role of the learner's experience.** Adults come into an educational activity with both a greater volume and a different quality of experiences than youths. This can have negative and positive effects on the educational process and is connected to their self-concept.

4. **Readiness to learn.** Adults become ready to learn those things they need to know and are able to do so in order to cope more effectively with their real-life situations.

5. **Orientation to learning.** Adults are life-centered, whereas children's orientation to learning in school is subject-centered.

There has been considerable debate about the andragogical and pedagogical perspectives of adults. Davenport and Davenport (1985) reviewed research that identified the andragogical-pedagogical orientations of adult learners. One of the researchers, Van Allen (1982), found that full-time younger females and married students in a community college had a higher andragogical orientation. Davenport and Davenport reported that Grubbs (1981) also found that females and more traditionally-aged students lean more toward andragogical orientations.

The limitations of the aforementioned studies are that they are based solely on questionnaires such as the Student Orientation Questionnaire (Christian, 1982, 1983) and the Education Orientation Questionnaire (Van Allen, 1982). In order to best approach the question of how students interact with course material to make meaningful connections, information must be gathered to describe how students work within classrooms with the knowledge they already have as well as the knowledge they are attempting to gain (Erickson, 1982).

In believing that students are ultimately responsible for constructing their own meanings, the scheme of adult cognitive and ethical development described by William
G. Perry, Jr. (1981) is crucial to this discussion of the development of adult learning processes over time. Perry is recognized for balancing the cognitive domain with the emotional — "the evolving ways of seeing the world, knowledge and education, values, and oneself" (Perry, 1981, p. 78) — when considering human development. Perry and his colleagues at Harvard in the late sixties interviewed and observed 100 college students regarding their structuring of meanings to determine the students' perceptions and methods of learning (Perry, 1970). The students' recursive interpretations of their lives as they experienced college year by year revealed a logical progression which Perry reports as nine "positions" and the subsequent "transitions" between each position, ranging from "Dualism" to "Relativism."

While nearly all of Perry's (1970) informants were male, Belenky, Clinchy, Goldberger, and Tarule (1986) studied all females in a similar way using Perry's scheme as a basis. Belenky and associates identified four perspectives among college women that coincide with the positions and transitions Perry established. In the following section I will discuss learning theories and concepts of knowledge based on a cumulative interpretation of the schemes Perry and Belenky et al. established. These schemes correlate with a) the ways Caine and Caine (1991) describe learning based on a model of information processing, and b) Knowles' (1990) description of adult learners, as well as c) Jack Mezirow's (1981) critical theory of adult learning.

The first two positions discussed by both Perry (1970) and Belenky et al. (1986) involve decreasing degrees of "Dualism" in which students first see meaning as either Good or Bad, Right or Wrong, or Us versus Them. For these students,
knowledge is quantitative and experienced through "Authority," test scores, and the "Right job." Belenky et al. (1986) call this "received knowledge" in that students do little with new information, except to memorize it. Caine and Caine (1991) refer to this as "surface knowledge." Knowles (1990), the adult educator, explains that previous experience with school and learning form mental habits, biases, and presuppositions that may result in close-mindedness and/or dependence on the teacher for all information.

Working away from the Dualistic perspective requires students to incorporate a Multiplistic world view (Perry, 1981). During the transition through the second to the fourth positions, then, the students move to "subjective knowledge" in that they begin to accept the fact that there are differing opinions and they begin to trust their "inner voice" with regard to what they are hearing and reading in classes (Belenky et al., 1986). Further, Caine and Caine (1991) include in this middle ground "felt meaning" in which emotions and cognition come together when patterns and connections are perceived by the learner. In this transitional stage, then, students are beginning to perceive relationships between their ideas and ways of processing information and those of others they meet in the classroom or life experiences.

"Relativism," Perry's (1970) fourth through fifth positions, finds the students placing value on the differing opinions they encounter from teachers, fellow students, and texts. At this point, knowledge becomes qualitative and context-specific as students begin to apply "procedural knowledge" (Belenky et al., 1986) to reason through their beliefs. Learners at these positions begin to discover for themselves the
value of applying a particular procedure to learn concepts. Relativity of concepts to life situations of the past, present, and future establish frames of reference for learners who are also beginning to value opinions of others as well as their own. Learning is more meaningful and accessible as students move from the declarative/surface knowledge to procedural knowledge. These positions correlate with Knowles' andragogical need to know, and the learner's self-concept.

The transition through the last four positions of Perry's (1970) scheme of intellectual development is characterized by the students developing a "Commitment to Relativism." The students become aware of the risks involved in making choices, while simultaneously becoming invested in making meaning in the world. Here ownership and empowerment are major components in the learners' process of becoming efficient through meaningful learning. The key to these positions is the intrinsic motivation that underlies all Knowles' (1990) assumptions about the learner in the development of Commitment to Relativism. Belenky and associates (1986) appropriately call this last phase "constructed knowledge" because as Kurfiss puts it students

include the self in their knowing process, no longer executing a procedure but now becoming passionately engaged in the search for understanding (Kurfiss, 1988, p. 56).

At this level, students should be more efficient learners, because they are no longer memorizing random data, but interpreting and constructing their own schema for
remembering and using the information. Learning becomes a positive phenomenon as students experience satisfaction and success.

Jack Mezirow’s (1981) critical theory of adult learning provides the most expansive description of what may be involved in meaningful adult learning. Influenced by the German philosopher and critical thinker Jurgen Habermas’ three domains of knowledge (1971), Mezirow envisioned learning as occurring in three distinct forms: technical, interactional, and emancipatory (Merriam, 1987). The first is the most common for developing knowledge in the physical and social sciences. Technical learning involves the search for regularities and predictability of learning alternatives through observation. This form resonates with Knowles’ (1990) need to know assumption in which learners need direction, and Perry’s (1970, 1981) Dualistic positions regarding right and wrong as ascribed by Authority. However, it is not clear that this is the only way this technical form works. It may also include the learners’ readiness to learn independently based on the adult’s life-centered orientation to learning -- another of Knowles’ assumptions (1990).

The second form of adult learning discussed by Mezirow (1981), the practical, which stems from Habermas’ (1971) "interactional domain," focuses on understanding communication within the context of a particular culture. In the case of a reading and study skills course, this would mean learning the culture of the community college as a "student"; thus, the students are interacting in the setting of which they want to learn to be a part. This second form from Mezirow’s concept of adult learning is also reminiscent of Perry’s (1970, 1981) Relativism. As students interact they becomes
aware of other's -- students and teachers -- opinions as valid sources of thinking.

Once again, Knowles' (1990) assumptions about the adult learner's need to know, self-concept, readiness to learn, and orientation to learning are characteristic of the interactional form of learning espoused by Mezirow.

Emancipatory, the third of Mezirow's (1981) domain of learning, involves a notion common to many theories of learning and instruction -- a "disorienting dilemma" in which meaning is based on what students perceive to correspond to perceptions formed by particular psychological and cultural experiences (Wilson & Burket, 1989). Mezirow equates this third domain with his "perspective transformation" (1981) which is a learning process by which adults' "new learning transforms existing knowledge into a new perspective and in so doing, 'emancipates' the learner" (Merriam, 1987, p. 194). Knowles' (1990) emphasis on the learners' self-concepts closely ties to this, but it is Perry's (1970, 1981) schema that highlights the true value of this last phase in both Mezirow's and Perry's philosophies of adult learners. The developed sense of Relativism and the Commitment to Relativism seen in Perry's (1970, 1981) schema of cognitive and ethical growth underlies the necessity for students to reach this level of awareness about their learning in order for ownership and empowerment to initiate learning encounters.

In a study using Perry's (1970, 1981) scheme that is closely related to this study, S. W. Weil (1986) investigated the interpretative frameworks used retrospectively by adults to make sense of their experiences in higher education. A
basic question in Weil's study was: How do non-traditional students become learners given what they know about "learning" and "being a learner"? Weil interviews 25 non-traditional undergraduates enrolled in a polytechnic institute. Analysis of the data revealed that as students enter into formal education anew they experience "disappointment, dislocation and ultimately re-discovery — the process of which seems to result in renewed value basis upon which to make choices as a learner" (p. 219). Although Weil's study focused on processes by which non-traditional students make meaning of content by interpreting their role as learners, it failed to examine the students at the beginning of this process -- at the entry point of becoming adult students, nor is there mention of the possible influences of specific study skill courses that are designed to assist with the process of becoming learners. The question then remains: What can be learned about this process of becoming a learner when non-traditional, at-risk students are given specific instruction to aid in the process? And further, given that others have established a similar progression of tension and relief as part of learning (Piaget, 1959 [disequilibrium]; Posner et al, 1982 [dissatisfaction], Caine & Caine, 1991 [activity uncertainty]) a question emerges: Should the goal of higher education be to speed up this process and get students to the point of re-discovery sooner, so that disappointment and dislocation are not a hindrance?
The Course and The Theories

Since teaching reading and study skills, I have had a sense that students often carry attitudes and study habits which inhibit their ability to integrate the course concepts into their college lives. These attitudes and habits stem, as Perry (1970, 1981), Knowles (1990) and Mezirow (1981) point out, from student notions that "learning" in school means acquiring a surface understanding of the content for the purpose of testing well and from depending on authority for information. The course content is universally prescriptive and the assumption is that all learners have the same needs and progress at the same pace. Assessment favoring the behavioral domain de-emphasizes the students' personal involvement in the learning process.

Frank Smith (1985, 1986), an educational/cognitive psychologist, describes this phenomenon another way. Based on psycholinguistic theories of speech acquisition in small children, Smith believes that learning is promoted because of "learning clubs" in which there are "no entry fees, no tests, no need of personal recommendations" (1986, p. 29). Infants, for example, join the spoken language club "by a single act of mutual acceptance" (1986, p. 29). The benefits of membership are that experienced members help newcomers and there is no coercion; instruction is relevant. "Our club memberships are our identity" (Smith, 1986, p. 48). This inclusion in learning impacts on students' self-concept (Knowles, 1990), empowerment (Mezirow, 1981), and ability to commit to relativism (Perry, 1970, 1981). However, Smith maintains that learners can be taught that they don't belong to various learning clubs. Tests are a primary source of exclusionary measures, as well as the teacher's attitude towards
students. These exclusionary tactics are often found in traditional behavioral pedagogy. Exclusion from learning clubs encourages positions of Dualism in Perry's schema (1970, 1981) which leads to rote, disconnected learning.

Caine and Caine (1991) refer to the Dualistic phenomenon as learning "content devoid of significance to the learner" (p. 93). This surface understanding is known as taxon memory or "route following" (Caine & Caine, 1991). In other words, this is information that has been rehearsed and is extrinsically motivated by rewards and punishment -- a behavioral view of learning. Smith (1986) adds that tests "ascertain the clubs that [students] are unlikely to join" (p. 49). In contrast, a more useful objective is to teach for locale memory or "map constructing" involving "frames of reference" and "an internal organization of information that moves the student beyond the information packaged for the classroom" (Caine & Caine, 1991, p. 45).

Instruction with the aim of deliberate behavioral learning is referred to as "school learning" by anthropologists. Some educational theorists who add the cognitive domain to the learning process regard their approach as "critical thinking" (Facione, 1992) or "taught cognitive learning" (Erickson, 1982). Caine and Caine (1991) refer to the learning as "deep meaning," a polar extreme to surface knowledge on a continuum of knowledge internalization.

The following figure is offered to sum up the similarities of the learning theories and concepts of knowledge that form both the conceptual and theoretical frameworks underlying this study.
Although these theorists have added to and supported what I have come to believe about learning, they did not offer me a framework for analyzing and describing the non-traditional adults in this study. Therefore, in order to describe the meaning-making process of non-traditional learners, I created the Development of Learning Perceptions Model (see CHAPTER II: Development of Learning Perception: An Applied Model).
CHAPTER II

DEVELOPMENT OF LEARNING PERCEPTIONS:

AN APPLIED MODEL

... the truths of theories of development
are relative to the cultural context in
which they are applied.

Jerome Bruner, 1986, Actual Minds, Possible Worlds

Introduction

This Model emerged from the demands of perceptions and the taxonomies of
learners uncovered during data analysis. The Model is grounded both in the cognitive
learning theories described in CHAPTER I and the data analysis of this study.
Although other theorists seem to indirectly acknowledge the inter-relationships of the
cognitive and affective domains, it is a central and unique premise for this study and
its Model. This focus and uniqueness may in part be due to the nature of the reading
and study skills course, that is, that the course content is context-specific and can be
constructivistic by nature. There are three developmental perspectives in this model
which describe the learning perceptions of non-traditional at-risk students.
First Perspective

The first perspective concerns an extrinsic focus students have on identifying and remembering concrete facts. Students with this learning perspective think of and/or experience learning as the means of retaining facts; thus, they are generally employing rote memorization or "surface learning" (Caine & Caine, 1991). In this perspective, students are primarily concerned with retaining what they were told on a syllabus.

Students with this concrete perspective tend to engage learning in one or more of the following ways. First, the students' priorities are to memorize random facts with little or no recognition to the interconnectedness of these facts. Additionally, there is little awareness to the process by which these facts are acquired. Roles are clearly dichotomized -- teachers are information-givers; students are information-receivers who complete the circuit when they recite back their "knowledge" in the form of a test. This re-affirms Perry's (1970) early developmental stage of Dualism. Finally, to students with this perspective, information exists in a vacuum, with little application of their prior experience or background. In fact, Bruner (1986) points out that this preoccupation with the goal of retaining the facts "smothers the occupation with the means to it" (p. 113). Students functioning in this mode perceive knowledge as something to "get" while those who move into the next perspective understand that meaning is assigned to ideas and concepts by the individual -- they realize that learning is an internal and personal process.
Second Perspective

Students with the second perspective metacognitively begin to realize that learning involves more than the consumption or absorption of facts. Recognizing how those facts are organized and then internalized becomes important to students. They realize that the facts that are internalized in meaningful, rather than rote ways, are less likely to be forgotten. Further, when students begin to apply concepts relevantly in their lives, they realize the information is less likely to be forgotten. However, Caine and Caine (1991) caution that learning at this level can just become a "trick" to acquiring more surface knowledge. From this perspective, learning becomes less mechanical and more meaningful as students become more personally invested in their learning process. Caine and Caine (1991) refer to this as "felt meaning" which "expands our frames of reference" and provides a "road map" of how the new information might fit (p. 95).

Learning that occurs in school involves a conscious effort for non-traditional students to organize not only their time and possessions, but also their ideas for meaning. In their life roles, learning occurs in ways that are not a conscious effort nor is it identified with tests and retention.

Students in this second perspective build their own schemas for new information in one of many ways. First, avoiding rote learning, second perspective students re-write their class notes and answers to written questions in their own words. By doing so, students not only rehearse the material, but also organize it meaningfully according to their own needs. Secondly, these students may seek out instructors and
classmates to clarify missing information or information that does not connect with their constructed meaning-making. Students may also discuss learning strategies with other classmates in order to sharpen their own processes. The role conscious effort plays in learning decreases for the students with the third perspective.

**Third Perspective**

The third perspective encompasses dimensions of the previous two, but is distinguished by its seeming effortlessness and apparent sub-conscious processing of information. New information fits into already existing schemas or new schemas are readily built. This phenomenon is referred to as "automaticity" by Dave Berliner (1988), and as "deep meaning" by Caine and Caine (1991). Students who have achieved this kind of learning have learned to internalize facts without having to make a conscious effort to retain them. As some have expressed it, they "just know it." Further, the facts are involuntarily networked across disciplines or schemas. When learning occurs this way, the awareness of the process is almost secondary; that is, the students use their personal meaning-making strategies to instantaneously connect prior knowledge with new information. Students with this perspective experience an ease in processing bred from a familiarity with internalized meaning-making.

In sum, students with the first perspective are ultimately concerned with retaining decontextualized facts, while the students with the second perspective metacognitively begin working on how to retain facts. Lastly, those with the third
perspective have learned to process information in a sub-conscious manner having internalized their learning process. In this final perspective, if students begin to struggle to learn material, they switch into a self-monitoring mode of "this is when I need to be learning." With varying degrees of effort, automaticity, and metacognition can internalize material. Bransford and Vye (1989) support this overall model by stating, "A useful way to think about meaningful learning is to view it as a transition from memory to action" (p. 192).

This model embodies two concepts -- perception and skill. The first operates within the cognitive domain, while the latter functions within the behavioral domain. While the model's three perspectives are developmental and somewhat linear, non-traditional students work to varying degrees in both domains. A tension exists when non-traditional students who are acting within the third perspective must function within a pedagogical context where the behavioral domain is dominant, i.e., schools. Traditionally, schools cater to the needs of students at the first perspective. Once students begin to engage learning with the third perspective, they are less likely to exclusively operate within the behavioral domain again. That is, although students using the third perspective may engage in some of the same behaviors as those with other perspectives, the cognitive elements of their learning process are developed to the point that pure surface learning never manifests itself in the same way.

An exception to this exists when non-traditional students are confronted with the following circumstances:

- the context for learning the new information is very stressful,
• there is limited or no prior knowledge of the new topic,
• and/or the students are not at all interested and in fact opposed
to the information in such a way that integration of the
knowledge is impossible.

The relationship between cognitive/behavioral domains and perceptual
development of non-traditional students is brought into clearer focus when examined
from the neuropsychological context discussed by Caine and Caine (1991) when

"Triune Brain Theory" and the Non-Traditional Learner's Development

Paul MacLean (1969, 1978) popularized the notion that the human brain is
actually three brains in one. MacLean, the former director of the Laboratory of the
Brain and Behavior at the U.S. National Institute of Mental Health, seems to believe,
as I do, that the development of learning patterns coincides with the growth and
reliance on the hierarchical structures in the brain. MacLean's model, along with
other similar models (Ornstein & Thompson, 1984), is based on an evolutionary
development of the brain.

At the first perspective when students are focused on randomly storing facts,
they are functioning from the reptilian brain. This small portion of the brain located
at the brain stem is concerned primarily with survival behaviors, such as the "fight or
flight instinct." This is of interest to educators because of its automaticity and its
resistance to change (Caine & Caine, 1991). The reptilian brain houses our fears and
an "us versus them," "right versus wrong" mentality. Perry’s (1970) developmental scheme contains these characteristics in the first positions of Duality. The reptilian brain functions ritualistically, meaning that if something works, it is likely to be repeated and not changed. Thus, students who see memorizing as "working" — that is getting the facts from the class to the test, are not likely to change their technique of rote memorization.

It isn’t until the second part of the brain kicks in that students may realize that there is more to learning than merely repetitiously retaining facts. These students have employed the limbic system which houses the emotions. Here events are associated with emotions where the locale memory is housed. Thus, learning becomes more internally grounded as awarenesses about learning or "metacognition" are awakened. The students start to look at the world around them as they would in Perry’s (1970) development at the positions of Multiplicity and Relativism. Caine and Caine (1991), in describing MacLean’s triune brain model, point out that the limbic system can coordinate both internal and external messages, thus inhibiting the reptilian brain from ritualistically reacting to fear. Given this, the ritual or habit of rote memorization is put aside in lieu of meaningful learning.

The neocortex, or the "thinking brain," is the outer portion which constitutes five-sixths of the human brain (Caine & Caine, 1991). Within this portion of the brain, just inside the forehead, is the prefrontal cortex responsible, neuropsychologists are finding, for "adaptive behaviors." Rather than working from the "reactive behaviors" of the reptilian brain, the adaptive behaviors allow the capacity for logical
and formal operational thinking to increase. When functioning from this larger part of the brain, students can plan, analyze, sequence, and learn from errors (Caine & Caine, 1991). Perry's (1970) positions of Relativism and Commitment to Relativism are recognizable here due to this brain's function of empathy and compassion. Thus it is in learning with these human and logical characteristics that facts are not seen as raw materials for a "learning machine" which are eventually rendered useless, but as "expressions of what people are capable of doing" and seen as meaningful and emancipatory to the learner (Caine & Caine, 1991).
CHAPTER III

METHODOLOGY

Introduction

The purpose of this study was to examine whether at-risk, non-traditional adult students interact with reading and study skills course concepts to create surface and/or deeper meaning. Two questions emerged from this examination:

1. How do students reconcile the tension between displaying surface knowledge and developing deeper personal meaning?

2. What are the issues that influence the development of personal meaning in this course?

It was assumed that meaning-making occurs in interactions -- interpsychologically, then intrapsychologically (Vygotsky, 1978). Since I could not "get inside my students' heads," I observed and documented their behaviors in social educational situations and inferred the intrapsychological processes. As Erickson (1986) notes, ethnographic methodologies are particularly well-suited to interpretive studies such as this in which inferences have been made about the process of personal meaning-making.

28
The Setting

The course was offered in the Developmental Education department at a growing community college in the midwest. The community college offers students two-year degrees in a variety of technologies as well as a transfer program. Reading and study skills was a course aimed at reviewing ways to study and read more effectively. The curriculum for this course consisted of group and individual work on reading and study problems, note-taking, memory, test anxiety, objective and essay tests, and final exams. Lab exercises were designed to help students increase their reading speed and improve comprehension (see CHAPTER IV: The Context, APPENDIX A: Curricular Notes, and APPENDIX B: Sample Course Outline).

Along with introducing the students to reading and study strategies, the purpose of the course, in my eyes, was to enhance students' awareness of their strengths and weaknesses as well as to have them examine their attitudes and the commitment involved in being a college student. Engaging in a process of constructing personal meaning seemed essential to the success in the course as I envisioned it. However, the course curriculum, as it was originally presented to me several years ago, lacked means for the students to develop, analyze, or display personal meaning-making with the content. Thus, I added 1) 15 journal assignments to be done as assigned throughout the quarter, and 2) essay questions to each of the three tests and the final (see APPENDIX C: Journal Assignments and Essay Questions).
The Subjects

The participants of this study were students enrolled during the autumn quarter in three sections of a course entitled "reading and study skills." A subset of these 50 to 60 students were then selected by virtue of willingness and richness of data to participate in the follow-up study which occurred in the quarters after the course had been completed.

The course participants ranged from young adults who had recently graduated from high school, to adults in their fifties and sixties who were returning to school after many years. After analyzing some of the preliminary data, I chose to focus on the older students returning to academia after a hiatus of some nature, commonly referred to as "non-traditional students."

Typically, the students who took this course financially invest in their own education and were, therefore, highly motivated to succeed. Further, the students appeared concerned about the relationship between their study habits and their success as college students.

It was beneficial to begin this study in the autumn quarter due to the fact that at this time a larger percent of the students were most likely to be just starting their college experience. Hence, they seemed motivated to take the reading and study skills course more seriously and their previous assumptions about school and learning were yet untouched by the new college experience.
Data Sources

In order to examine my research question, I used participant-observation to document universal principles, and case study techniques to cite the particulars of the students' meaning-making in the course as they engaged in class assignments and interactions (Erickson, 1986). Erickson (1982) states that if learning is to be viewed theoretically as "interaction between the individual and environment in real time" adequate description of taught cognitive learning includes actions of individual learners, relevant features of the environment, and

show specific change in individual-environment interactions across time, from before learning, through during learning, and after having learned (italics not mine; p. 158-159).

These interpretive details over time "support higher level inferences about changes in the learner's (unobservable) ways of thinking" (Erickson, 1982, p. 162).

To capture the details of the meaning-making process over time, data collection was carried out in three contexts: the class, the individual students' work in the class, and students' interaction and application of course material. Data collection began with the students' basis for meaning-making -- the class as it happened -- moving to a window into the students' meaning-making of the course through their written work, and then to individuals' meaning-making and their use of the information outside of the actual class setting through follow-up case studies.
Audio-Taping

To document the largest arena for data collection, the class as it happened, each of my three course sections were taped every time it met during the 11 week quarter. Erickson (1986) recommended the use of machine recording in instances where the events' structures are too complex to be apprehended all at once. These tapes, along with reflective fieldnotes and the course syllabus (see APPENDIX B: Sample Course Syllabus) chronicle the foundation that was offered to the students for the benefit of their growth as students in this course.

In order to collect naturally occurring data outside the classroom during the course and to build trust with the classes, I involved the students in creating and
documenting study groups (Erickson, 1986, p. 142). These events occurred toward the end of the quarter. Participants were asked to voluntarily audio-tape these study groups for the purpose of looking more closely at how students discuss the information from the class outside of our classroom setting. Only two of the five final case study participants attended a study group. As it happened, they were the only two to show up for the same scheduled study group. This data will be discussed in the individual case studies presented in CHAPTER V, and the final discussion in CHAPTER VI.

**Participant-Observation**

As the instructor and action-researcher, I kept reflective fieldnotes during the autumn quarter. As I taught the course and graded students' work, I documented my noticings about the students' meaning-making processes and how I felt I influenced those.

**Documents**

From within the classroom arena came another source of data. As a window into personal meaning-making of the students in the course, I documented what students did as required for this reading and study skills course. This data was collected in order to ascertain the on-going processes of the students and to further develop and analyze questions about meaning-making as they emerged from the data.
At the end of the course, all students in each of the three course sections were asked to voluntarily submit their written work for the course. This set of data included the student information sheets, grade sheets, 15 worksheets, 15 journals, four tests with essays, four different lab assignments, progress record sheets, surveys, and notes. A complete description of the course is given in CHAPTER IV: The Context. The documents collected, however, are described below:

**Student information sheets.** These one-page documents were filled out by the students on the first day of class. Information about high school graduation, financial aid, how the student found out about the course, other courses or colleges enrolled in, credit hours, jobs, family, and chosen technology were required on this sheet. There was also a section in which students checked off problems they judged themselves having with reading and study skills. Also the students were asked to write a brief paragraph about themselves, including information that would be important for the instructor to know. The student information sheet is completed for institutional purposes and kept on file in the department for a period of a year.

**Grade sheets.** Each student was given a grade sheet on which to keep track of points received in the course. I also kept a grade sheet for the same purpose. These grade sheets were compared at the end of the quarter for coinciding points. Points were recorded for three tests, 15 worksheets, 15 journals, three of the four lab reading assignments, and the final examination. A pre-test and post-test score of the Nelson-Denny comprehension test was also recorded on this grade sheet. A copy of
each student's grade sheet was kept on file in the department at the completion of the
course.

**Worksheets.** Fifteen worksheets were provided according to the established
curriculum for the course. Students were given a packet of five worksheets at a time.
Students answered questions on these worksheets by reading designated chapters in the
course textbook, Edward Spargo's (1977) *The College Student*, or by reading
hand-outs about study skills that were included in the packet of worksheets. The
students did these study-guide worksheets at home in preparation for class discussion.

**Journals.** Fifteen journals were added to the established curriculum less than a
year prior to the study when I began to realize that the students were not provided the
opportunity to think for themselves about the skills being taught and practiced in the
course. I designed 15 journal prompts for this purpose and as a means for adding to
the course extra material about memory, and practicing essay writing. The journals
also allowed me to interact with the students as problems and questions arose (see
APPENDIX C: Journal Assignments and Essay Questions).

**Tests.** After each packet of five worksheets a test created by the
Developmental Education department was given. The tests covered materials
discussed from the course textbook and the study guide worksheets, as well as an
additional article about "bad reading habits," the SQ4R study method, and a movie on
time management. In addition, I added essay questions to each test, providing
students the opportunity to practice writing essays and to give them a voice in the
testing process (see APPENDIX C: Journal Assignments and Essay Questions).
The final exam was the fourth test worth the same amount of points as each of the previous three tests. However, I designed my own final because I felt the one designed by the department did not provide students the opportunity to display their competence with reading comprehension or essays; rather it tested recall of facts about study skills.

**Lab exercises.** Four lab exercises were completed during the quarter. They were completed as follows:

1. **Six-way Paragraphs** (Walter Pauk, 1983) -- students read 26 short articles and answered questions in six different categories of comprehension strategies, such as finding conclusions and using vocabulary in context. The objective was to diagnose and remediate comprehension based on these six different strategies. These exercises were done at home with a self-diagnosing answer sheet. A progress chart was also filled in to show the comprehension scores throughout the quarter. I collected the packets about half-way through the quarter to assist students with their diagnosis and remediation. The students submitted the packet which includes a progress chart and the diagnostic chart.

2. **Shadowscopes** -- students read 10 articles from a workbook suited to the shadowscope pacers. The objective was to improve speed and comprehension as the individual progressed to higher rates of reading speed. These exercises must be completed in the department’s reading lab either during class or on the students’ own time if they should be absent or behind. The students record their progress with comprehension and increased words per minute (WPM) on a chart in the lab packet.
The students submitted a packet in which they have completed preliminary vocabulary exercises and the comprehension questions for each of the 10 readings, as well as the progress chart.

3. **Timed Readings** (Spargo & Williston, 1975, 1980, 1989) -- students read twelve 400-word articles striving for good speed and comprehension without the shadowscope pacer ("good" is considered a comprehension score of 70% or better). The objective was also for the students to develop as "flexible readers," that is, adjusting reading rates based on the purpose for reading and the difficulty of the article. Once again, these exercises were completed during class time or on the students' own time if they fell behind. A progress chart was used to record the comprehension and WPM the student read each article. Students submitted a packet which included the progress chart and the answer sheet.

4. **Reader's Digests** -- regular newsstand Reader's Digest articles were first skimmed and then read to practice skimming and pleasure reading after practicing new reading skills in the other lab exercises. Students recorded their WPM for skimming and then reading an article over 1,000 words in length. Students submitted a record sheet with their skimming and reading WPM.

5. **Progress record sheets** -- this one page document was used to record the students' progress over the quarter. "Pre-Test" comprehension and WPM scores from a reading exercise administered at the beginning of the course were compared to "Post-Test" scores derived from averages of lab exercises completed during the quarter. The progress was examined based on the range of reading rates, the WPM
and comprehension scores gained when reading general materials, and the WPM and comprehension scores gained when reading technical materials. This document also provided a self-evaluation for students to indicate the percent of improvement they felt they had made in various study skills areas. This self-evaluation was similar to the checklist on the student information sheet completed by each student at the beginning of the quarter.

**Surveys.** At the outset of the course, a short survey (see APPENDIX D: "What Do I Already Know?") was given to all students. The survey was designed to determine prior knowledge of course concepts, the students’ expectation of the course, as well as their self-analysis of their needs from the course. This data served to inform me about the class as a whole, as well as to inform me about the five individuals who eventually became the focus of my study. A similar survey was distributed at the end of the quarter as part of a progress assessment for the course (see APPENDIX E: "What Have I Learned?"). These surveys were added to the course curriculum for the purpose of the study and were used within the course as a way for students to review and assess their own gains at the completion of the course.

**Notes.** I asked the students who volunteered to submit their work to also submit any notes taken for the course.

**Questionnaire**

A six-page questionnaire was developed to gather specific feedback about students’ attitudinal and skill changes during and after the course (see APPENDIX G:
The questionnaire was distributed by mail after the completion of the course to students who had consented to further participation in the study by either submitting written work or signing a consent form (see APPENDIX F: Consent Form). Instructions for filling out and returning the questionnaire were explained on a cover letter. The students were also told to anticipate a call from me to set up an interview time. There were approximately 32 questionnaires sent out; 12 were returned.

**Interviews**

A subset of the original class members was interviewed to verify students' attitudinal and skill changes (see APPENDIX H: Interview Schedule). Given scheduling problems and students who had dropped out for a quarter or more after the study, six students were interviewed. Five of them became the case studies included in this document. The sixth person, a 19 year old male who had recently graduated from high school, was dropped from the study as my interest turned to the non-traditional students. Through the interviews, in addition to uncovering the processes that occurred during the autumn quarter course, I followed up with this subset of participants to gain a sense about how their meaning-making of the reading and study skills course content extended into their further college work. All interviews were audio-taped as permitted by the informants. I also made notes and comments in my field journal after I interviewed each of the five case study participants. The purpose of these interviews was to verify and reveal further patterns...
and assertions about meaning-making to keep the collection/analysis sequence working.

**Member Check**

After the five individual case study stories were drafted from the data analysis, I contacted each participant and requested that they read their story. The purpose was to check accuracy of facts, interpretations and to discuss the emerging model with the participants.

**Research Plan**

To document the process through which students made sense of course concepts, research was carried out in three phases. Although it is customary to simultaneously collect and analyze data on an on-going basis (Erickson, 1986; Lincoln & Guba, 1985), I chose to wait until the course was completed before doing any extensive data analysis. Because I was the instructor of the course, thus the one responsible for assigning letter grades at the end of the quarter, I had the responsibility of being the instructor first during this first phase of data collection. Therefore, extensive data analysis only occurred in the last two phases, although daily noticings were recorded in my reflective fieldnotes and acted upon as necessary for the course to evolve as envisioned.
Phase 1: Data Collection Only

In the first phase I collected data to document the course as it happened. This data included the interaction of class members during class, during arranged study groups, and the written work that was voluntarily submitted at the end of the quarter. It also included my reflective fieldnotes and the two two-part surveys administered at the beginning and end of the quarter. Using these methods, I documented the meaning-making of the class as it happened, my influences in that process, the students’ meaning-making as a result of required coursework and the individuals’ meaning-making in the context of external interactional events.

As part of phase one and to establish informants for phase two, all students were asked to sign consent forms (see APPENDIX F: Consent Forms). The first form granted me permission to use data from the audio-tapes of every class. On the second consent form a checklist was provided for students to volunteer to 1) submit written work from the course, 2) work as a tutor in the following quarter, 3) tape interactions with others in which the course is the topic or is relevant, 4) be interviewed the following quarter, 5) do extra journaling to reflect instances in which course material is used in other life experiences. The tutoring and journals were never implemented.

All submitted coursework was collected the day of the final exam for the course and all audio-tapes of extraneous interactional events were not analyzed until after the quarter had ended to insure that participation in the study did not bias grade determinations.
Phase II: Analysis and Interviews

After the course was completed in December, phase two of research began. Spradley’s “Developmental Research Sequence” as presented in *The Ethnographic Interview* (1979) and *Participant Observation* (1980) served as the models for the continuation of this study. Briefly, Spradley’s models helped to discover and look into deeper and more specific questions as the domains and taxonomies emerged about their perceptions. These sequences, to me, work to concentrically reveal and organize layers or “units of meaning.”

From this point on then, data collection and analysis occurred recursively as the domains of perceptions and taxonomies of learners were discovered to reveal the most basic units of meaning-making that I could uncover in phase one data and the on-going data collection and analysis in phase two. I first started by re-reading the 15 journals and four essays of all the students who turned in a complete set of documents for the course. Because these documents were student responses rather than answers from a text, these documents were coded for statements that revealed students’ perceptions of their values, beliefs, techniques, and ability. Although this process took me deeper into the data, it failed to reveal clear patterns for further analysis. The coding did help establish further questions that I needed to ask of my students. Thus, I decided to return to the students themselves to answer these questions.

A six-page questionnaire was developed and sent to approximately 32 students who were chosen because they had submitted written work at the end of phase one and/or had consented to continue participation in the study through journaling or
interviews (see APPENDIX G: Questionnaire). Again, the purpose of the questionnaires was to verify some hunches about these learners based on analysis of phase one data -- specifically changes in attitude and skills and their use and further understanding of the course material as they applied it to other courses.

Continuing to define the domains and taxonomies of students' perceptions and skills through phase one data analysis and the questionnaire responses, I selected informants to be interviewed. In addition to uncovering the processes that occurred during the autumn quarter course, I hoped to gain a sense about how meaning-making extended their use of the reading and study skills course content into their further college work. Further, in interviews with this subset, I pursued questions that emerged from the analysis of their written assignments described above, and got to know the students' beliefs and backgrounds (see APPENDIX H: Interview Schedule).

Questions for interviews were a combination of a model of the pedagogical encounter offered by Erickson (1982) and questions that emerge from recursive data analysis in phase one. Erickson's model was used as a guide to unveil the initial internalization, social and contextual use of material, and the deeper internalization that occur as a result of using the material in social contexts. When analyzing these informal interviews, I noted all references to the process of meaning-making and changes in meaning-making due to application of the course in other contexts.

In this phase, the follow-up work was done to generate more documentation regarding the application of concepts from the reading and study skills course for five individuals. I looked both for ways in which participants used the structures set up in
my classroom discussions, as well as ways in which they constructed their own schemas in order to make meaning and use the course content in other contexts of schooling. In the larger context, I looked for clues as to how classroom interactions revealed and developed meaning-making for all students involved. The collection/analysis sequence after phase one was recursive until the domains of perceptions and taxonomies of learners with meaning-making were discovered and describable for the third phase.

**Phase III: Reporting Case Studies and the Emergent Model**

The third phase of the research was to write up the final report on the process these at-risk adult learners had engaged in to make personal meaning in order to learn the course concepts. The analysis of the data in the previous phases lead to narrowing the subset to five case studies for the reporting of the data. Lincoln and Guba (1985) point out that naturalistic inquiry is

inclined to interpret data (including the drawing of conclusions) ideographically (in terms of the particulars of a case) rather than nomenthetically (in terms of law-like generalizations) because different interpretations are likely to be meaningful for different realities

and because interpretations depend so much on other variables such as the investigator (p. 42). Further, the case study mode of reporting is "more adapted to a description of the multiple realities encountered" of the class participants and subset of informants I studied (Lincoln & Guba, 1985, p. 41).
For the final report, such case studies provided rich documentation of the students' meaning-making through application of the reading and study skills concepts in other courses. The individual case studies included the collection and analysis of class participation anecdotes from the audio-tapes and my reflective fieldnotes, the required coursework collected in phase one, and especially from the follow-up interviews in phase two.

The spiralling data analysis implemented throughout the phases was influenced, as mentioned before, by Spradley (1979, 1980). As the focus on five individual students took me deeper into the research questions, I was able to generate a model for the development of perceptions and skills of the non-traditional, at-risk learner. Having "mucked around" with the data from the course and the interviews, the model was embodied in the case study participants.

It wasn’t until I had realized the range of perceptions and thinking styles of the students that I was able to envision this model based on the conceptual frameworks discussed in CHAPTER I: Reviewing the Literature While Identifying the Problem. Perry (1970, 1981), influenced my understanding of the increased complexity of intellectual and ethical development. Having connected with Perry's schema, Belenky et al. (1986), highlighted different kinds of knowledge. The Mezirow (1981)/Habermas (1971) continuum reflected the influence knowledge has on students' lives. My understanding of the process of developing as a "meaning-maker" was made more clear by Caine and Caine (1991).
These theorists' models, however, did not completely comply with my belief that the cognitive and affective domains are essentially linked in the meaning-making process. As I began to describe the case studies, I found that there were three different types of learners. These learners could be distinguished by their mindsets, as well as their approaches to "learning," their involvement in their own learning processes, and their perceptions and specific characteristics. These domains emerged as common lenses through which to view each perspective as a taxonomy. The Development of Learning Perceptions Model is discussed in CHAPTER II: Development of Learning Perceptions: An Applied Model.

Upon finishing drafts of each of the five case study participants and having drafted my resulting model of development, I conducted member checks. Basically, I asked each member to check for accuracy of both the facts I had collected and the interpretations that I had made with regard to their individual and collective learning processes. I also took the opportunity to explain the developmental model which resulted from my study and asked the participants how they felt they fit into it. I verified my own beliefs and collected further evidences of the developmental growth over time. Due to the fact the member check occurred several quarters after the last interview, the participants were able to verbalize more about their learning process as it developed over time and changed since, yet due to the reading and study skills course.

The member checks with each case study participant occurred in various forms. First, I met with Michael one-on-one at which time he read the draft and then
discussed his comments and growth. Our conversation was audio-taped. Moe, Mike P. and Priya each picked up a copy of their stories at my office on campus, while I mailed Carla’s to her due to her tight schedule and responsibility to her mother. Three of these four participants then phoned me after reading their stories at home on their own time. While it was good to give them this time to digest what I had written and reflect on their processes, I was not able to audio-tape the phone conferences. Instead, I simply made notes on my computer as they referred to certain passages or concepts. Mike P., however, read the document I gave him, made comments with a red felt-tipped pen and returned it to my campus mail box. I eventually phoned him to resolve some points he was concerned about. I only spoke with Carla by phone once, at which time she promised to mail me her comments. She could not stay on the phone long, so I only got her brief reaction. I never received her comments by mail, nor could I reach her by phone. Lastly, I went back to the case study stories adding comments and omitting parts that were in error according to the participants.

The last step in the final phase of this research study was to discuss the case study participants with regard to the model of learning perceptions. As this analysis took place, four issues emerged as common themes important to the participants’ meaning-making process. These four issues will be discussed in CHAPTER VI: Discussion and Implications.

The number of participants at any one point in the study was dependent on the richness of the data they provided and the students’ willingness to participate and grant their permission to be a part of my study. The only exception to this was in phase
two when I decided to focus on non-traditional students. This decision was made because of the lack of research literature on this group as a whole and my curiosity about how life experiences gained prior to the course -- as school children and working adults -- influence the meaning-making process of learning.
CHAPTER IV

THE CONTEXT

Introduction

It is necessary at this time to describe the course in detail. As the setting for the study, all students participated in the same course events, but experienced them from the different perspectives, thus I have included this course description for two reasons: 1) so that the reader knows what all the participants experienced in the course, and 2) to assist the reading of the remainder of this study — to understand the terminology used in the course.

Because the data collected for this study was taken from three different class sections that were taught on different days at different times — two of them meeting twice a week for one hour and 20 minutes per session and the other meeting three times a week for 50 minutes — each section’s syllabus was slightly different. Therefore, I will briefly describe the overall sequence of worksheets, journals, labs and tests; although, they may not have been covered in the same order as each class progressed. I will attempt to explain terminology that is important or may not be of general knowledge to the reader. I have broken the course into three parts according to natural breaks in the syllabus when tests are given.
The Course

I

The course begins by introducing the syllabus. Being new to the college scene, many students aren't familiar with how syllabi function. Time is spent going over the policies and procedures, as well as the reading of the daily assignments. Students are made aware that the course has three tests -- each following the completion of a set of worksheets and journal assignments. Students receive two Grade Sheets to keep track of their scores -- they each keep one and I keep one. At the end of the quarter we compare to be sure all is up-to-date. Students are told that worksheets will only be collected on occasion as I deem necessary, but will always be collected on the day of the tests. The journals, however, are collected as assigned and will be read, responded to, and returned to them the next class.

In the first class students receive their first packet of worksheets, an article on reading "bad habits," and the first journal assignment. These are all related to the reading of the syllabus. The first journal assignment -- to describe how they were taught to read and their experiences and uses of reading -- will tie into their reading and discussion of the "Bad Habits" article. The students are also asked to fill out a Student Information Sheet on which students record some personal data. Lastly, the Nelson-Denny Reading comprehension test is administered as a twenty-minute timed-test to determine students' reading levels. These scores are used to determine whether the students need to be in the preceding course, and if not, the scores are
used to assign reading books for lab assignments later in the quarter. The results of this diagnostic test are discussed with the students in the second class.

The "Bad Habits" article (source unknown) is presented to the students to emphasize two main points. First, the article discusses the need for students to be "flexible readers." Flexible readers determine their purpose for reading a selection, and consider the difficulty of the passage when considering how quickly or slowly they should read that selection. It is stressed that this is an individual choice dependent on interest, background knowledge, and the purpose for reading. A flexible reader is someone who reads different materials at different rates. The second reason this article is shared with the students is so that they may become aware of reading "bad habits" and how to overcome them. These habits include:

1. Moving your lips as you read.
2. Vocalizing -- pronouncing words in the voice box.
3. Reading everything at the same speed.
4. Regressing -- going back over a word or lines as you read.
5. Reading one word at a time.
6. The need to "hear" each word as you read -- especially likely for auditory learners.
7. "Seeing" each word on a "screen" in your mind -- especially likely for visual learners.

In order to help students identify their current flexibility with different materials, the class does an "experiment." Each student is given two articles. The first, "Mighty Little Men," is of general interest and written in the style of a National
Geographic article. The second article, "Grain Size," is very technical, discussing the grain size of steel. The students are asked to time themselves reading each article which are approximately 830 words in length, and answer ten true-false comprehension questions at the end of each article. The students then calculate their reading speed in words per minute (WPM) and the percentage of correctly answered comprehension questions.

As an option for their second journal assignment, then, students are asked to discuss their results of this experiment. They are asked to discuss why they felt they read and comprehended as they did given the different types of reading materials. For instance, some may have read the more technical article faster than the general one because the article was boring. In turn, their comprehension score may be lower than the one they received for the more general article. The second option for this journal is for the students to describe from their experiences the difference between reading for pleasure and reading for school. This is intended to help students focus on the different approaches they take to different types of reading materials.

By the second class students have completed at least the first worksheet and possibly the second. The worksheets were established long ago for the course with most corresponding to chapters in the text, The College Student: Reading and Study Skills, by Edward Spargo (1977). The first worksheet focuses the students on diagnosing strengths and weaknesses of college students. The need for a good attitude, good communication and study skills, and self-confidence is discussed. Further, the students are introduced to the concept of "reading actively" which I tease
them by telling them that it means reading while riding a stationary bike. Instead, they have read that it means to "evaluate and understand what is read," to read for learning. This concept is then compared to being a "flexible reader" as discussed in the "Bad Habits" article. Lastly, the importance of having one's ears and eyes checked so that they are functioning properly is also touched on. The students are also asked to identify why they personally have enrolled in the community college.

Included in the first packet between worksheets 1 and 2 are two inventories and two checklists from an earlier edition of the text. The inventories ask the students to rate their reading ability in 18 questions and their study habits in another 18 questions. The two checklists focus on the students' need to have their vision checked and to review their general attitudes toward school.

The second worksheet focuses on listening effectively. Six listening faults are outlined so that students can become aware, again, of the bad habits they may have. These faults include:

1. Daydreaming.
2. Close-mindedness.
3. False attention -- a protective device; pretending to listen by giving the false appearance that you are watching the speaker; otherwise known as a glazed look.
4. Intellectual despair -- attitude of futility.
5. Memorizing everything the speaker says -- rather than listening for "big ideas."
6. Personality listening -- focusing on the speaker's annoying habits; judging content by the impression the speaker gives.
Four ways to have good listening habits are then presented. These include:

1. Prepare to listen.
2. Watch the speaker.
3. Note questions.
4. Listen creatively -- that is, start to process information by anticipating new information.

On the worksheet, students are then asked to identify two listening faults they have and tell how the faults can be overcome with the good listening habits.

At this point, students are then introduced to the SQ4R Study Method. This method originated as the SQ3R by F. Robinson in 1961. The SQ4R method is described for the students as followed on the hand-out:

1. Survey. This involves sizing up the situation or the assignment. Note the pattern of the chapter. Look over the whole chapter reading the introduction, headings, and summary. Familiarizing yourself with the information before you begin will give you an added advantage of understanding the material.
2. Question. Pose questions based on the headings of the chapter.
3. Rite. Write down these questions made from the headings or from underlining main ideas in the book.
4. Read. Read the chapter with an objective in mind -- to find answers to the questions you've present to yourself. As you find the answers write them down.
5. Recite. Recite the answers out loud to your questions in your own words. Verbally answer the questions to reinforce understanding and retention. Anything you say aloud you remember better and longer.
6. Review. This last step reduces any need for cramming. It anticipates rapid forgetting. (You forget 50-70% of material if you only read it once.) As soon as you have finished 10 pages, close the book and review your notes. Ask yourself the questions and try to answer them from memory. If your memory fails, glance at your notes. The primary objective is to
be able to answer your questions without aid from the text or your notes. Do this for each 10 pages in the textbook until you have finished the assignment.

In class we discuss a few variations to the SQ4R method. For instance, I recommend adding "React" after the "Read" step, and "Reward" at the end, thus, giving the "SQfjR." I also mention to the students that they should read by section divisions and ideas rather than random interruptions at ten pages as the hand-out suggests. After describing the method we turn to a chapter in The College Student text and attempt to apply the method as time allows. The most difficult part of this strategy seems to be coming up with good questions from headings. In this text it is relatively easy; however, depending on the editors of texts and their styles, this can be difficult at first. The third journal, then, asks the students to go home and try the SQ4R as described on their hand-out and then discuss any modification they made and why those changes are necessary for them.

The next assignment for the students is to do worksheet 4. I skip the third one at this point so that it may be grouped with worksheet 5 which I will discuss later. Worksheet 4, "Building Vocabulary," briefly discusses that the instructor and course text are the main sources of vocabulary in a course. The students are made aware that teachers often emphasize new vocabulary words by spending a lot of time talking about particular words, writing them on the chalkboard, repeating them and/or adding inflection to the voice during lectures. Two ways of organizing lists of terms are also discussed. These include keeping a notebook and recording vocabulary along with notes, or writing terms on one side of a 3X5 card and the definition on the reverse
side. I also suggest that students can implement a double-sided journal in which they keep text notes on the left-hand pages and coordinate class notes with the text notes on the right-hand pages. The use of context clues and roots and affixes are also briefly discussed along with a few examples of prefixes and suffixes.

The last two worksheets in the packet are discussed together. Worksheet 3 is about marking and highlighting a textbook and worksheet 5 is about using the author's signs and signals. To start the discussion of these two worksheets, I ask the students why they think I have put them in the same lesson. We then go on to discuss three reasons for marking a text which are 1) to improve concentration and attention, 2) to motivate thinking, and 3) to help you remember. I warn the students not to think of the highlighter pen as an instrument for absorbing the information it skims across, but that they should see highlighting and marking a text as a way of indexing what the author has set out for them to learn the material. This warning opens up a discussion about the fact that learning is not an absorption/regurgitation process. The text gives seven ways to mark a text; they include:

1. Summarize graphic data.
2. Underline major points.
3. Bracket key passages.
4. Star important facts.
5. Enumerate series.
6. Use abbreviations.
7. React.
I then ask the students to tell me the difference between a major point and an important fact. To help them see the hierarchy of ideas that an author may present, I briefly review the steps of an outline. The last part of worksheet 3 asks the students to make up three more questions pertaining to the chapter and to answer them.

Although I don't go over these in class, I do emphasize that coming up with their own questions help them engage with the material by anticipating what might be on a test.

The fifth worksheet, then, addresses the author's use of signs and signals. Signs, indicating sequence and relative importance, are usually seen in bold face, italics, or color changes. The most obvious signs are numbers, letters, and sequencing words or phrases. Next, four different types of signals are discussed: forward signals, counter signals, summary signals, and terminal signals. I introduce that these are ways for the reader to sense the author's direction or line of thinking by my acting out the motion of moving forward. The author intends for the students to recognize that the material that has already been covered is as important as the information that is coming after a forward signal. To display the equal importance I draw a balance beam and show that "X" and "Y" on each side of the balance beam are equally important. With the counter signal, I discuss the notion of "point/counterpoint" to show that some signals point out opposition. Again, I use the balance beam to show that both sides of the issue are of equal value, but the author adds signal words to indicate opposition. Lastly, we compare summary signals to terminal signals by discussing that summaries help tie up loose ends so that new information can be addressed, while terminal signals indicate the last bit of
information is to come. In comparing this on the balance beam, we see that summaries are more important than all the information that has lead up to them because the author has put "cement" between the ideas to help the reader get the "big picture." The terminal signal is different from the summary signal because it comes at the very end -- much like the last "in conclusion" an instructor gives at the end of a lecture when class is over.

Highlighting a text and finding signs and signals are then practiced. To emphasize the highlighting, students are given an article to mark. But first, we take the title and turn it into a question so they have a purpose for reading and can further implement their SQ4R strategies. After reading and marking the article at their seats, I ask the students to pair up and discuss what and why they marked their article. We then briefly discuss the article paragraph by paragraph noting what is important and not important to underline and highlight. We find that only the last paragraph really addresses the question we set up for ourselves. Then students turn to the signs and signals chapter in their textbooks to practice some exercises. After reading and identifying signs and signals in one or two paragraphs, students are again paired off and assigned a paragraph to find signs and signals. Their findings are shared in class as others follow along and ask questions when confused.

To help eliminate the bad habit of regressing and to increase the fluidity of the eye movement necessary to read at faster paces, the students are introduced to the "left-to-right eye movement exercise." The students are usually a bit shocked and confused by this exercise because they are asked to "read" a 600-word passage that
has been printed upside down and backwards. However, the object is not to read to comprehend but to sweep the eyes left-to-right as quickly as possible. I treat this exercise as a game and call it "eye exercises," telling the class they have just entered the "eye gym" and discuss the importance of exercising the eye muscles and breaking the psychological barrier that every word on every page must be read in isolation in order to comprehend the text. Each time the exercise is completed the students "read" the article twice while being timed. The first set is done for sixty seconds, and every set of two thereafter, ten seconds are dropped. Usually by the end of the quarter, after practicing this at home and in class as a warm-up to reading, the students are "reading through" more words per minute and in less time.

Two reading exercises are also introduced along with the first set of worksheets and journals, before the first test. Exercises in *Six-Way Paragraphs* by Walter Pauk (1983) are introduced to the students and are completed at home on their own time. The shadowscope reading lessons, however, are introduced in class, but are completed in class as relegated by the syllabus.

Pauk’s *Six-Way Paragraph* book is employed to provide students the opportunity to practice and diagnose their reading skills. Pauk provides short passages, followed by six different kinds of questions assessing the following skills in identifying:

1. Subject matter.
2. Main ideas.

5. Clarifying devices (i.e., similes, metaphors, signal words).

6. Vocabulary in context.

After previewing and reading the passage, students are asked to fill their answers in on a specially devised diagnostic chart. Completion of twenty-six exercises is required by the end of the quarter; however, about halfway through the quarter I collect them. At this point, I assist with problems in following the procedures for the exercise and the "diagnosis of their work." I return the diagnostic charts to the students with a hand-out I devised to help students practice and improve the six skills not only when doing the Six-Way Paragraph exercises, but in other reading as well.

The second reading labs that the students are introduced to are the shadowscope exercises. The objective of these exercises is to have students improve their reading speed and comprehension with a reading pacer. Students are assigned to workbooks according to their reading level determined by the Nelson-Denny Comprehension Test. In order to familiarize themselves with the story, the students preview the first two pages of the story and complete a short vocabulary exercise. The last two pages of the story are read on a shadowscope machine. These machines are set up with a light pacer which travels down the page at a rate set by individual students according to their beginning reading level. Students complete a reading lesson by answering ten comprehension questions after the story. The goal in doing these reading lessons is to improve reading speed while maintaining a 70% comprehension. In order to move to the next faster speed, then, the students must
show a sense of "mastery" at one speed by completing two readings at the same speed with a comprehension score of 70% or better. Seventy percent comprehension, it is explained, is considered "good" for these lessons for several reasons: 1) these exercises are "experimental" in that students should be trying new comprehension and reading skills, and 2) these exercises are not being read for a test or a grade like a textbook would be. Most students' reading speeds do increase throughout the quarter with these exercises used in conjunction with others. Every quarter there are students who are not successful with these and find them frustrating.

Journals 4 and 5 are added to encourage students to think out loud. Journal 4 has two options. The first is to explain what they think is the purpose for doing each step in the shadowscope lab exercises. The second option asks students to describe how they get through difficult material. I encourage the students to describe how they know their motivation and attitude are diminishing and what they do to get re-focused. Again, these journals give me an opportunity to assess and aid students' understanding of themselves and the course.

Journal 5 takes this a step further, also giving the students two options. One option is for students to choose a question that I have written on their journals they have already handed in and respond to it. I explain that these comments and questions are not to be read as judgements, but as questions to draw out their thinking and understanding of themselves and the information covered in the course. The second option for this journal is for the students to ask a question that will help clear up ideas or procedures that they do not understand clearly. I ask them to answer their own
question, however, so that I may clean up what they already know rather than put ideas in their minds. Once again, this gives me a chance to assess their personal processing of the course.

In the class meeting before the test I give a non-graded "pop quiz" for several reasons. First, the "quiz" merely asks students what is important about the next class, what's due, and how many points the special event is worth. I do this to check on whether students are following their syllabi and understanding the points system for the class. The last "quiz" question asks students to explain what they've done to prepare for the next class's special event. Many of them give a sheepish grin and I find out that many have done nothing to prepare in advance for that day's review, let alone for the test. After I tell the class that I'm not collecting or grading the "quiz" I ask them to write a few sentences about how they felt when I said "pop quiz." Then we go over the answers and I give a pep-talk about test anxiety, preparation, and confidence.

Additionally, in the class before the first test the test format is discussed as well as the test content. I give a brief lecture on the fact that some anxiety should be expected because this is a new experience -- at the very least this is their first test from me, and to the extreme, this may be the first test some students have taken in many years. I encourage them to review every day before the test, rather than cramming at the last minute.

The first test is given by the third or fourth week of the course. The entire test is worth 100 points and covers the first five worksheets, the SQ4R study method, and
the "Bad Habits" article. It takes one class period and contains true/false, multiple-choice and short answer questions. In addition, I have added a 20-point essay which in the 50 minute class section I allow the students to take home and complete (see APPENDIX C: Journal Assignments and Essay Questions). At this point in the quarter, I grade the essays solely on thought and not on essay format, grammar, or spelling. However, I do begin to make comments to help students who show little knowledge or understanding of writing an essay. On the day of the first test, students turn in their worksheets for credit and receive the next packet of worksheets.

II

When the students return to class after the test, they complete part of the sixth journal before getting the test back. This journal asks students to record how they felt about the test before and after they took it. I then return the tests and the students are asked to reflect on their test-preparation strategies by responding to the following questions:

- How do you feel now that you’ve gotten your test back?
- What have you learned about yourself as a test-taker?
- What will you do differently/the same for the next test?

During this class session we go over the correct answers to the test, discussing questions that students have about their answers.

Usually, during one of the classes after the first test, a movie is shown. The movie, "Time of Your Life," presents six suggestions for using time more effectively.
The students are asked to take notes on the six suggestions and the "Swiss cheese technique." The six suggestions are as follows:

1. Set goals and prioritize (using an ABC system).
2. Make a daily "to do list."
3. Do A's before C's.
4. Ask yourself, "What is the best use of my time right now?"
5. Handle each piece of paper only once.
6. Do it now!

The film also touches on how to deal with "an overwhelming A," that is, a big project such as writing a research paper. The "Swiss cheese technique" is described as a way to handle "an overwhelming A." Using this technique, the students break their big project, a research paper for example, into smaller A's. This way it is still a priority, but broken down into more manageable "bite-size" pieces. Once students begin to accomplish the smaller A's in the little chunks of time they have available to them, the paper gets started and alleviates procrastination. Although the film is geared for business people, the time management suggestions are applicable to students, especially those juggling work and family in addition to school. After viewing the movie, we discuss the notes they have taken in regards to how the information applies to them as students. Discussion usually deals with procrastination. I always tell about my experience with what I thought was procrastination, but found out was my way of clearing out my "outside world" in order to go to my "inside world" where I write papers and the like.
After the first test an additional reading lab is added -- the *Timed Readings* (Spargo & Williston, 1975, 1980, 1989). The objective of these exercises is for students to receive practice in reading faster while checking their comprehension reading at a faster rate. Once again, these are "labs," I tell the students, "so experiment with your reading strategies." Here, too, 70% comprehension is considered "good" for the same reasons discussed with the shadowscope reading lessons. The *Timed Reading* books are assigned according to the reading level assessed at the beginning of the quarter. Students are asked to read and time each reading of twelve 400-word passages throughout the quarter. The time in words per minute and the comprehension scores are plotted on a graph so students can visualize their progress. Students are reminded to be "flexible" readers as they improve their reading speeds and maintain "good" comprehension. As with all the reading labs completed for the class, students are given credit for doing the labs, not for the success or failure they may incur as they progress through them. The emphasis is put on practice, trying new strategies, and improving at one's own pace.

The next worksheets are discussed in the next few class sessions and students are given time to work on their reading labs. Worksheet 6 focuses on "How to Study," emphasizing that "organization" is the key to productive study time. "Studying" is defined as "the process of applying the mind in order to acquire knowledge" (Spargo, 1977, p.127). The students list and describe three steps to organizing a study approach, and two steps to planning a time schedule. At this point students are asked if they recognize any patterns in the study techniques discussed in
the class. Several students answer that they see the importance of setting goals for each study time so that there is a sense of accomplishment and to "prime" the brain for the incoming information. Lastly, from this worksheet students learn that memorizing and reviewing should be done in the last part of a study time because "forgetting occurs when new learning displaces previous learning" (Spargo, 1977, p. 130).

In between worksheet 6 and 7 are instructions for completing a time schedule. Students read in the textbook that they should plan to spend two hours studying for every hour they spend in the classroom. The students fill out the time schedule provided to give them a picture of how they are spending their time. I usually take a few minutes to explain that leisure time is important for students to relieve tension, regardless of how busy they are.

Worksheet 7 focuses on "Using the Dictionary." Students define and apply the following terms: entry word, syllabification, pronunciation, parts of speech, etymology, synonym, inflected form, and guide word. When discussing this worksheet with the class, I ask them to identify why it is important to know these dictionary terms and how they might use them. I also give them a hand-out to help them look up words they can't spell.

The eighth worksheet is "Learning to Concentrate." Concentration is usually defined by the students as "paying attention" or "focusing." The text suggests that fatigue and hunger are two distractions that students should overcome before sitting down to study. Throughout this worksheet and others, the "Time of Your Life"
movie is tied in. For instance, asking the question suggested in the movie, "What is the best use of my time right now?" helps students tune into their needs so that study time can be focused and profitable. This worksheet asks students to list and describe the eight ways to build concentration outlined in their textbook. The eight ways are as follows:

1. Develop an interest (by previewing).
2. Set a goal.
3. Prepare to concentrate (by having all tools available).
4. Vary the activity.
5. Prevent daydreaming (by reviewing frequently and becoming aware that you are daydreaming; fight it).
6. Relate the learning.
7. Set a time to finish.
8. Pace the assignment.

Again, as we go over the overriding themes from other worksheets and the movie, we highlight how to prepare for and engage in the materials. Lastly, on this worksheet, students are instructed to try one of several concentration exercises in the text and report on how well it worked. These exercise include meditation techniques, short-term memory games, and visualization.

The next journal assignment is made about this time. While all the other assignments are worth five points each, this next assignment groups journals 7, 8, and 9 together for 15 total points. The students are required first to read and take notes on "Problems and Possibilities of Memory," a chapter from Frank Smith's book
Reading Without Nonsense (1985). The assignment is timed so that students are simultaneously completing worksheets 9 and 10; one is about memory and the other is about note-taking. I take a great deal of time with this assignment because I think it is important information for students to know, plus, the reading can be difficult for some. Therefore, when the Frank Smith chapter is distributed I also include a simple diagram of the information-processing theory which we discuss in class. The diagram helps students understand the difference between short-term memory (STM) and long-term memory (LTM). We spend a great deal of time discussing three ways that information gets into LTM: either through rehearsal, organization, or meaningfulness (Seifert & Hoffnung, 1991). By my using the metaphor of play rehearsals, the point is made that through the latter two, forgetting is less likely to occur. The metaphor is: if you were to go to an early rehearsal of a play you would hear actors speaking lines very dryly, with little expression. However, if you were to go to a rehearsal several weeks later you might find the actors ad-libbing lines because they know the organization of the play. Closer to show time the director would be insisting that the actors say particular lines exactly right and in a particular way because their lines are meaningful to the play's development.

After the students have had a week to read and take notes on the assignment, they return to class for discussion with their notes for five points. I ask them to talk about the difficulties they had in reading and taking notes. We often review the SQ4R study method as a way to also help with note-taking. The main point that I try to emphasize is Smith's statement, "Comprehension takes care of memorization" (1985,
I am aware now that my bias was to talk students out of using memorization at all. However, due to this study, I have learned more about students' use of memorization in the learning process.

The students are then given a writing assignment for ten points. They are to discuss how they use STM and LTM when taking notes in class, taking notes from a textbook, and preparing for a test. I put a graph on the board to help them visualize the comparison that they will be making in this assignment. We briefly discuss how to go about organizing the response using the graph. The students are given a week to write their response, but are invited to show me an outline or draft in the next class meeting.

Woven in-between these discussions of this assignment about memory are more reading lessons and the discussions of worksheets 9 and 10. For worksheet 9, "Training Your Memory," students identify three faculties of memory: retention, recall, and recognition. Through discussion, students understand that retention is like a storage place for information. Recall, then, is the faculty used for short-answer questions and essay tests, while recognition is the faculty employed with true/false and multiple-choice questions. Next, students list and describe the seven techniques to build memory suggested in the textbook. Those seven techniques are as follows:

1. Plan to remember.
2. Review the matter.
3. Look for principles.
4. Schedule memory last.
5. Think about the matter.
6. Apply the learning.
7. Discuss the material.

During the discussion of these techniques, I stress to the students the importance of becoming aware of their individual learning preferences. I explain very simply the differences between being a visual, an auditory, or a kinesthetic learner and how these play into the way we process information. I highlight the importance of being able to talk about the material they are learning because it involves thinking, talking, and hearing. This worksheet also explains the use of "mnemonics" or memory formulas. Examples discussed in class include the one given in the text: to remember the colors of the spectrum in order use ROY G. BIV. Each letter in this fictitious name stands for the colors: Red, Orange, Yellow, Green, Blue, Indigo, and Violet. Another example is the way to remember the five Great Lakes: HOMES. These letters stand for the lakes: Huron, Ontario, Michigan, Erie and Superior. Some students laugh during this part of the discussion because they think these are just more work; others laugh because the formulas seem easy and fun. The worksheet concludes with four true/false questions about memory.

The last worksheet before the second test is about note-taking. The answers for this worksheet are found on hand-outs that are attached to the packet. On this worksheet students look at what to do to get ready to take notes: a) complete outside reading and assignments, b) review previous notes, and c) take all necessary tools for note-taking. Students are reminded through the second question to listen for signal
words that the instructor may use to guide their thinking. In this way, students see that the signal words discussed on worksheet 5 are applicable in other ways. The third question focuses students on reviewing lecture notes a) as soon after the lecture as possible, b) during the first review time after the lecture, and c) once a week to review main ideas. Students are then asked to look at a checklist included in the packet and describe two of the tips which they feel they need to work on the most to improve their note-taking. Lastly, students list activities they can do to "edit" their notes such as add words for clarity, write out words they abbreviated, and underline important points.

The tenth journal is also completed before the third test. This journal is presented on a sheet of paper with questions for the students to answer. The main purpose of this worksheet is to have the students think through their experiences and progress with the reading labs -- the Six-Way Paragraphs, the shadowscope reading lessons, and the Timed Readings. They are asked to compare their reading rates and comprehension scores from the shadowscopes and Timed Readings. Many students, I find, just do the exercises and don’t think about how the exercise might improve or even demonstrate their reading progress. Many read and comprehend at very high speeds on the shadowscopes, but when left to read without the pacer revert to slower speeds -- usually due to their habit of reading word for word. When these worksheets are returned to the students, we discuss this briefly so that students tune in to their progress.
During the class before the second test, the students review for the test by playing a game. I put five categories on the board: movie, terms, lecture activities, building concentration, and building memory. We go around the room, each student chooses a category and I ask that student a question from that category. As students answer their questions, I try to help them see how categories are established and how knowing the differences and similarities amongst categories will assist them on the test.

The second test is given at the beginning of the eighth week of the quarter. The test, worth 100 points, covers worksheets 6 through 11 and the movie, "Time of Your Life." The test includes true/false, matching, multiple-choice, and short answer, as well as an essay. With this essay, students are given a choice between two questions (see APPENDIX C: Journal Assignments and Essay Questions). One question asks them to discuss an academic goal they have set for themselves, what they will do to accomplish it, and how they will know it has been accomplished. The other essay question asks for them to discuss what Frank Smith's statement, "Comprehension takes care of memorization," means to them. On the day of the second test, students hand in their worksheets for credit and receive the last packet of worksheets.

III

In the class after the second test, the test is discussed, journal 11 is completed in class and students complete assigned reading labs. For journal 11, students are
again given a worksheet-like list of questions to be answered. This journal focuses the students' attention on their progress with the Six-Way Paragraphs as well as how this and the other reading exercises have improved their reading.

One last reading exercise is added for the purpose of measuring the students' ability to read for pleasure after practicing more technical readings in the other labs. Students choose stories from Reader's Digests that are at least two pages long or one thousand words. The students are introduced to the technique of skimming (which is later discussed on worksheet 15). The students simply time themselves skimming and then reading the article and then calculate their words per minute (WPM) for each activity. The students are required to skim and read at least two articles from a Reader's Digest in this manner. These scores are later used as part of their reading progress report for the quarter.

Journal 12 is assigned shortly after the second test. This journal was originally added because I was uncertain if the journals were helping or hindering my students' progress. Hence this journal asks students "If given a choice to keep writing journals and doing worksheets as we have OR just doing worksheets for 10 points (rather than five each), which would you choose and why?" During this particular quarter I added an extra credit question at this juncture for the purposes of my study. This question asked the students to describe what happens to them when something makes sense or is meaningful to them while they are studying.

Four of the five worksheets in the last packet cover test-taking. The first one, worksheet 11, addresses text-anxiety. Answers to the questions on this worksheet are
found on hand-outs that are included in the packet. The worksheet asks students to first list and describe six ways to deal with stressful thoughts. Those techniques include:

1. Yell "Stop!" -- to stop the cycle of negative thoughts.
2. Daydream -- to fill the mind purposefully with pleasant thoughts.
3. Visualize success -- visualize calmly studying, calmly coming to the test, successfully taking the test, etc.
4. Focus on specific objects -- leaving no room in the mind for negative thoughts.
5. Praise yourself.
6. Consider the worst -- this generally leads to absurdity and relieves the pressure and anxiety.

The second part of this worksheet focuses on dealing with stressful feelings. Again, six techniques are described to help deal with physical stress. These techniques are as follows:

1. Deep breathing.
2. Scan your body -- reduce physical stress by becoming aware of it.
3. Tense and relax -- the body becomes aware of what "relaxation" feels like and gives itself permission to relax.
4. Use guided imagery.
5. Describe the pain -- like number two, awareness and attention helps reduce physical pain.
The last question on this worksheet asks students to pick any four suggestions from the worksheet and tell how they feel the suggestions will help them and why they chose them.

Worksheet 12 is taken from the textbook and addresses review for exams. This is appropriately timed as the students face their finals in less than three weeks. The questions on this worksheet emphasize the use of regular and constant review to cure the "jitters." The following eight steps to studying for finals are described by the students:

1. Establish a review schedule -- this is a separate schedule from the normal routine to just focus on preparing for finals.

2. Develop a new approach -- students are encouraged to get a "fresh look" at the material by organizing it differently.

3. Outline the course -- this is one way for students to get a "fresh look" and to summarize the information from the quarter.

4. Know what to expect -- find out from instructor the type of test and content that will be on the final.

5. Study quizzes.

6. Review class questions -- go back to notes and questions asked by instructor, other students, and self.

7. Cram, i.e., intense review of main points.

8. Be ready -- get plenty of rest, proper food, keep your confidence about you.

Worksheets 13 and 14 are discussed together as the first covers "Taking Objective Tests" and the latter covers "Taking Essay Tests." Objective tests include multiple choice, fill-in, true/false, and matching questions. Advantages and
disadvantages of taking both types of tests are discussed. Most importantly each worksheet describes steps in actually taking each type of test as well as how to prepare for each. The steps in taking an objective test are as follows:

1. Read the directions.
2. Arrange questions.
3. Apportion time.
4. Answer easy questions first.
5. Answer question of moderate difficulty.
6. Answer difficult questions last.

We spend time discussing why this layering of questions and apportioning of time is beneficial. Lastly, the students are asked to write in three final suggestions given for taking objective tests. Those suggestions are: 1) Answer all the questions; 2) Do not change answers; and 3) Use all the available time. We discuss the exceptions and necessity of the last suggestions, giving students a chance to think about their own test-taking strategies to this point.

The steps for taking the essay test from worksheet 14 are as follows:

1. Divide the time.
2. Outline all answers first.
3. Balance the outlines.
4. Write the answers.
5. Review what you have written.
Once again we discuss why these steps are beneficial and compare them to the steps discussed for the objective test. We also discuss some terms that instructors often use when writing essay questions, such as "compare," "contrast," and "describe."

Another way for students to evaluate their own attitudes and strategies is to fill out a 20-item Test Reaction Inventory (Sarason, 1972) included in the worksheet packet. Finally, all these test-taking ideas are reviewed and considered as students complete journals 13, 14, and 15.

After completing these four worksheets and the Test Reaction Inventory, the students are then asked to focus on their own test-taking capabilities when writing journal 13. This journal asks students to summarize themselves as test-takers based on the Test Reaction Inventory and then to list the skills, strategies, and/or ideas they found most helpful from worksheets 11 through 14 and tell how they will implement them into their test-taking routine. They are also asked to write about how these new strategies are different from what they have done in the past when taking tests.

Journal 14 provides students with the opportunity to write an essay and conference with me about the content and format. The essay prompt is as follows:

Which do you prefer to take, an essay or an objective test? Why? What is it about your second choice that you don't like?

In preparing the students to write their practice essay, we discuss how this question might be answered and how it would be organized into paragraphs. This provides an opportunity for the students to apply some of the strategies discussed on the worksheet about essays -- particularly the concept of balancing the outline, or in this case,
writing equal points about both sides of the issue. The students are required to write a draft for the next class time during which they conference with me as I read their draft with them and make suggestions. Second drafts are often required for some students while others write a final copy for the next class. I promise students that I will work through as many drafts as they need to produce an essay with which they feel comfortable.

The last journal gives students a chance to practice one of the tips on how to prepare for essay tests which is to predict essay questions for the final. Thus, I ask the students to pretend that they are the instructor and, remembering that the final is cumulative, come up with their own question and answer it. The students are reminded that the question and answer on the final would be worth 20 of 100 point, thus their question should warrant that value. Many students do in fact write good questions and some are pleased to see that their questions are similar to the one on the final.

Worksheet 15, the last worksheet before the third test is administered, covers the concept of skimming. Even though this was discussed earlier when the Reader’s Digest exercises were introduced, this worksheet brings us back full circle to the topics discussed in the first few classes. The first question on the worksheet asks students to define a “flexible reader” — a term introduced in the "Bad Habits" article. The second question asks for two conditions that reinforce inflexible reading. Here we revisit some of their own reading experiences they discussed in the first few journals: that is being taught to sound out every word; thinking that every reading
every word insures 100% comprehension; and being evaluated as a "reader" solely on reading basal readers out loud. The textbook also reiterates some of the "bad habits" discussed earlier in the quarter. Lastly, skimming is defined as running the eyes down a page or column "snatching ideas on the run" (Spargo, 1977, p. 120). We discuss when skimming is useful and different ways to skim for different reasons -- thus increasing the students' sense about what it means to be a flexible reader.

During the class before the last test, we spend some time reviewing. For this review, I give a hand-out that helps students compare and contrast, first the advantages and disadvantages for students and the instructor of the essay test versus the objective test. The second side of the hand-out is to aid students in comparing how to prepare for and how to take the two different tests. The last test, given in the last week of the quarter, is worth 100 points and covers the last set of five worksheets. True/false, multiple choice and short answer questions are included as well as an essay (see APPENDIX C: Journal Assignments and Essay Questions) and ten fill-in questions that asks students to identify statements as being applicable to the essay test, the objective test or both.

During the last class of the quarter, the third test is returned to the students and briefly discussed. This leads into a discussion about the final to be given the next week as scheduled by the college. Next, a second Nelson-Denny Comprehension Test is given as a post-test. The results of this post-test are discussed briefly before the final and have no bearing on the students' grades. It is given as a way to measure change over the quarter. Before students hand in all of their completed reading labs,
we use their individual scores to fill in a Progress Record Sheet that compares their range of reading speeds from the beginning of the quarter with their range at the end. It also compares the students' reading rate and comprehension of general and technical materials from the beginning of the quarter to their scores in those categories at the end of the quarter. The scores from the beginning of the quarter are taken from the "experiments" we did with reading "Mighty Little Men" (the general piece) and "Grain Size" (the technical piece). For the end of the quarter scores, the students' range is figured as their highest words per minute (WPM) they got skimming to the lowest WPM they got reading the Reader's Digest articles. The end of the quarter scores are averages of the four highest WPM and the averages of their comprehension scores from the Timed Reading for general reading and shadowscopes for technical reading. This document also contains a self-evaluation for students to indicate the percent of improvement they felt they had made in various study skills areas. The self-evaluation is similar to the checklist on the Student Information Sheet completed at the beginning of the quarter.

At a specially arranged time, the final is given. An hour and 50 minutes is allotted for the cumulative final. Although I use departmentally prepared tests throughout the quarter, I did write my own final. I warn the students during the last class that the test will physically look different because of the different type setting. The final that I created has more application sections. That is, besides true/false, multiple-choice, and short-answer, I also include a section in which students read a passage from a running magazine. The passage is only the introduction to an article
about keeping the immune system healthy through proper diet. The students are asked a literal question as well as a question that predicts what the rest of the article is about. They are asked to highlight the most important part to demonstrate their use of highlighting and finding main ideas. Lastly, the students are asked to describe how they would read the article with regard to determining their purpose and the difficulty of the article. Thus, the students must think through and apply the concepts discussed in being a "flexible reader." The final also includes several essays of which they choose to write only one (see APPENDIX C: Journal Assignments and Essay Questions). As the students complete their finals, I make sure their individual folders for the department are complete. These must contain the Student Information Sheet from the first day of class, their Progress Record Sheet completed at the end of the quarter, and a copy of their Grade Sheet. At this time, I check that the students' grade sheets and mine coincide and that the student has an idea of grade to expect on their grade cards. Good-byes are said individually this way and students depart.
CHAPTER V

CASE STUDY STORIES

Introduction

This chapter contains the case study stories of the five students who participated in the second and third phase of this study. Each story contains mostly facts about the person's personal history and engagement with the reading and study skills course gathered in the interviews. Discussion and further application of the case studies to the research question and Development of Learning Perceptions Model can be found in CHAPTER VI: Discussion and Implications.

These stories are told in no particular order and can be read in any order the reader finds necessary as I have cross-referenced and compared the participants throughout the stories. The students who you will meet are Priya, Carla, Mike P., Michael, and Moe. The participants chose their own pseudonyms. It is my hope that you will see the colorful lives of the non-traditional student.
Priya: Time, effort, and interest

Introduction to Priya.

Priya is a 32 year old woman originally from India. She has been in the United States for 20 years. Educated in India until the age of 12, she attended school in an Irish-Catholic convent where the nuns were "very strict and very proper" — if your sneakers were not "totally white" for assembly, you were sent home to get clean ones. The primary mode for "learning" was "mostly memorization, there was no review." Memorization meant that she was sent home from the convent with a certain amount of material that she was to "study" and then was tested on it via essays which were expected to be written verbatim. Priya’s interpretation or her opinions about the subject were unacceptable. Priya described this as "knowing it from A to Z."

As a student in India, memorizing history and science was easy for Priya because the material was interesting to her. "With history and science I didn’t have to think," she said, "It just comes." However, besides having "limited time" and "no interest" in math, she also did not have a tutor available to help her as she does now at the community college. Time and interest are important factors now in Priya’s notion of a "good student." To Priya a good student is a student who really takes time and sits down and studies. Who wants to accomplish whatever they are doing...It doesn’t have to be intellectually based.

A good student to Priya is not the gifted student who gets things easily and has an "I know it" attitude, but who has to work. Priya values the deep level learning that involves effort. To Priya learning means "acquiring knowledge." Further she
recognizes that she's learned something new when she can relate it something else. 

This ability to relate the knowledge to something else, she says, is an advantage.

I found that learning was valued and fostered in Priya’s family when she was young. As a child, she and her three younger sisters would gather around her father, "a legal advisor to all the diplomats in the country here for the Indians" and "a grand storyteller on a grand scale." As they sat fascinated, her father would tell them about things such as astronomy, philosophy, and history.

Perhaps it was the diversity in her educational experiences beyond India that laid a foundation for her knowledge-building habit. In America, she attended an international school in Manhattan. Describing the diversity amongst her classmates, she said,

So we were a group of ten. There were scholars in math. Let’s put it this way -- I mean, they didn’t have to think, they just had to write it down. And there were scholars in history as well as science. It was interesting to find out -- everybody had their own techniques as their ways to do it [learn].

As a teenager, Priya learned to recognize and value the different ways of learning amongst her peers. I believe this later formed the groundwork from which Priya judges her own abilities as a student.

An emphasis on learning is also evident in the family’s career choices. Two of her three sisters are in America; one is a doctor and one is an engineer. Priya wanted to pursue a career or an "intellectual field," but married young and had children. For a while she managed and designed Indian garments for the family store in New York.
Beyond high school, Priya took correspondence courses towards a Bachelor of Arts in history and political science from Delhi University. Priya’s mother has a high school diploma and her father has a doctorate in law. Priya has worked as a telemarketer and then as a receptionist for an insurance company to help pay for her tuition when she was waiting on student loans. Yet another educated family member is Priya’s husband who has an applied engineering license.

Priya spends a good deal of her time and energy raising her three children: a 16 year old girl, a 10 year old girl, and a six-year old boy who all attend public school. Although Priya has a good command of English, she frequently speaks Hindi to her children to encourage their interest in their heritage. The children can interpret the Hindi, but reply to their mother in English.

At home, Priya enjoys curling up with a cup of tea and a good novel. She also reads to her children. In fact she says, “Basically, one of my loves is reading. I love to read if you don’t put me in a spot and tell me, ‘You have to read this.’” Priya reported, however, that as she entered the community college, reading for school purposes was "more or less a turn-off" because as a child she was forced to read and get everything memorized. Coming into the reading and study skills course she had no basis from which to form expectations for the class — she wasn’t sure what she would find. She enrolled for the course under my tutelage by recommendation of another student who regarded me highly.

Once in the course, Priya was fascinated by the things she learned about herself and being a student. As a student Priya was quite thorough in her work as
demonstrated by worksheets being answered in complete sentences on her own paper and in her own words.

In her second quarter at the community college, during which time she was enrolled in reading and study skills, Priya applied to a two-year respiratory therapy program. In keeping with her hands-on learning style and to clarify her career interest, Priya volunteers at a local hospital and at a cardiologists' office when she can find the time. Given an opportunity to shadow a doctor at a local university hospital, she was "able to see and comprehend" the importance of the job. She has always wanted to be in the medical field and was especially drawn to respiratory care due to some friends' illnesses.

During the quarter in which the study took place, Priya took algebra and chemistry along with the reading and study skills course. She eventually dropped the chemistry course because her son became ill and she could not attend one lab meeting. The instructor did not allow for absence from these labs and therefore, she was encouraged to drop the course or fail. Nonetheless, she continued to sit in on a study group with some peers because relating new information to previously learned information and vocalizing her learning seemed to be key ways for her to learn.

**Interpretation of changes due to course.**

Through inventories, the "What Do I Already Know?" survey (see APPENDIX D), and her journals, Priya indicated that coming into the course she felt she was an above-average reader and that she enjoyed reading. She believed she had a large
vocabulary along and the ability to use context clues and the dictionary were superior. This confidence in her reading ability is probably due to her love for and practice with reading for pleasure.

On the other hand, she evaluated herself only "average" in her ability to read rapidly, summarize a passage, concentrate and remember, use graphs and table in a text, skim, preview, and read actively and at flexible rates. Hence, perhaps her own understanding of the "turn-off" she felt toward the reading she would do in college, as opposed to curling up with a cup of tea and a good novel, is revealed in this self-assessment.

At the beginning of the course she did not review course materials on a regular basis and had no other way to prepare for a test other than to memorize — as she had done in India. In terms of reading, she diagnosed herself as having the "bad habit" of reading while moving her lips and also regressing — both signs of attempting to take in every word, rather than reading for ideas.

Lastly, Priya disclosed on the questionnaire that she had difficulty describing her progress with the reading labs completed during class time. Through analysis of her journals, Priya's discussion of her progress with the labs generally addressed the amount of interest she had in the passages and the amount of time she had personally, or was allotted in the course to do the exercises. Once again, her need to spend time with material, to be familiar with the information, and/or have some interest in the subject was displayed as key elements to her perception of her reading improvement.
Although her final progress record sheet does not display the vast improvements that many students find, her ability to read different kinds of material at different reading rates — her flexibility — did improve. She had not taken into account the fact that her beginning flexibility only ranged 200 words per minute (WPM), and that by the end of the quarter her flexibility ranged close to 1,000 WPM. Priya often commented about being tired and distracted and feeling that this curtailed her ability to really improve her reading through these exercises. This may also be partially due to her attitude and beliefs about needing time and not being "put on the spot," and the tendency from her early schooling to read to memorize. As true as all this might be, in the final interview Priya explained that most of her problem with the lab exercises was that she answered according to her own thoughts on the subject, "not according to the statistics" given in the passage which therefore resulted in a low comprehension score. Once again, her values that oppose her early experience with rote memorization, surface, and unfortunately cause her trouble. Fortunately, I found that Priya could see through this and did not let it affect her self-esteem or confidence in her reading ability.

Priya admitted that the reading and study skills course was easy for her and that she did not apply the concepts and techniques she learned in the course to this particular course. There are several reasons for this, I believe. First, the course was about her as a student, therefore, like history and science in her younger days, she "didn't have to think — it just comes" because it was interesting. She mentioned in the final interview that it was easy to memorize for this course, especially using
mnemonics. Studying for this course was like "second nature" to her -- perhaps meaning that she reverts to old memorizing behaviors because she already "knows" the information at a deeper level. Further, her other courses were time-consuming and more intense, therefore she may have found relating to the study skills course much easier and therefore it "came" to her without much effort. That is, it made sense to her and she could easily relate to it.

To succeed in the reading and study skills course Priya did not consequently use much of what she learned in the course. She mostly found the information useful in other courses. In the final interview she indicated that it was all useful "now." In the quarter following her enrollment in the reading and study skills course, Priya took another algebra course, general biological chemistry, and essay research. She found the note-taking information from the course "a very good advantage" because it was essential to her success.

The techniques from the reading and study skills course were of tremendous value in her other courses and on into the following quarter. The notion of constantly reviewing was perhaps the biggest highlight for Priya. In contrast to her early education in India where over-night memorization was a must, time was now on her side to spend with the material. To Priya learning "is getting it over a long period of time" which means constant review. Through constant review, Priya reported, "you keep your memory alive." She described constant review as a "study habit" in which you learned the information -- "without being put under pressure to learn."
After the course was over, Priya reported that she remained fascinated with the study ideas in the course. Even though she already felt comfortable with her note-taking from lectures, she improved her note-taking skills for both lectures and textbooks. The SQ4R study method proved helpful for Priya, too. This was especially useful in digesting her chemistry text. She felt she was a good student and was aware that she had some weaknesses to work on. Despite her propensity toward digesting information in her own words and making meaning through application, throughout the course she believed that an instructor is the information giver, that the student is the information receiver, but that her opinions were also relevant to class discussions.

When asked in the final interview if she thought she could now do better on the tests for the reading and study skills course because she had been able to use the techniques she responded affirmatively, saying, "It'd be easy -- you use it. It's part of me now!" She knew to use the techniques she had learned in the new courses because they were common sense to her now. When I probed as to how the concepts were remembered she responded,

Mostly from you. I'd remember you saying this would be this and this would be this. But it would click like that, I would go to what I remember you said that would help. . . rather than by some of the notes or some of the exams I remember that I took.

Clearly, Priya learns best aurally/auditorily -- she remembers my words and claims that the best teachers are those that use their own words and examples for students' clarity and comprehension beyond the textbook.
Carla: A developing student

Introduction to Carla.

Carla is a 41 year old woman with a variety of experiences. With her adopted parents, an Army surgeon and a nurse of Russian descent, Carla, a German Jew from Bavaria, came to America at 10 years of age. Even before graduating from high school in Florida, Carla had her beauty and barber license. Eventually she had her own shop in New York and then in California as she transferred across the country with her military family. Carla reports that she was "really good at hair cutting" and had won 27 trophies for her talent. However, she grew tired of this and sought a Bachelors of Fine Arts in Tampa, Fla., and worked as an interior decorator. Though she enjoyed many forms of art, she especially enjoyed drawing abstract buildings, but confided she was not very good at drawing people. At that point she really wanted to be an architect. Carla found that "you really need a master's degree to make money (as an interior decorator) and everybody took your idea and they got the money and you just did all the work."

Following in her adopted grandparents' footsteps she then went into real estate for about five years and "made a killing" — working 80 hours a week. At this point she became an American citizen and proudly took a job working as a computer operator for the state. However, she quickly became "disappointed in our government" for "hiring people when they weren't needed" and people who "weren't educated and they were ignorant." Carla admits that she was very vocal about this and was therefore one of the first to be laid off when the time came.
Carla is currently unemployed and living off her investments. While attending the community college her ultimate goal is to receive a degree in engineering; she wants to be a civil engineer. When asked what a civil engineer does, Carla replied, "They survey property and bridges and things like that... It's technical, and I know I would be good at that."

As a future civil engineer it is not surprising that Carla reported being good in math. Though she "has to work at it," math comes to her most easily because it involves formulas -- structures to which she can relate. Carla believed, on the other hand, that she had difficulty with anything requiring language such as "reading, English and spelling." History and English deal with words and they are not "exact;" therefore, Carla is not as interested in them and as a result may not do as well in these subjects.

When asked what makes a good student, Carla said that it is someone who is "successful in all areas. Totally all areas. Not just mediocre in all of it, but very knowledgeable." She dichotomized the issue when she gave the example that while she is good in math, her mother is good with English -- that is, those things Carla has difficulty with: vocabulary, reading and spelling. She said that a lot of people are "one or another," but the "successful student" has both qualities -- "to be knowledgeable in all aspects."

Carla valued social interaction in her learning development, but because that was not available to her given her commitment to her mother's care, she worked on her own and then required assistance to help her clear up any problems she discovered.
along the way. Carla is clear about the form that assistance needs to be for her. Carla related that too often teachers tell you what not to do, which is useless for her because she has already figured out what didn’t work in a math problem, for instance. Instead she needs teachers that will help her get beyond the point where she is stuck. Teachers who just give answers are of no use to Carla, instead she values teacher who give answers along with explanations as to why they are the answer and associating that information with past and future course material.

**Changes due to the course.**

It seemed that the process of learning to deal with college was rather unsettling for Carla. This discord in her identity as a successful student from her writing experiences was further disrupted by her mother becoming ill. Non-traditional students often experience "disappointment," "dislocation," to "ultimate re-discovery" — "the process of which seems to result in renewed value basis upon which to make choices as a learner" (Weil, 1986, p. 219). From the final interview, I found that Carla may have fallen into this pattern: She reported that about three-quarters of the way into the course — about the same time her mother’s illness began — she "re-did all [her] books and notes and highlighted everything . . . it took a number of days." Thus, she’d been disappointed and frustrated with her success as a writer and a student; this frustration was exacerbated by the time and attention required by her mother. Carla found herself losing touch with her goals and in order to reinstate herself as a student, despite the time it took from her few hours for sleep, she began
to re-evaluate her study techniques. Gradually, Carla used both right- (e.g., using different color highlighters and paper) and left-brain techniques (e.g., writing notes in margins about what to study) to become more organized which made her learning process more meaningful.

When asked why she "re-did" her books so late into the quarter, Carla said that a lot of the new information given at the end of the quarter was important, so she implemented it as she learned it. Earlier in the interview she reported that the SQ4R study method, note-taking, and reviewing were the things that she learned in the course that helped her succeed. However, two of these three topics are addressed in the first half of the quarter. Only reviewing is addressed directly in the last set of worksheets which cover test and final exam preparation; nonetheless, it is stressed throughout the quarter. Therefore, out of necessity, due to the stress and "disequilibrium" that Carla was experiencing as the quarter went, Carla implemented the techniques of which she had previously been exposed. She further emphasized that it happened all of a sudden when she said, "I mean in my books and everything you can see the difference in the highlighting. It was like 'woom' and then all of a sudden just real neat... then you're seeing more and than the abbreviations."

Other changes that occurred during the quarter as a result of the course had to do with adding and relieving pressure in her life. First, Carla decided to use a timer to keep from "laxing off." She found that adding a time pressure to her studying helped her concentrate and retain information better. She related that this discovery was due to using the shadowscopes in lab. To the other extreme, Carla also began to
study a week before a test rather than just the night before the test, relieving the pressure of learning everything at once. This constant review included audio-taping her notes to listen to when she could.

Carla reported in the final interview that she would probably do better now on the tests from the reading and study skills course "because now I know how to study and I'm more knowledgeable about things. And I can spot [main facts] easier."

Carla, like Moe, found the material from the reading and study skills course useful and implemented the strategies as she learned them. Interestingly, several quarters later when she enrolled in a spelling and vocabulary course with me Carla commented that she wished she could take the course over again to "instill it" in her.

During the quarter that Carla was enrolled in reading and study skills she was also taking Typing I, and two courses in the developmental education department: a composition course, and pre-algebra. Carla did not do well in the composition course. As early as her fourth journal she judged that her writing for the composition course was "yucko." In truth I found she had difficulty expressing her ideas and encouraged her to relax when she writes.

Throughout the quarter I noted Carla's declining self-esteem as she struggled with the composition course. In journal after journal she lamented what a bad writer she had become. I eventually responded to this by encouraging her to not view the perceived problem as a crutch for other weaknesses she was discovering through the reading and study skills course. Further, I suggested that her writing was being judged harshly because it was too much like her speaking pattern. In the final
interview she shared that this had been true and that she repeated the writing course in the following quarter. She was more successful in her second attempt at the course because she began writing issue papers with numbers and statistics instead of writing about her own emotions; she found that this was a more comfortable voice.

In the quarter following reading and study skills, Carla enrolled in a business course, a critical thinking course and the composition course she had had difficulties in the quarter before. In these new courses she continued to orchestrate a sense of how to become organized and manage her time. Organization for Carla seems to be a way to effectively use her study time. From her creative side, she began color-coding everything -- drafts of papers, highlighting in different colors as she read and re-read texts, writing reminders in margins about the amount of attention she needed to give certain passages in a text. Carla reported that she found she needed to go back and "re-study" reading and study skills concepts such as the SQ4R method of reading a text when she "fell back on old habits." However, she found herself automatically using the questions from the SQ4R study method to review her notes and texts.

Carla valued the SQ4R method because it prompted her to think about the material as she studied. As we talked about this, we got into an interesting discussion about the difference between "memorizing knowledge" and "knowing." The following excerpts reveal that Carla valued a deep learning associated with making meaning, but when put to the task herself had not been able to enact that deeper learning. In the final interview, Carla made the comment, as many of the others did,
that the reading and study skills course should be "mandatory for everyone no matter how good you are" because . . . our conversation went like this:

Carla: . . . too many people are doing their tests and things on memorization and not knowledge, ya know, not remembering and studying correctly . . .

Me: You just used two terms and I wonder if you’d define them for me so I know what you mean by them. You said "memorizing" versus "knowing it" or "knowledge" — what’s the difference for you?

Carla: Memorizing is that you’re, I think, you’re associating it for short-term, just like ’til the test is over and then it’s over. I will be truthful, on this [referring to business textbook], there’s so much you have to know on this that I was really shocked. And it’s just an intro to business. And I mean the test and this is just one test; and I’m just ahh [reveals frustrations]. So I’ll ask [the instructor], "Is any of this going to be on our final?" And he said, "No." And I know this is awful — I tried to do it on memorization. But also I tried to do it on knowledge so I can retain it.

Me: What is "knowledge"?

Carla: Knowledge is retaining it forever, keeping it in a certain category. I think how I retain knowledge is like you said — hands-on, when you deal with it, and when you associate with other students then you’re becoming to have like that. So, I’m pretty much on my own, so it’s hard for me.

On her own, then, Carla studied by first reading a text without writing anything in the text. She wrote all her notes on paper so that the book is blank for future quizzing. Re-testing herself seemed to be the key to Carla’s success. In this process she knew she had learned something when "it just comes real easy. I don’t have to search for it." Whatever came easily, that is, she didn’t have to search her memory for, she knew it was "retained." Carla likened this process to a "computer
bank" - "You're searching through for the data, and you just want to come right up with it." I found that her behavior seemed mechanical.

Carla's explanation of how she learns seemed contrary to her belief that everyone should learn to study so they "know things" rather than just remember them for the test. So, I asked some further questions:

Me: Is there a difference between easier retrieval and knowing automatically?
Carla: Mmm hmm. I think knowing it automatically is because it's every day occurrence and you're using it all the time. Easy retrieval is it's there and it's probably current learning and then you can just pull it up real easy.
Me: Does one of those involve more application — that you've been able to apply the information some place?
Carla: The easy retrieval is for me.
Me: What do you mean?
Carla: Like with the study skills, I can apply that easier.

Carla then spoke of her need to check her understanding of what she has read by answering instructors' questions in class. She, like Mike P., preferred to go into class having already read the material so that in class she could "prove" that she "knows it," and then learn from her mistakes should she not be correct in her understanding of the material. Carla was referring here to her ability to recall and retain information. She seemed to differentiate between two ways of displaying knowledge — I probed deeper:

Me: To go back to the "easy access versus knowing it automatically," can you study something and know it automatically?
Carla: Not for me I can't. I have to study it more than once. Unless it's an easy thing that — I don't think I've had anything easy.
Me: What would be something easy?
Carla: Nothing yet. Isn't that terrible? I really have to work hard.

Carla went on to explain that math was easy because she worked ahead in the book and then went to class with questions. She believed in learning from her own mistakes. Learning for Carla meant to know it deeply so there was easy access/retrieval of the material; however, in her own experience with learning, she had only been able to memorize for tests and was developing the ability to make deeper associations. Perry (1970) points out that "growth" involves courage. For Carla, I think this courage will probably grow out of experience and her developing self-concept. Like Mike P., the demands of further coursework may lead to new perspectives of what is involved in meaningful learning.¹

Mike P.: Finding time, being forced, and knowing it or cramming

Introduction to Mike P.

Mike P. is a 34 year old mechanic who left a good job to seek a degree in engineering as a full-time college student. Growing up in a small mid-west town where a college education was not valued, neither of his parents received four-year degrees. Mike reported, however, that his father is probably one of the few people who "got to the point where he's at without a college degree." His father has several associates degrees and is the vice-president of an insurance company. Mike P. is married to a certified public accountant who received her bachelor's degree in accounting from the local state university. She is currently working in management accounting. Mike reports that she was a straight 'A' student and is hard on him about
his studies — Mike was grateful for this as he began his college career after being out of school for 15 years.

Mike's school history was rougher than the other case study participants. He reports having been "distracted from reading for some reason" when he was young and therefore got special help including going to summer school in third and fourth grade as well as to the teacher's house for extra help. "Fighting reading all the way through high school," he received high enough grades to remain on sports teams; although, he occasionally found himself ineligible for certain games. He liked math, but had to work at it. Science and history were his best subjects because his family had a chemistry set and took vacations that set a foundation for his learning geography and history. But this seems to have been all the educational support Mike received at home. He now wishes his parents had "forced" him to be a better student instead of just letting him "get by."

Being uncomfortable around educated people as an adult was one factor in Mike's desire to get a college degree when he came to this area almost 10 years ago. However, his main reason for returning to school was for career advancement. Just as he felt uncomfortable around educated people, he was also frustrated with his position as a mechanic. Like Carla, he saw people in higher positions getting credit for his ideas. Through his job he discovered what is required of an engineer and predicted that he will do well. He did not enjoy what he was doing and felt that getting an education would be the only way for advancement.
A successful student in Mike’s mind was one who sets goals and achieves them. Mike’s goal was to maintain a ‘B’ average because his wife said that it looks better when job hunting. A ‘B’ average shows that an individual worked for the grade. An ‘A,’ Mike P. said, means it came easily. Therefore, people with ‘B’ averages are more likely to get hired because they are work-oriented. Mike also commented that having the goal of a ‘B’ average “takes the pressure off of examinations -- and then I learn rather than worry.” However, in the member check, Mike added that he was beginning to realize that an ‘A’ could also reflect hard work.

Like several of the other participants, Mike P. came into the reading and study skills with no expectations of what he would learn or do in the course. He says that having been out of school for 15 years he had no background knowledge from which to form any expectations. The inventories Mike completed at the beginning of the quarter he enrolled in the reading and study skills course reflect his lack of expectations for the course. He responded that he was unsure about the meaning of concepts to be covered in the course and that he was uncertain about his own abilities or habits as a student.

Mike P. informed me in an interview that he did very little reviewing for my course. If he knew it, he knew it and if he didn’t, he memorized it before the test. Mike embodied the non-traditional student that I thought I was facing in each student in every class. Completing all readings and homework assignments as he went through the course, Mike did not find constant, consistent review helpful to him and instead studied only the night before the test in preparation. In fact, Mike said the
hardest thing about studying the night before a test was that sometimes he would have
to go to work the next day before the test and then he would forget what he had
studied. In the member check, Mike reported to me that he has found studying right
before the test as helpful in achieving high scores on tests.

Changes due to the course.

In an interview the quarter following his enrollment in the reading and study
skills course, Mike P. stated that note-taking and the SQ4R study method had been
most helpful to him. However, due to a problem in taping that first interview,
another interview was held several quarters later. This proved to be an interesting
addition to my data. When interviewed later, Mike said the note-taking had been
most beneficial, but that he had not done much textbook reading since the course and
therefore felt uncomfortable about his ability to read. The time-management
techniques were also beneficial to Mike during the course and into the following
quarters.

The shadowscope lessons were most problematic for Mike P. Like Michael,
he found the exercises frustrating because he didn’t advance as fast as he thought he
would — again with no basis for what the class would be like, his assumption about
how fast was fast enough for him must be related to his own self-esteem, as well as
comparisons he made of himself against others in the course. Like Moe, Mike seems
to get his bearings of success based on what his fellow students are doing.
According to the final progress record sheet, Mike P. increased his reading speed considerably, however his comprehension scores decreased slightly at higher reading rates. On a self-reflective section at the time this sheet was completed, Mike indicated a 75% improvement in his reading speed and only a 40% improvement in his comprehension. Perhaps Mike's view of improvement was based more on his ability to comprehend than on increased speed, but because of his constant concern about how much time he spent preparing for classes as a full-time student, he saw the reading rate as an important factor.

Nonetheless, due to little need to read in the following quarters, Mike P. expressed a concern that he would continue to struggle with his reading. Like a self-fulfilling prophecy, this may be a concern that continues from his childhood and may well inhibit or slow his ability to improve as a reader. Mike may also carry a belief that reading slower leads to better comprehension, when reading too slow can lead to no comprehension due to a backlog of non-visual cues while "reading" (Smith, 1985). Further, Mike may be dealing with intellectual despair due to his beliefs about his reading abilities learned as a young boy. Or perhaps because his early schooling was so fragmented, he always thinks in fragments and isn't predisposed to thinking skills, ideas always bottle-neck unless schema are already there and easily accessed.
Michael: Application, connection, and retention

Introduction to Michael.

Michael is a 31 year old African-American male who wishes to become a teacher. With his wife, a nurse, he has two boys, aged seven and ten. He often commented in class about their progress in school and asked about ways to encourage their growth. Besides the reading and study skills course material being useful to himself as a student, Michael found the materials appropriate for helping his boys in school.

About 12 years ago, upon graduating from high school, Michael received a track and field scholarship to attend college in Virginia. Although he claimed to be good at English and science in high school and not successful in math, Michael majored in business and administration because as he explained, "I didn't know what I wanted to do." Due to an unfortunate accident, however, Michael left school. He then got married and started working. Michael confessed that he really did not have a desire to go to school at that time, and was only attracted because of his interest in track.

Michael's work experiences fostered his current career choice. While still in high school in Queens, New York, Michael worked in his father's store. Later he worked construction. Upon leaving college, he started working with kids; thus, finding his interest in becoming a teacher. He started by coaching and became involved with the local Department of Youth Services when he moved to this area. He is currently working part-time for the local recreation department. With this
information and his goal of becoming a teacher I asked Michael if he would like to become a physical education teacher. He responded that he had thought about it but realized "there's enough gym teachers." At this point, Michael was not clear on what grade level he would like to teach, but coaching will probably be a part of his day.

Michael is very serious about his heritage and has made tremendous efforts to understand his culture despite the predominance of other views he has met up with, particularly in education. In junior high, entirely through his own interest rather than as an assignment, Michael wrote reports on Egypt so that he would understand multiple perspectives on history. He realized even back then that the American history that he was being taught in school was one-sided. History became interesting to him when he could connect it with what he was learning on his own about his African-American ancestors.

Michael did not only meet with this bias in education. At one point in his life, out of necessity to make "decent money" and to have good benefits, he worked as a custodian for a large local computer corporation. In addition to the money, Michael was curious as to whether he "could make it in the corporate world." Along with the prejudices against his position as a custodian, Michael found "too much racism goin' on." This degradation sparked Michael's interest in returning to school. He is currently enrolled in the associate of arts program at the community college and will transfer to the local large university to complete a five-year program in education. He told me he had been ready to go back to school for two years.
Entering the community college, reading and writing were no strangers to Michael. In his youth and throughout his hiatus from college life, he has done intensive reading to discover the African links to history. He has also written several articles about his experiences as an African-American and the social issues he has come up against in his neighborhood -- four of these have been recently published in newspapers. In addition, he has struggled to get other more controversial pieces of his writing published. He said, "People aren’t ready to hear it yet" -- Michael clarified "it" as "the truth."

Despite all this success and ambition, Michael said he’s working to accept the title of "writer." During the study, Michael was enrolled in a composition course, a math course and the reading and study skills course. He was receiving feedback from his instructors that has encouraged him to begin to see his gift and accept a role as a writer. When asked about other roles in his life, he lists his familial roles, being a student as well as being a teacher. Here, Michael has accepted his gift of teaching and is acting on it in his job and with his two boys.

Further, regardless of all the reading that Michael has done, he came into the reading and study skills course knowing that he needed to bolster his comprehension skills. Interestingly, however, Michael had expected the reading and study skills course to primarily focus on study techniques. He was surprised by the incorporation of reading labs, and in fact had some problems with the shadowscope exercises. The thing that Michael least expected in the course and the thing that he most remembered
from learning to read as a child was "practicing reading" with all the reading lab exercises in the course.

**Interpretation of changes due to course.**

Michael reported that his most significant needs coming into the reading and study skills course were to improve his study techniques and his comprehension. The inventories administered at the beginning of the course revealed that Michael had a good attitude about returning to school. He rated himself as average to above average on most reading skills. He said he was an avid reader, but had problems with comprehension. When I asked him what he meant by "comprehension" he referred to it as retaining information.

The dichotomy between reading and comprehension that Michael continued to refer to was interesting to me. I believe that he can read and comprehend because he has done so much reading about his heritage. Reading about topics that are meaningful to Michael may not require as much concentration on comprehending. However, perhaps Michael was anticipating or reacting to the college reading he would have to do that was either challenging or not interesting to him. Further evidence of his concern about college reading was verified on a reading inventory from the beginning of the quarter on which Michael rated himself as having difficulty using graphs and charts in a text, using the dictionary and marking a text — all skills used for textbook reading. Therefore, I believe that Michael's concern about
comprehension and retention were related to his concern about reading and retaining information for college tests.

Expecting the course to focus on study skills, Michael did not anticipate the "help" that he received in reading, even though he knew he needed to work on his comprehension. The only previous experience that Michael had had was with the "practice reading" he had done in grade school with SRA Basic Reading Series (Science Research Associates), a linguistic program published in the mid-sixties. Similar to the SRA's, the Six-way Paragraph exercises were most beneficial to Michael because of the primary focus on six comprehension strategies. Further, Michael may have received maximum benefit from these because they were completed at home.

Michael greatly valued the opportunity to work on things in his own time and space -- like Priya, he needed time with things. Michael even went so far as to begin to tape all his classes so that he could take them home to listen to and take notes from -- ciphering out the parts that were not important.

The shadowscope lab exercises meant to increase reading speed as comprehension increased proved to be "uncomfortable" and "frustrating" to Michael, further proving that meaningfulness and applicability were necessary to Michael's learning process. Michael described the shadowscopes as "uncomfortable" because his speed was not increasing at a rate he thought it should. With no basis for what the class would be like, his assumption about how fast was fast enough for him must be related to his own self-esteem as well as comparisons he made of himself against
others in the course. When he tried to read faster his comprehension was lower which was "frustrating" and therefore, "uncomfortable." Michael didn't see much purpose in the shadowscopes perhaps because he felt satisfied with his "reading ability" and saw the increased speeds as a detriment to his comprehension which he most wanted to improve.

During the quarter after the reading and study skills course, Michael reports he just "fell into" using many of the course concepts because they made sense. He used the course textbook as a reference to refresh his memory about how to do the techniques.

Some techniques that Michael carried with him into the new quarter included his variations on taking notes from texts and lectures. At one point in the course I mention the use of tape recorders as study devices. Michael really locked into this ideas and now tapes all his courses. After first taking notes from a text book, he goes to class and tapes the lecture. He tries to take some notes from the lectures, but this is not his main focus. Instead, he sits and listens trying to absorb the information as a whole. Then, as mentioned before, he takes notes from the tape, at home where he can concentrate on making connections between the text material and the lecture material. He reports that this way he can concentrate better and not feel obliged to write down everything the lecturer says for fear he won't remember it or hear it again. At this time he concentrates on detail and begins to identify the important information in the class and see how text- and instructor-given ideas relate. This way
too, Michael can note differences in the wording of important ideas and omit notes that the instructor has mentioned as unimportant.

Lastly, Michael has found that constant review — even reviewing notes for a half-hour a day — helps to prepare for tests. Coming into the course Michael was aware that his test preparation strategies were insufficient. At that point he was relying on memorization and cramming the night before a test. Continuous review made sense to Michael which enabled him to experiment with different ways to take notes and review for tests. This reduces his test anxiety and boosts his confidence about himself as a learner.

Michael reports that by taking the reading and study skills course he was able to identify weaknesses that he didn’t know he had. In the final analysis, he found that he’d become able to adjust his reading of different kinds of materials and that overall, the enhancement of his attitude and self-confidence made him feel more in control of his learning.

I truly believe that this course was an empowering experience for Michael. He found a place where application was valued and sought out, where difference was ok both in adapting to being a student and learning about oneself. Michael was heard — Michael spoke up and processed information the way he needed to in this class and therefore felt the ability to do the same in other courses. This course supported and fostered the introspective nature of Michael meaning making process for learning.
Moe: Scared, motivated, and growing

Introduction to Moe.

Moe is a 45 year old Vietnam veteran. Despite being shot twice, being blown up in a mine, and being run over by a three-quarter ton truck while in 'Nam, Moe originally said, "They never got me." After returning with "survivor's guilt" and later cancer probably caused by Agent Orange, he not only had a shattered pelvis but a shattered life; he concludes, "But they really did get me." Moe is thankful now for ice cubes, showers, shopping malls, and school because eight years ago he was homeless and an alcoholic.

Moe now lives in a fairly affluent part of town with a woman he married several months after the study took place. He is also a proud grandfather. He makes twelve dollars an hour as a handyman for construction companies, having made $600 a week at one time as a plant manager. The Veteran's Assistance program (V.A.) helped him get into the community college. Although an occupational battery had suggested he become an x-ray technician, due to his physical problems, including the fact that he can not stand for long periods of time, the counselor at the V.A. recommended Moe go into legal-assisting. Having successfully completed several quarters at the community college, Moe later reported that he'd really like to get a degree in history; however, the V.A. will not back him on that because "there aren't any jobs in that field."

Both of Moe's parents and his sisters received college educations, with his father ultimately becoming the art director of the state historical society. Moe reports
that his mother had more abilities than his father; however, she was ill most of her adult life and seldom worked. One of his sisters teaches gifted students and has two master's degrees. Moe was happy to report that his own daughter has received her GED and enrolled in the community college for financial management three quarters after he himself had begun there.

Moe grew up in an Italian-speaking neighborhood where as a youth he bailed hay to make money. As a high school student, Moe took all college-preparatory courses. Math was not Moe's favorite subject, except in knowing how to figure handicaps and count his winnings at the race track. Nonetheless, he received A's in music and history and received a music scholarship in percussion to the local state university.

Instead of taking the scholarship, Moe joined the Marine Corps. Moe did two tours in Vietnam before being sent back to the States in a wheelchair. Once back in America, people spat on him while he habitually continued to be on the look-out for snipers. He was in and out of institutions trying to deal with "survivor's guilt" and even spent some time in jail. Moe's recollections of Vietnam are dreary and scary. Only recently has he come to understand how the military had dictated all his actions which led him to drinking. He explains, "And I proceeded to drink because I didn't want to feel. I didn't want to be responsible, because when I was responsible people died." This fear of responsibility may have added to his fears when first starting at the community college.
Moe's only prior experience with college life was several beginning English courses that he took through United States Armed Forces Institute Correspondence during the year he was laid up in the hospital. When he returned to the states he attempted to enroll at the local state university where five years earlier he had been offered a scholarship. He was told, "Mr. D., we really don't care for your type." Here again, another potential strike against the institution of education for Moe, adding to his apprehensions about success in school and lowering his self-esteem.

Despite all that seemed to point him away from schooling, Moe enrolled at the community college with the help of the V.A. When Moe finally entered the classroom for the first time in thirty years, he found himself in my reading and study skills course. He told me then and continued to explain in interviews that he was "terrified" -- afraid of failure, afraid of the unknown. Combat he could handle, he said, but this was terrifying. In fact, in the interview he said that his fear of final exams his first quarter surpassed any fear he had known in Vietnam. In the beginning Moe said he relied on memorization for his early survival in my course and others. He said be memorized because that was the only way he knew how to deal with the material.

Moe found he could relax, however, as he daily learned and implemented the course materials from reading and study skills. He called the course "a consummate course" which taxed him in every way. When he first told me it was the hardest course he'd ever taken, I could not understand how this could be true. However, he explained that the course required him to use all his learning faculties -- reading,
writing, listening, and even math to figure his scores. Upon entering the course, he was afraid that he'd "killed too many brain cells." Fortunately, Moe found that his continued love for reading, his "thirst for learning and knowledge," and the reading and study skills course combined to shore up his self-esteem and confidence to the point that several quarters later he decided he would like to get his master's degree!

During the quarter in which Moe was enrolled in reading and study skills he also took a basic composition course and math from the developmental education department. He was not required to take any of these courses in this department according to his ASSET scores or his V.A. counselor. Although Moe resented the idea, they decided it would be best for him to get started this way given he hadn't been in school in thirty years. He claimed in retrospect that had he not built a basic foundation in these courses he would have dropped out of school immediately. However, he had apparently developed his love for learning which he had even in the military. Because he could read and write letters for his fellow soldiers and also received the New York Times, he reports that he was viewed as being a "rocket scientist." His commanding officer called him an "intellectual hillbilly."

This intellectual hillbilly now seemed to thrive on getting his education. He was so grateful and motivated — no longer by fear, but by the thrill of learning. Occasionally, however, fear returned. The quarter after the study took place, Moe experienced chest pains and paralysis in one arm due to his anxiety in a typing course. He claims, though, that the techniques, strategies and confidence that he gained in
reading and study skills remain the foundation of his mental growth and decrease in anxiety.

Having been set above his peers for being an intellectual in the military, Moe realized that by comparing his work to other students in his courses he indeed had "a shot at this!" This increased confidence seemed especially apparent in his writing courses in which Moe has been very content and successful. He has so many experiences from which to write stories and essays.

Moe says that a good student is someone who attends class, listens, and does the work. Like Priya, the ability to schedule time to study and to apply oneself is important to Moe’s concept of a good student. In the interview, Moe recounted his own final essay for reading and study skills in which he called listening "the cornerstone of being a good student." He saw attending class and trying to make sense of all the material -- texts, lectures, and such -- as putting together pieces to the "puzzle."

**Interpretation of changes due to course.**

With no expectations about the course due to lack of college experience, Moe was surprised by the reading portion of the course. Having been a "pleasure reader" in order to "escape," he thought he was a good reader. Through the course however, he found that he regressed a lot, meaning he often re-read lines, and was not a flexible reader, meaning he read different kinds of material at the same speed. He points out that now his eyes "just roll left to right and it expedites the reading." "For
some reason now," he says, "I don't miss as much when I'm reading." Getting all the pieces to the puzzle is important to Moe as he values a) attending class so as to not miss anything and b) reading more fluently now so he doesn't miss anything. This tendency may be a reflection of the "hypervigilant" behaviors he learned for combat.

Another surprise and benefit in the reading and study skills course for Moe was learning note-taking strategies. He has started to carry a clipboard and pen at work to jot things down. The "cardinal rule" that Moe says he learned in the reading and study skills course was "whatever the instructor writes on the board, write it down." He does this automatically most of the time. From time to time he sees something on the chalkboard and he says to himself, "I know that," but soon after he either remembers his "cardinal rule" or actually hears my voice reminding him, "write it down." Interestingly, he recounted that when he first heard this discussed in class he thought, "Well, I can remember that." This self-talk was somehow comforting and affirming to him. In addition, it affirmed for me that things that are useful and make sense to students are easily remembered.

As he took the course he learned all these things he did not know -- that even as a "good reader" he regressed, that he didn't know how to take notes, and that there were alternatives to cramming for tests. Moe credits the reading and study skills course with helping him identify and strengthen his weaknesses. I believe that his maturity, intellect, and intrinsic motivation should certainly be commended, given all that he had experienced in his life.
When asked what was difficult for him in the course, Moe quickly retorted, "The tests." His initial low self-esteem combined with the quantity of material that needed to be "retained" elicited Moe's anxiety. At first he thought he would do things "his way," but remembered that doing things "his way" found him homeless and drunk. So, he said, "I've learned to get out of my own way." Thus, his self-confidence grew as he started to practice the things that were discussed in class which included continuous review, writing down what the instructor says, and trying to apply the techniques in his courses. It is obvious to see how this course laid a foundation for Moe's college success by diminishing his fears and low self-esteem.

Moe describes his learning the material in the reading and study skills course as a process — "from day one in this class you started practicing the techniques and soon you were doing them in other classes." Specific techniques for test preparation that he incorporated as he learned them included highlighting answers in his textbook as he prepared each of the worksheets and mnemonics. By highlighting answers in the book Moe realized he would save time by not having to re-read the text, but instead could go back to the book when he wasn't clear about what he'd written on his worksheets.

Moe's use of mnemonics was informative for me as well. I had been skeptical of teaching this memory technique because it seemed to foster memorization which I was trying to discourage. Moe explained to me, as did a few of the other participants, that he used the mnemonic technique "just to get into my own comprehension." In other words he would create the "mnemonic-as-trigger" to "get
him rolling" with the information that he just knew and did not have to memorize. For instance, he explained that in a psychology course he needed to know five steps of a particular process; he memorized the mnemonic "THAPA" to set off his understanding of "theory," "hypothesis," etc. He could then explain each step from his own understanding. Moe confirmed that he knew it was a theory, and he knew what theory it was, "the mnemonic is the initial step to knowing" when recall is necessary.

This mnemonic-as-trigger technique is a way to organize or chunk ideas together so that they are remembered in a group and/or in sequence. As with other techniques and suggestions made in the course, Moe did not use mnemonics until they were introduced in the course. A close look at this third test shows his mnemonic written along side each question. In the same way, it is evident that when he reviewed his fifteen worksheets for the final, he took the time to create mnemonics for the lists of terms and ideas he needed to know for the final.

When asked if tests were necessary in college courses, Moe responded emphatically that they were. Tests, he insisted, are barometers for the instructor to know how students are doing. Personally, he said, tests "tax him into learning." Moe, however, mentioned in his journal about his preference in taking objective or essay exams that he would rather write a paper than do an exam.

For Moe, the process of using and perfecting study techniques continued into the following quarter. From the reading and study skills course, Moe had developed cues like "write that down" that were either automatic or directly drawn from his
memory as my voice or just from the course. Further, Moe explained that
"repetitious utilization of information" throughout subsequent quarters was a "learned
process" for him. He explained that he "had no other recourse" but to implement the
techniques he was learning in reading and study skills. Like Michael, Moe knows he
has learned something when he can apply it.

1. Carla proved to be an interesting study in whole-brain learning. For example, Carla
unconsciously revealed to me in the interview that she herself was well-rounded in both
the humanities and sciences; however, she just didn't put them together to acknowledge
them for herself. Further, Carla indicated that a good student was someone who is
"successful in all areas," dichotomizing "all areas" as math-oriented subjects, on the one
hand, and language-oriented subjects on the other. This dichotomy is comparable to the
right brain/left brain model of whole brain theories. Of additional interest, she explained
in a journal entry that she is left-handed and was forced to be right-handed -- further
indication that Carla was predisposed to her whole brain approach to learning. Though
she set up the right-brain/left-brain dichotomy between her mother being good at language
learning and herself being better at analytic learning, she indeed has qualities on both
sides: Carla has a BFA in interior design, "artistically" exercising the right hemisphere
of her brain, while loving math from the left side. However, the obstacle that stands in
the way was the difficulty she had writing about herself for her composition course. For
some reason, Carla is allowing this to be an obstacle in her developing as a student.

Functioning from both hemispheres then it is not surprising that Carla also seems to
function through both visual and auditory learning modes -- needing the colors on her
notes and being partial to listening to her notes on tape. Additionally, showing an even
more well-rounded learning style, Carla discussed her need for hands-on learning in the
form of going to class prepared to engage in the lecture and ask questions. This
preference for hands-on activity coincides with her enjoyment of math and science in
which she got to do problems, rather than read about ideas in English and history.
Fortunately for her, Carla does bring these kinesthetic activities to her studying with her
note-taking strategies described earlier and her need to be an active participant in class
discussions. These strategies improve her ability to learn, as well as "look good" to
instructors. They also represent learning techniques that exist for students with the
second and third perspectives.
CHAPTER VI

DISCUSSION AND IMPLICATIONS

Introduction

The analysis of data for this study, combined with all that I have previously intuited while teaching the reading and study skills course led to the Development of Learning Perceptions Model was developed to examine the research questions after other learning theories were considered. While the Model is discussed at length in CHAPTER II: Development of Learning Perceptions: An Applied Model, it is presented on Table I on the next three pages.

The remainder of the chapter will address each of the research questions individually. The research questions were as follows:

- Do these at-risk, non-traditional students interact with the course concepts to create surface and/or deeper personal meaning?

- How do students reconcile the tension between displaying surface knowledge and developing deeper personal meaning?

- What are the issues that influence the development of personal meaning for this course?

Lastly, the implications of the study will be discussed in the final section.
### Table 1: Learning Perceptions Model

<table>
<thead>
<tr>
<th>Perspective One</th>
<th>Perspective Two</th>
<th>Perspective Three</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mindset:</strong> Product oriented</td>
<td><strong>Mindset:</strong> Attention to organization</td>
<td><strong>Mindset:</strong> Construction of information for engagement/Interaction</td>
</tr>
<tr>
<td>- grades</td>
<td>- conscious effort made to organize time</td>
<td>- open to concept accommodation and change through interaction with self, other students, peers, texts, and instructors</td>
</tr>
<tr>
<td>- tests</td>
<td>- conscious effort made to organize work</td>
<td>- open to using and incorporating information across disciplines</td>
</tr>
<tr>
<td>- possible future reference</td>
<td>- conscious effort made to organize ideas</td>
<td>- values learning as a life-long process</td>
</tr>
<tr>
<td>&quot;Learning&quot; through memorization</td>
<td>- attention to meaningful concept acquisition</td>
<td>&quot;Learning&quot; through meaning-making and application</td>
</tr>
<tr>
<td>- rote memorization — little meaning attached, easily forgotten, not readily accessed from memory without exact clues</td>
<td>- &quot;Learning&quot; through organization of meaning</td>
<td>- incoming facts automatically fit into already existing schema or new schema are readily built</td>
</tr>
<tr>
<td>- mnemonics-as-trigger — mnemonics used for recalling; still little meaning except through easy memorization associated with mnemonic</td>
<td>- awareness of existing schemas within self</td>
<td>- many skills and strategies easily learned</td>
</tr>
<tr>
<td></td>
<td>- constructs original schemas</td>
<td>- metacognition automatic or purposeful</td>
</tr>
<tr>
<td></td>
<td>- builds strategies for packaging raw information (facts) for retention</td>
<td></td>
</tr>
<tr>
<td>Perspective One</td>
<td>Perspective Two</td>
<td>Perspective Three</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Degrees of Involvement with Information/concepts</td>
<td>Degrees of Involvement with Information/concepts</td>
<td>Degrees of Involvement with Information/concepts</td>
</tr>
</tbody>
</table>
| - little application to assimilate raw information with existing knowledge | - memorization for comprehension: uses mnemonics as triggers for learned ideas that already make sense in order to avoid memory overload -- chunking and grouping of ideas in own | - seeming automatic comprehension of incoming ideas: "just know it"
<p>| - little metacognitive activity or awareness outside of strategies for rote memorization and triggers | - student feels safe enough in classroom or with instructor to clarify understanding of information organization | - intentionally and holistically relates facts across intrapersonal schemas and &quot;intercurricular&quot; schemas |
| - can perform only isolated skills required for course | - intentionally asks questions as part of meaning-making process | - views classroom as a place to experiment with ideas and to develop opinions with others |
| - believes order or organization of information is not to be tampered with; memorizes &quot;as is&quot; or verbatim | | |
| - rarely views classroom as a safe place | | |
| - absorbs facts mostly from texts and lectures -- little of self involved for comprehension | | |
| - struggles mostly to organize time and &quot;learning approach&quot; | | |</p>
<table>
<thead>
<tr>
<th>Perspective One</th>
<th>Perspective Two</th>
<th>Perspective Three</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perceptions and characteristics of learner:</strong></td>
<td><strong>Perceptions and characteristics of learner:</strong></td>
<td><strong>Perceptions and characteristics of learner:</strong></td>
</tr>
<tr>
<td>- student as sponge: facts are just &quot;out there&quot;</td>
<td>- understands the need for connecting ideas</td>
<td>- integrates new or incoming information from instructors and other resources in a life-long learning process</td>
</tr>
<tr>
<td>- concepts seen/felt as baggage or a load</td>
<td>- classmates and peers share strategies for remembering; compare strategies and results</td>
<td>- views information &quot;out there&quot; only in the respect that it is available and manageable</td>
</tr>
<tr>
<td>- understands that facts are there to be retained for recall, begins to understand that recall is required at varying degrees</td>
<td>- sees metacognition as valuable and therefore it becomes a conscious effort</td>
<td>- and perhaps even already part of own schemas to be recognized with time and application</td>
</tr>
<tr>
<td>- suffers disattachment to own cause for learning because of meaninglessness</td>
<td>- sees facts and ideas as &quot;out there&quot; but manipulatable, not yet internalizable</td>
<td>- automatically asks questions of instructors and classmates to help build personal meaning</td>
</tr>
<tr>
<td>- has difficulty reading due to overload of visual information and shortage of or inability to rely on non-visual information (F. Smith, 1985)</td>
<td>- approaches instructor and other resources as manageable</td>
<td>- continues to refine textbook reading and note-taking processes, may first read text to get overall idea and then go back to pick out important faces and details</td>
</tr>
<tr>
<td>- views classmates and peers as check points of reference to review facts and to compare grades</td>
<td>- approaches textbooks with developing note-taking skills; begins to understand the nature of textbook formats as useful in breaking a subject into manageable parts</td>
<td>- exhibits overall appreciation of learning</td>
</tr>
<tr>
<td>- is somewhat fearful of new or incoming information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- is often fearful of instructors and other resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- perceives reading textbooks as a slow, word-for-word process</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How Students Interact with Course Concepts to Create Surface and/or Deeper Personal Meaning

All five students in this study display characteristics of the Development of Learning Perceptions Model. While some of the students exhibit evidence of embodying all three perspectives, a few others hold one perspective or another more heavily, or are vacillating between two.

The third perspective of the Development of Learning Perceptions Model is the ideal mindset for college learners. While it builds on the other two perspectives, the third perspective is the most liberating and emancipatory of the three because of the value and appreciation of learning that results. The third perspective includes and goes beyond the definition for college success set out in CHAPTER I:

as a college instructor my perception of student success in college is built upon the following two inter-related goals:
1. students learn course materials,
2. students develop an understanding about their own learning process.

Students with the first perspective will accomplish the first goal for college success, and students with the second perspective will begin to satisfy the second goal. But students with the third perspective go beyond these goals. These goals are the foundation for a deeper more personal meaning-making that results in students who are life-long learners. Learners with this third perspective develop values and perceptions about learning as they come to understand their own learning processes and gain ownership of and passion for the subjects they endeavor to learn.
The Tension Between Displaying Surface Knowledge and Developing Personal Meaning

Of the five participants, Michael best exemplifies students with the third perspective of the Development of Learning Perceptions Model. Michael is an African-American man and wants to be a teacher. At some point in his life, perhaps while experiencing learning from the second perspective, he became cognizant of his learning needs. Then, as characteristic of the third perspective, Michael unconsciously honored his need for application by automatically asking application questions of himself and the instructors. Application is a necessary component in his meaning-making and learning process.

To illustrate this, during the interview I asked Michael what would happen if he was taking a science course and there was nothing scientific going on in his life to apply it to. He responded that the course would be difficult for him: In fact, this had happened in his math course during the quarter he was also taking reading and study skills. He took the course again the following quarter and found that the instructor showed how the concepts are useful in "figuring out" real-life problems. Michael explained that if he can not apply the information he then looks for meaning in what he is learning. He said, "You can teach me all day and if I don't see any meaning in what I'm learning or what I'm supposed to learn then it's meaningless."

One of the most striking things about Michael, as a third perspective learner, is his reliance on application in order to learn. During class Michael frequently asked questions about specific application of techniques or to verify the strategy that he was
already using with regard to a particular technique. Many of Michael’s questions related to how the concepts being discussed in the reading and study skills applied to the learning processes of his sons. This application process is an important part of Michael’s learning — it seems to be a conscious effort or possibly an automatic reflex in Michael’s meaning-making process.

The Development of Learning Perceptions Model shows that while students may have the abilities to function within the third perspective — that is, new information fits into already existing schema and strategies already exist for personal meaning-making — they may still rely on the second or first perspective when the new information is perceived as abstract.

Even though Michael, of the five participants, exhibits the most qualities of the third perspective, he too reasons within the first and second perspective at times. Michael demonstrated a concern for the deeper levels of learning, yet when he could not apply it, he returned to a first perspective way of retaining the information for tests. There were some course concepts such as the discussion on memorization and the mnemonics that were "not practical" for Michael because he "never thought that it would work for [him]." Nonetheless, instead of first perspective rote memorization, Michael chunked things together and looked for meaning to assimilate the new knowledge. Thus, in order to survive college testing, Michael does revert to a first perspective-type learning; however, as discussed in CHAPTER II, the return to first perspective is informed by the second and third perspective.
Michael recognizes he "knows something" — a sure sign of third perspective learning - because application is immediate. He automatically asks the questions because he is already aware from the second perspective that this is the way he learns best. In this way, Michael does not have to consciously formulate questions or scenarios to apply the information he is trying to learn as he did in the second perspective. It is as if he already had them formulated, which to some extent is true because the learning is conditionalized (Lesgold, 1988).

Another striking thing about Michael was his use of self-talk when describing his processes which demonstrated his having at least the second perspective of the Model. To some extent he becomes his own instructor -- leading to metacognitive learning and ownership of the learning process. For instance, during the interview Michael was explaining how reviewing on a consistent basis came naturally to him and diminished his need to cram for tests:

I kinda fell into it, I think. Like I need to save time. I really need to save time. And so I say, "So, if I'm writing notes from class, I think if I review these notes a half hour a day, then I won't have to cram." ... I felt that I wasn't forcin' it. I wasn't trying to overly concentrate. I just said, "Well, I'll just review this page. I'll review it then put it away." So by the time the test came around I'd reviewed it so many times then I was ready.

Such references to what he said to himself were made throughout our interview and were also the style which Michael used to ask questions or make comments in class. His comments showed that not only does Michael reflect on his process of learning,
he is able to articulate his thought processes -- a strong sign that Michael functions at the very least from the second perspective.

Moe, the Vietnam veteran who was once a homeless alcoholic, definitely functions within the second perspective but can vacillate into the third perspective. It is surprising to me that he does not hold more to the first perspective as a result of his military training. However, he may have transcended that strategic stimulus-response learning because the military experience prompted other ordeals in his life. Nonetheless, despite the mechanical reactions he learned in the military, Moe seemed to know that finding his own meaning was important. For instance, right from the beginning of the reading and study skills course, he answered worksheet questions in his own words rather than verbatim from the book. However, when looking at his worksheets after the course had ended, it was apparent that he relied heavily on authority for "correctness." Many of his answers were omitted with "white out" and the answers discussed in class were written in with different ink. Perhaps this was done to please the instructor or because he valued the instructor's views more than the texts or his own.

Given his personal fears, Moe could easily have given in to something in the course we called "intellectual despair;" he instead used what he was learning. For Moe, application moved him away from rote memorizing for my class. Through applying the techniques as they were applicable to his college life and learning to talk about and recite information as he studied it, Moe began to make learning
meaningful — a characteristic of the second perspective. It is quite possible that if Moe had a first perspective outlook on learning he would have quit school. However, due to his view of learning as a luxury, he was promoted to third perspective cognition and definitely second perspective behaviors.

In the member check, Moe confirmed my notion regarding the automaticity of learning and cognition in the third perspective — as courses become more advanced, students gain ownership of their learning strategies as well as the content. He has learned to use the techniques which come to him automatically as he endeavors to work with more challenging materials. He said that adding application to his learning strategies negated the need for memorization, except to the extent of using mnemonics-as-triggers. He also said that in these more challenging courses he was finding recitation — talking about the material out loud — as beneficial to his understanding and therefore his retention of material.

Priya, a woman educated in a convent in India and in an American school for children of diplomats, also displays characteristics of third perspective cognition while functioning with second perspective behaviors. I sensed that for Priya there is a fine line between the rote memorizing she did as a child and the learning by review and quizzing she does now. That line requires effort, time, building familiarity with the ideas by finding connections and ways to relate to it, rather than memorizing and regurgitating words under pressure. "General knowledge is a high priority for our culture," Priya explained, with the cognition of a third perspective student.
Knowledge, relating ideas together, is what she prizes -- a third perspective notion -- not being able to repeat back unrelated words.

The distinction between "memorization" and "review" is a key factor in Priya's success as a community college student. In her process of learning, memorization is remembering things that are interesting and come to her effortlessly; whereas, review involves effort, time, and enough interest in the subject to engage in it to find meaningful connections. This ability to relate the knowledge to something else, she said, is an advantage and relates to her need for time with material in order to "learn" it. For Priya, becoming familiar with materials means relating it to something and that takes time and effort -- a second perspective behavior with the desire to go to the third.

An important phenomenon occurs for Priya that helps distinguish her as a student who functions with the third perspective when the material is relevant. She said that the material for the reading and study skills course was "more logically put, more logically understandable, more common sense, more day to day." Little apparent effort was needed for Priya to prepare for my tests, but the course was indeed valuable to her.

Notably, reverting to first perspective rote memorization for the last test, due to her son becoming sick over a long holiday weekend, Priya felt unprepared -- she was aware philosophically that she had not "put in the time." But because the course made sense to her -- "it was common sense," she did well on the test by relying on her second and third perspective techniques once the test was in front of her. She said
that the information was in fact "second nature," and therefore, thinking rather than memorizing got her through the test satisfactorily.

Carla, the multi-faceted woman who surprised me with all her educational experiences, comes the closest of the five participants to being exclusively in the second perspective, which developmentally includes the first perspective. Nonetheless, it is clear that her learning behaviors function from the second perspective, although she is cognizant of deeper, more personal meaning to be had in school.

Carla's description of her learning process indicates that she values and strives for the learning that occurs with the third perspective. However, at the time of the study, like Mike P., she was working on moving from the first to the second perspective. Once she found herself in that second perspective, her metacognitive awarenesses were sharpened as she became cognizant of techniques and learning situations that led to more efficient and more meaningful learning.

Carla, nevertheless, seemed to understand that learning occurs at more than one level and in more than one way. She was able to describe the deeper knowing of a person with the third perspective in the Model, although she was currently capable of the second perspective. In fact, she said that even after the completion of the course she was conscious of going back to behaviors of the first perspective nature which emphasized facts rather than the organization of ideas. Having become aware that she was reverting back to rote memorization tactics, she found it necessary to
consult her reading and study skills course information to remind herself of the preferred learning techniques. Perhaps by color coding pens and paper, and adding notes to herself in the margins Carla acknowledged her need for a whole brain approach (see ENDNOTE CHAPTER IV).

It was Carla and Mike P. whose stories truly baffled me at first. But it was their stories that influenced me the most in developing the Learning Perceptions Model.

More than any of the other participants, Mike P. seemed to have been "doing school" and for this reason, he embodies the first perspective of the Development of Learning Perceptions Model. The college experience for Mike was definitely a means to an end, a hurdle to cross. His early experiences with school and the lack of support from his family contributed to this mindset.

Several comments and actual behaviors inform my belief that Mike P. may have been functioning in the first perspective. First, Mike prepared for my tests only the night before, as he seems to have continued to do in other courses. Nonetheless, in a discussion about what he anticipated struggling with in college, Mike told me, "You study, you get good grades." Thus, I concluded that "studying" to Mike meant getting ready for tests.

Further, studying to Mike P. seemed to be more about finding the time to study than about applying the information in meaningful ways. He continued to function to get the information for the test as he had done as a youth. Perhaps his
early schooling was so fragmented and meaningless that his thinking may continue to be fragmented and frustrating. For Mike, ideas will continue to bottle-neck and not be stored in useable schemas. Instead, he will continue to take in facts -- characteristic of a student with the first perspective in the Learning Perceptions Model. In the member check, however, Mike P. distinguished between the "learning" he did in high school and the learning he does in college displaying a move toward the second perspective. The distinction seems to lie in his attitude and perception of how the material may be used in the future. Mike said that in high school the material was learned just for the test. Now, however, he tries to learn it for future use.

His strategy of ascertaining the instructors' styles for lecturing and testing was another clue that Mike P. was "doing school." In my class, for instance, Mike discovered that the tests only required him to list and describe only four or five items from a list of seven or eight required on the worksheets. Tests that only require literal information will be a major obstacle for Mike P. to progress into other perspectives and find deeper meaning. For instance, when studying with Priya in a study session, Mike left the study session to ask me a question which pertained to the number of items within a concept he would need to know. This indicated to me that he was memorizing items rather than learning concepts. I encouraged him to know the concept as a whole rather than the individual items.

In the study session with Priya, Mike P. exhibited another characteristic of someone with the first perspective. The process that he and Priya went through in this study session was for Priya to read and discuss her notes aloud while Mike wrote
the information down. The two were very suited for their roles -- Priya as the teacher, reciting, and Mike as the passive student, copying for future memorization. In the interview, he said that he tried other strategies for preparing for tests and they did not work, so he returned to his previous behaviors of memorizing.

In the courses Mike P. took during and after the quarter enrolled in reading and study skills, the instructors’ values and uses of reading enabled Mike to continue avoiding reading. He does not value reading in some of the same ways that the other participants, like Priya and Moe, do. Thus, he reported that he did not practice the reading skills he learned in my course. This situation, I am afraid, only adds to Mike’s staying in the first perspective because it is not likely he will encounter multiple views on a subject if he does not read the textbook but just listens to a lecture. Further, just listening to lectures promotes passive information gathering rather than thinking about the matter and applying to other concepts in the course. He continues to rely on someone else to give and think through his course materials.

This is not to say that Mike P. is void of thinking -- he did report that when his mind would wander in class or while studying at home he would think, "Karen said not to do that." Like Moe, his awarenesses gradually became automatic, but started out as directly related to his learning in the reading and study skills course. Further, Mike valued putting things in his own words, so he was not totally dependent on instructors or books for his thinking. Some of what he learned in my class was applicable in other situations and he continued to build on those skills and awarenesses.
Just as Mike P. tried other strategies than memorizing and cramming for tests, he also analyzed and questioned strategies as they were presented on worksheets. In fact, on one worksheet he questioned the concept of studying last for the test that you have last by writing, "What if you have four classes in a row?" Here again, Mike's inability to continually review rather than cram the night before the test shows up. On the same worksheet, mnemonics are introduced and Mike penned in the question, "Is this a good or bad habit?" Here Mike reflects my concern that mnemonics leads to memorizing and he displays that he also questions the value of memorizing -- showing a move toward the second perspective.

What is not known is whether he is conscious of his own first perspective obstacles or if he is just responding to what he has gathered from me as the instructor. Nonetheless, what is apparent is that Mike P. does do some thinking about the reading and study skills course concepts and his own processes. However, little change is made in his thinking and less change is made in his learning behavior.

Meaning-making is either there from the start for Mike -- that is, he wants to take in information as if in the third perspective -- or the information gets memorized as facts somewhere within the first or second perspective. Mike puts it this way, "When I'm reading, the material must make sense to me in order for me to store it in long-term memory."

Interesting data about Mike P. concludes with his member check. He picked up a copy of his story which included some of this discussion section. We had agreed that he would read it and then call me to discuss it. However, several days later I
found the copy in my campus mailbox with his comments inked in with a red felt-tipped pen. In addition to the statement presented above from Mike's member check, he also added this comment which points to the interesting fact that school learning for Mike P. does not include personal meaning-making at the level described for perspective three of the Development of Learning Perceptions Model: "Do you really think most student do anything more than just get by?" Another comment speaks to the issues of time involvement, "rite of passage" beliefs, and the effects of school/non-school learning: "If I had the time to review and make meaning of something I would, but getting through school at 34 as fast as I can seems important too."

I believe that moving to the other perspectives of learning will come when Mike P. engages in a subject or course that is both meaningful but difficult, useful but complicated, and he is compelled to think about it another way. Mike affirmed this prediction in the member check when he wrote, "Maybe when I get to my core courses I might find more meaning in what I need to learn." He also informed me after the member check that in an accounting course he was taking, he could not learn formulas by rote memorization. More application of the principles was necessary to do well in the course. The instructor's tests and the class discussions were more about the application of the formulas in principle than they were about being able to recite the formulas at random. This contextualized learning will lead Mike into the second and third perspectives of the Model.
Issues that Influence the Development of Personal Meaning

The following four issues emerged as influencing these students' development of meaning. All but one of the issues revealed themselves as perspective-specific. The case studies are discussed to illustrate each of the issues.

Rite of Passage

This issue pertains to students' belief about college as a rite of passage, that is, their beliefs about higher education in terms of how it fits into their life. "Rite of passage" is associated with rituals and often with the need to change due to major events which are often associated with personal crisis. Pubescence, with all its physical and emotional changes, is often considered a "rite of passage" to adulthood. Similarly, college serves as a "rite of passage" both in the form of a ritual and a catalyst for change.

This belief about college as a "rite of passage" is clearly defined by the perspective a student has about learning. The determining factor is the degree to which students view college as a crisis or as a normal part of life. The students in the first perspective see college as a means to an end, namely a job. College is a hurdle to struggle over to get to the better paying or more satisfying job. There is a great deal of turmoil surrounding their getting through college while juggling other life roles. Students with the second perspective envision college with a bit more practicality and less crisis. They see it as a "necessary hurdle" — along the lines of the "Protestant Work Ethic." The culture these people belong to may see college as a
ritual. Those with the third perspective see life holistically with college as an extension of their life-long learning process — the hurdle becomes a bridge to cross for advancement. They are as passionate about the learning process and their growth as they are about the major field they eventually study.

First Perspective.

Mike P., as the student most heavily in the first perspective, quite clearly views his education at the community college as a crisis. In the member check he made clear to me that he was doing the best he could given his responsibilities of owning two houses, working part-time and going to school full-time. He wrote in response to reading my drafts about him: "If I had the time to review and make meaning of something I would, but getting through school at 34 as fast as I can seems important too." When I commented that he relied on the behavior of memorizing even though he is at some level cognizant of "meaning-making," Mike asked if "this is bad for me as a student? If I need to make meaning will I remember these things four years after I take more classes?" We see here a slight interest in learning for future use, but through all of our discussion, getting a degree was his primary concern with meaning-making being a "bonus" along the way.

Second Perspective.

The students with the second perspective, like Priya, view college purely as a "rite of passage" more than a means to a job or money. It was difficult to find data
to clearly distinguish students with the second perspective because as I got to know the
students, their individual reasons for coming to school closely resembled the third
perspective because of the deep personal meaning that job and school had for them.
But there are characteristics about Priya's learning that led me to believe she may fall
into this category of "rite of passage" believers. These students at the second
perspective see college as a "necessary hurdle" and part of a ritual. Priya did not
pursue a career like two of her younger sisters because she got married and had
children. She had a career of sorts, she said, because she designed for and "looked
after" the family's Indian garment store. However, I got the sense that a college
education was encouraged in her family. Priya's father is well-educated and
participated significantly in his children's education. College is not as much a means
to an end in this culture, but a way to get the "general knowledge" that Priya
described as important in the Indian culture.

Third Perspective.

Moe's story depicts a lovely scenario of the third perspective learner who
values education far beyond the degree and a job. School to Moe is a luxury, perhaps
even a reward as part of his healing process from his journey from Vietnam. Moe
had a scholarship to a local state college in music, but instead enlisted. Going to
school now is a privilege, as well as a way to get back to life as he once knew it. He
is proud that his daughter got her GED and began college in his footsteps. Though
college was probably viewed as a ritual part of life in Moe's family, on the return
from being a homeless alcoholic, Moe cherishes his education as a precious part of life. It is regaining his self-esteem and courage — to the point that he would like to continue and get a master's degree some day, despite what the Veterans Association has in mind for him - that makes learning meaningful in and of itself.

While Moe's story seems to be the happy ending type, Michael gives us a more practical, yet somehow magical view of the third perspective rite of passage belief. Perhaps because of the many years of practice, he, more than the others, has carried that learning process into the college setting.

Michael's ability for application and meaning-making stems more directly from his drive as a youth to know more about his culture than what he was learning in his regular school setting. At an early age, learning outside of school and learning for learning's sake was a part of Michael's life. Further, we see with Michael that schooling at this point in his life is not solely a "rite of passage" but part of his growth in a life-long learning process. It is important for Michael to know the relevance of what he is learning, how it applies to real things, and how he can connect it with his own non-school learning which not only includes information about his culture, but also his gift for writing. His learning extends almost magically beyond the college classroom, often times including his sons in the life-long process of learning.
Multiple Roles

For all participants, a distinguishing characteristic is that in addition to being a student, they are also spouses, parents, care-takers, home-owners, and/or employees. "Finding time," "making time," and "spending time" wisely are all big issues for non-traditional students. The ability to manage time and study efficiently is included in the goals of college success inherent in the course. For some of the participants, the added pressure of time constraints could either be an advantage or a disadvantage in their ability to develop meaning-making processes. Because multiple roles is an issue for virtually all adult students, there were no readily apparent defining features associated with each of the three perspectives.

Priya learned that as a person with multiple life roles, she must make the best use of her study time. With the second perspective, she learns about her own learning needs and satisfies them. In this way, she is learning more efficiently, yet depth and personal meaning are not sacrificed. Priya meets the second goal for college success, for instance, by recognizing that if she sees something in print or in words — it clicks better. It makes more sense to her.

Making an effort was no stranger to Priya's approach to learning in my course. From observation of Priya and from the data she supplied for this study, I found her to be a very thorough person. For instance, after the first worksheet assignment, she began writing her answers for the worksheets on her own paper — thus giving longer answers than most students. Further, the answers were usually in complete sentences
and in her own words — something I recognized that she values. Her papers were well-organized with visual cues such as numbers and indentions. Perhaps some were even re-written after our class discussions, although many had notes from class penciled in or in different color ink. Priya found that the time she spent being organized and thorough on a daily basis paid off and saved her time later.

Pressure to learn is frustrating for Priya due to her role as a mother and a student. Priya reported frequently that time and interest are necessary factors in her ability to learn information. This is not to say that if she doesn’t learn something the first time she gives up, but that being able to spend time with ideas and come back to them over a longer period is helpful to her meaning-making. Thus, learning to take her time, to become "familiar" with the information - indeed, being given the permission to do so - was enlightening to her and enhanced her second perspective position.

Another example of prohibitive time constraints for Priya was in testing situations. Priya reported on a test-taking reaction inventory that tests would be more bearable if she could do them alone and with no time limit. This, along with developing an interest and the notion of constant review rather than over-night cramming as she was conditioned to do as a child in the first perspective, emancipated Priya to learn with the second and possibly the third perspectives.

Unlike Priya, the pressure Carla experienced due to her troubles in the composition course and with her mother may have been a further catalyst for
understanding of all the concepts covered in the course. Pressure, necessity, and relevance are all issues that lead Carla to meaningful understanding of the course concepts. This pressure due to lack of time is a common problem for students working through the first to the second perspective. Pressure became a motivating factor for Carla.

It was important for Carla to do efficient studying. As she moved away from random memorization, she became aware of learning strategies that were efficient and led to meaningful learning. She could then spend more time with her ailing mother and perhaps dedicate herself to perfecting her writing for her composition course.

A further example of how pressure became a necessary and helpful element in Carla’s learning process is that she found by setting a timer when she reads she would play a sort of "beat the clock" game. She said she thought of this idea because of the "pressure" she felt in doing the shadowscope reading exercises. She found she concentrated better when a timer was ticking away. This also made her feel like it was "her time" in the midst of all that could interrupt her studying.

Given that he was maintaining two houses, working 20 hours a week and taking 18 credit hours at school, Mike P.’s concept of time and effort are very product and grade oriented, while the others focused on expediting the learning process for more meaningful or deeper reasons. Priya, Michael, and Carla all talk about taking the time and making the effort to review, to become familiar — things
which Mike P. would see as taking too long and probably not being necessary or rewarding.

**The Effect of School and Non-School Experiences**

As an extension of their multiple roles, many non-traditional students bring with them preconceived notions about what learning should be like. These notions about learning are derived from the "on-the-job" training these students receive and the many facets of their lives. Added to this mix, students often rely on memories of high school settings from over 10 years ago.

It is quite clear that prior experiences have shaped their beliefs and values about learning. The following stories illustrate the different ways students in each of the three perspectives have been shaped by their background. I have reversed the order of the discussion of perspectives because the first perspective links closely with the last issue to be discussed.

**Third Perspective.**

Priya's educational experiences in India, America, and with her family surely motivate the learning she described to me throughout this study. She came to realize that memorized words do not connect, let alone foster ideas. Memorizing as a child at the convent was about words, not ideas. Her use of words versus her understanding of ideas is demonstrated in her approach to preparing for a test now, however. For instance, along with constant review, she quizzes herself or has her
daughter quiz her. Priya checks to see that the words she verbalizes are similar to the ideas she has written in her notes. The quizzing is actually part of her daily review to see what she remembers from her meaning-making process.

Priya has augmented her school learning with the non-school learning she will gain as a hospital volunteer. This is characteristic of Priya as a second and third perspective student who is aware of her learning needs for hands-on, informal learning settings. In the volunteer situation she is able to observe, actually do some medical procedures, as well as ask questions as they arise. This affirms adult educational theories which state that adults need relevancy as well as self-esteeming learning situations.

The informal and formal school environments come together for Priya in terms of her test-taking needs. We saw before that pressure is a problem for Priya — launching her into first perspective behavior. Her best work is done when she has time to make connections. Similarly, time is a necessary element for Priya's comfort level and resulting success on tests. Priya reported on a test-taking reaction inventory that tests would be more bearable if she could do them alone and with no time limit. Once again supporting the learning style she is comfortable with in informal, non-school settings.

Second Perspective.

Carla had experienced a lot more formal and informal learning settings than I had imagined from my exposure to her in the reading and study skills course. Having
been a beautician, owning her own shop, working in real estate, becoming a citizen, working for the government in a computer-oriented job, Carla has learned many skills and had many experiences.

This is interesting to me for two reasons. First as an instructor, I realize that I did not get to know Carla as well as I thought I had. Getting to know her background would allow me to guide her in using it to her benefit: to help her tie in what she was learning with her past experiences and to boost her self-confidence by having her examine that she has been successful in other settings, educational or otherwise.

Secondly, I find it interesting that Carla did not share any of this with me. She and I talked quite a bit before and after class. We often discussed her struggles with college. It is interesting to me that she never took the opportunity to refer to situations from her past in which she had been successful. Perhaps this oversight is a reflection of Carla's belief in what "school" is, separating it from the learning that occurs in non-school experiences. I wonder if a trade school education in her mind is ranked as less valuable than the college education she is now pursuing. Of course, all of this may have just gotten overlooked because of the stress from her mother's illness.

To come full circle with my opening comment in this discussion of Carla, Carla had experienced learning in other settings. It is interesting that she does not utilize that or recognize her own potentials. Even after reading about herself in the member check, Carla's comment was that she "must be stupider" than she thought. She was not able to see that what I had written about her displayed her as
multi-talented and developing. Because I am uncertain as to Carla's view of school as a "rite of passage," I am unclear as to her values about learning. Thus, being talented or recognizing her talent may not be of importance to her. As I got to know her after the completion of the course, her beliefs were difficult to uncover as they all seem buried in the other turmoils in her life.

First Perspective.

Mike P. continually referred to his learning process from the one-dimensional stance of a student with the first perspective. Making learning meaningful seemed to be a luxury rather than a necessity. His busy schedule may have attributed to that in part. Perhaps finding meaning was difficult for Mike because he was functioning the only way he knew how — as he did in high school. Perhaps he knew he was getting by with my course — he said it was easy, and therefore, unlike Moe, did not put it to use and practice it, but just treated it as material to learn, to get by in my course. Similarly, Mike makes continual referral to not doing things — like reading the textbook when the instructor said it was not necessary — if it would "waste his time. His early experiences with reading in school may likely influence his decision to avoid reading now. He seems to do only what he needs to do to pass courses from a first perspective rather than engage in learning as a life-long process — acknowledging what he may already know or how the knowledge may be of use to him in the future.
The Role of the Instructor

The instructor of any class represents the key to the development of meaning-making among students. There is no content that is inherently boring, interesting, or meaningful. No content exists context-free — there is always a reason for engaging in it, a need for application and connection. The most important role of the instructor, then, is to help students discover their individual relevancies. Instructors are the catalysts for learning, bringing meaning to the curriculum and fostering students through their transitions from perspective to perspective.

The following section describes students’ perceptions of instructors they have encountered as well as their descriptions for what they would prefer to have instructors be like. Specific implications for instructors with regard to the findings of this study are discussed in the final section of this chapter.

First Perspective.

The role of the instructor will be key in Mike P. beginning to develop into the other two perspectives of learning. In order for instructors Mike encounters to influence his progression through the first perspective to the second and eventually the third, they need to be structured and motivational. This will serve his first perspective needs that will lead to the second perspective of recognizing his own learning style. The instructors will also need to provide opportunities for Mike to think for himself with hands-on approaches to learning and testing.
Mike P., then, from the first perspective, described a good teacher as someone who creates an environment of respect and strictness. Mike felt that college instructors "need to force" students to do their studying -- this requirement may stem from Mike's existing need for extrinsic motivation remaining from his high school days. I believe that as Mike advances through his course work this need to be forced will diminish as he develops personal interest and ownership of his college education. Instructors of non-traditional students must be aware of the varying degrees of structural needs that range amongst students.

A further example of the need for structure is seen in comments Carla made to me several quarters after the study when Carla enrolled in a spelling and vocabulary course with me. Recognizing that practice and deeper understanding "make perfect," she commented that she wished she could take the course over again to "instill it" in her. This comment shows Carla's reliance on structure to impel her to continue to practice and learn reading and study skills that will be useful to her as she continues her education. This reliance on structure is indicative of persons with the first perspective who have not quite learned how to rely on and trust their own metacognitive intuitions to advance into deeper, more personal meaning-making.

While her motivation to work ahead and on her own to discover her own short-comings is characteristic of further perspectives which begin the process of finding her orientations toward learning in the world, Carla's need for and regard for instructors as having a mediating roles is characteristic of the second perspective of
the model. Carla may not be aware of it, but she can probably easily access information from her memory if it is something that she is or would be good at — such as numbers or interior design. Like the other participants, I predict that Carla’s awareness of this capacity will develop as she is put in positions to test and demonstrate it. My fear is that the "school" setting inhibits the natural ability to use experiential and meaningful learning.

Second Perspective.

Moe relies on his instructors to be confident so that he can be confident. He feels that "good teachers" should be well-versed in their subjects. Like Carla, Moe expects teachers to be able to answer his questions by explaining them in a way he has not thought about. He also values instructors who are consistent with materials and present information in ways that "give you time to grasp things" because if he doesn’t "retain it or utilize it, it doesn’t mean anything." Like Michael, direct application improves Moe’s likelihood for "learning" something.

As shown earlier, Moe is "other-oriented" — instructors will need to be aware of this and create situations for interaction amongst students. Especially in his first quarter, Moe found that with no other way to judge how well he was doing, he could look around him and compare himself and his work to his peers. Unlike the military, he was not equally trained with his peers; his classmates came from all different experiential bases. Adding in the fact that he did not trust himself as a recovering
alcoholic and homeless person, he often judged his own progress or potential for success on the progress or success of his fellow classmates.

In the interview, like Mike P., he often referred to other students in his classes to explain how he knew he was doing well or going to "have a shot at this." He even admitted on a test reaction inventory that he secretly hoped others in the class would not do as well as he would. Given his comment that being responsible led to people dying, it is not surprising that at least at the start of his college career, Moe relies on others to validate his success -- be it correct answers on a worksheet or another student's note-taking or paper-writing strategies. The unfortunate aspect of this is the competition that is often built into traditional classrooms. Safety, in the way that learning clubs (Smith, 1985, 1986) are constructed will be important to students development through the perspectives of the Model.

Moe accepted all my comments and suggestions as constructive and never seemed to cave in from "intellectual despair." This is not to say that he made changes just because they were suggested by an authority figure, but he may have also seen the value in making the change. Instructors will need to be sensitive to students' prior experiences with authority. Environments in which the teacher is a facilitator or learning partner will promote self-esteem and diffuse competitive comparisons amongst students.

Priya's learning relies heavily on getting information fed to her orally, or perhaps more importantly, by having an instructor supply the information through
examples. Her preference is also reminiscent of Smith's learning clubs (1985, 1986). It is helpful for Priya to hear others "think about" the information -- how they relate and make meaningful connections with the material. This social aspect of Priya's learning process is related to her need for time to get to know a subject which may stem from her family's values. Education and learning were valued by Priya's family where her father spent time telling his daughters about philosophy, history or astronomy. Perhaps this is a basis for her need to hear others think out loud. Further, her experiences in an international school in Manhattan where she recognized and valued the diversity in learning styles and techniques amongst her peers may have also opened the door to her reliance on others in her "acquiring knowledge."

**Third Perspective.**

Relevancy to application is a key factor for many adult learners. I asked Michael what would happen if he took a science course and there was not anything scientific going on in his life. He said it would be difficult. A good teacher, then, to Michael in the third perspective, is someone who fosters applicability and the "meaningfulness" of the concepts. If this does not occur he gets bored, tunes out, or learns it at a very simple level for the sake of a test. This occurred during the study with the concept of mnemonics as well as in the math course he was taking. Like Carla and her composition course, Michael repeated the math course the following quarter and was much more successful due to the familiarity. Further, the instructor explained the relevancy of each math concept.
Implications of the Study

There are three primary areas the results of this study inform: a) instructors and curriculum developers, b) the learners, and finally c) further research.

Instructors and Curriculum Developers

Core or foundational courses need to more meaningfully connect to other content areas. Instructors need to be able to articulate the connections between content areas within programs so that students can better understand the relevancy of the information they receive. This communication of meaning is critical for students to transcend the "school-as-hurdle" mentality that needs to be overcome if they are to develop an appreciation for learning that is characteristic of the third perspective. These courses must allow for application and hands-on learning so that the relevancy issues are addressed.

The egg carton syndrome -- in which instructors are kept in their own section -- must be changed. We need to make omelets with the student as the center. Instructors need to consider and share with the students how information from one course is applicable to other courses, as well as to life. Students need help in constructing life-long schemas for the information they are exposed to both in and out of class.

Instructors and curriculum developers must be trained first and foremost to understand the three perspectives of the Development of Learning Perceptions Model. It is clear that the goal of educational institutions should be to promote the
achievement of third perspective cognition and behavior. Instructors face institutional barriers which often times are structured to accommodate traditional students who are developmentally in the first perspective. Additionally, most instructors have reached the third perspectives in their own lives and often struggle to relate the learning process to individuals who possess either of the first two perspectives. Instructors should make efforts to understand the issues involved in developing the three perspectives of the Model.

Further, instructors need to become more aware that the skills they teach do not exist in isolation. Study skills instructors need to go beyond the introduction of the basic skills which include more efficient methods for reading, writing, and calculating. They need to establish curriculum that encourages students to use their knowledge in applied ways. One possibility is to set up a sequence of "real world" situations. First, the students could practice their note-taking skills by listening and taking notes during a "mock" lecture. Then students could attend and take notes at a non-class lecture given as part of a lecture series, and finally, use their newly developed note-taking skills in another course they are taking for credit. At each phase, students would be given feedback, and as importantly, be encouraged to critique the process and analyze their own growth. This would allow instructors to get to know their students, as well as establishing an environment for peer interaction -- all of which were significant characteristics students in this study favored.
Ideally, study skills classes should resemble the applied learning laboratories that exist in some colleges of education to foster the development of teaching skills by exposing future teachers to a steady series of field-based activities. In such a learning lab situation, study skills students would be given the option to be evaluated and graded by the use of individual contract systems that would allow for the recognition of various stages of development in the Development of Learning Perspectives Model.

**Learners**

The "one size fits all" motto must be reconsidered. Students have differing perceptions about what school is, why they are in school, how it should fit into their lives, not to mention how to go about learning course materials. Researchers need to build constructs of learning that acknowledge the learning theories that founded the Development of Learning Perceptions Model.

With instructors as guides, students can cognitively move from perspective to perspective as necessary. Students need to be made aware that when they are interested in subjects they can begin to function within the second and third perspectives. But students early in their college experiences may need to consider the first perspective behaviors and cognition, strategizing how to develop to the more meaningful and efficient perspectives. In a perfect world where virtually every setting can be viewed as a "classroom," and learning is no longer considered to occur in the exclusive confines of schools, individuals who function from the third perspective can
derive meaningful learning from almost any context, becoming universal life-long
learners.

Further Research

Finally, as with most ethnographic studies of this nature, many unanswered
questions arose that are worthy of further study. Some of the more intriguing ones
follow:

1. The Development of Learning Perceptions Model needs to be tested in various
   contexts to see if the third perspective or indeed more perspectives develop as
   the non-traditional student advances through school. Further, what happens to
   them when they get the jobs they were seeking by getting a higher education?

2. How do we deal with "requirements" that appear to students to be abstract and
   non-applicable?

3. How does "school" seem to inhibit experiential, incidental, reflective learning?
   What can we do to prevent this?

4. Is the need for structure in a learning environment perspective-specific or is it
   a learning style preference?
5. How does the notion of "application," which is a key element in the learning development of these students, played out for liberal arts students or for students who are taking courses for learning's sake? How can this information inform educators about developing third perspective meaning-making processes?
COLUMBUS STATE COMMUNITY COLLEGE

Developmental Education

COURSE AND NUMBER: Reading/Study Skills - 1812

CREDITS: 3  CLASS HOURS PER WEEK: 3  LAB HOURS PER WEEK: 0

PREREQUISITES: 1811 or Asset score of 15 or above  CONCURRENTS: None

DESCRIPTION OF COURSE: Reading/Study Skills is a course aimed at reviewing how to study and read more effectively.

GOALS OF COURSE:
1. Students will identify reading/study problem areas.
2. Students will take organized notes from textbooks and lectures.
3. Students will organize their study time.
4. Students will use appropriate techniques on tests.
5. Students will increase reading speed and comprehension.

EQUIPMENT AND MATERIALS REQUIRED:
Shadowscope reading pacers, controlled reading books, Timed Reading books, 3-ring notebooks.

TEXTBOOKS, MANUALS AND REFERENCES:


GENERAL INSTRUCTIONAL METHODS:
Handouts, large group discussion, small group discussion, overheads, demonstrations, movie, worksheet.

STANDARDS AND METHODS FOR EVALUATION:

Tests = 400 points
Study Skills Worksheets = 150 points
Reading Exercises = 150 points

656 - 700 = A
607 - 655 = B
535 - 606 = C
480 - 534 = D
Below 480 = E
I. Diagnosis
   A. Strengths and weakness
   B. Speed and comprehension

II. Notetaking
   A. Textbook notes
   B. Underlying
   C. Signs and Signals
   D. Lecture notes

III. Studying
   A. Time Management
   B. Dictionary
   C. Concentration

IV. Taking Exams
   A. Memory techniques
   B. Test anxiety
   C. Objective exams
   D. Essay exams
   E. Final exams

V. Reading Skills
   A. Six-Way Paragraphs
   B. Timed Reading
   C. Reading Lessons
   D. Skimming

DATE May 1991
## UNIT OUTLINE

**COURSE AND NUMBER**  
Reading/Study Skills - 1812

**UNIT** 1  
**TITLE:** Introduction/Diagnosis

**APPROXIMATE NUMBER OF CLASS AND/OR LAB HOURS**  3/3

<table>
<thead>
<tr>
<th>UNIT CONTENT</th>
<th>SUGGESTED INSTRUCTIONAL METHODS</th>
<th>UNIT OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Discussion of Course Syllabus</td>
<td>A. Hand out course syllabus</td>
<td>Students will:</td>
</tr>
<tr>
<td>B. Department Student Information</td>
<td>B. Hand out information sheet</td>
<td>1. Read the course requirements, policies and grading procedures.</td>
</tr>
<tr>
<td>C. Strengths and Weaknesses</td>
<td>C. Handout - &quot;Bad Habits.&quot; Class discussion</td>
<td>2. Change their own &quot;bad habits.&quot;</td>
</tr>
<tr>
<td>D. Beginning Speed and Comprehension</td>
<td>D. Handout - Beginning Tests</td>
<td>3. Learn how to change them to &quot;good habits.&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Identify their strengths and weaknesses in reading and studying.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Know their beginning speed and comprehension in general and technical materials.</td>
</tr>
</tbody>
</table>
### UNIT OUTLINE

**COURSE AND NUMBER**  
Reading/Study Skills - 1812

**UNIT**  
UNIT 2  
**TITLE:** Notetaking  
**APPROXIMATE NUMBER OF CLASS AND/OR LAB HOURS** 6-9

<table>
<thead>
<tr>
<th>UNIT CONTENT</th>
<th>SUGGESTED INSTRUCTIONAL METHODS</th>
<th>UNIT OBJECTIVES</th>
</tr>
</thead>
</table>
| A. SQ4R Study Method          | A. Overhead lecture  
Handout  
Application of method of textbook chapter                                                          | Students will:  
1. Learn the steps in the SQ4R method and apply the steps to a chapter in College Student.  
2. Learn the steps in marking a textbook and apply to a sample article.  
3. Learn how to identify signs and signals in their textbooks.  
4. Learn how to listen in class and take lecture notes. |
| B. Marking Texts              | B. Spargo, pp. 55-88  
Underlying handout - small group work                                                              |                                                                               |
| C. Signs and Signals          | C. Spargo, pp. 61-64, 66067                                                                     |                                                                               |
| D. Lecture Notes              | D. Handout  
Spargo, pp. 151-154                                                                              |                                                                               |
# UNIT OUTLINE

**COURSE AND NUMBER:** Reading/Study Skills - 1812

**UNIT 3**  
**TITLE:** Studying  
**APPROXIMATE NUMBER OF CLASS AND/OR LAB HOURS:** 3

<table>
<thead>
<tr>
<th>UNIT CONTENT</th>
<th>SUGGESTED INSTRUCTIONAL METHODS</th>
<th>UNIT OBJECTIVES</th>
</tr>
</thead>
</table>
| A. Time Management    | A. Movie - "Time of Your Life"  
<pre><code>                  |         | Spargo, pp. 217-220                                                                 |
</code></pre>
<p>| B. Dictionary Usage   | B. Spargo, pp. 93-96                              | 1. Learn techniques how to manage time. Make a time schedule.                   |
| C. Concentration      | C. Spargo, pp. 143-146                            | 2. Learn procedure in how to use dictionary to locate needed information.       |
|                       |                                                   | 3. Use techniques to improve concentration while studying.                     |</p>
<table>
<thead>
<tr>
<th>UNIT CONTENT</th>
<th>SUGGESTED INSTRUCTIONAL METHODS</th>
<th>UNIT OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Memory Techniques</td>
<td>A. Spargo, pp. 135-138</td>
<td>Students will:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Use the techniques in studying for exams.</td>
</tr>
<tr>
<td>B. Test Anxiety</td>
<td>B. Handout</td>
<td>2. Apply the techniques while taking any test.</td>
</tr>
<tr>
<td></td>
<td>Test Reaction Handout</td>
<td>4. Apply techniques in taking essay tests.</td>
</tr>
<tr>
<td>D. Essay Exams</td>
<td>D. Spargo, pp. 203-206</td>
<td>5. Use the techniques in studying for final exams.</td>
</tr>
<tr>
<td>E. Final Exams</td>
<td>E. Spargo, pp. 187-190</td>
<td></td>
</tr>
<tr>
<td>UNIT CONTENT</td>
<td>SUGGESTED INSTRUCTIONAL METHODS</td>
<td>UNIT OBJECTIVES</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>A. Six Way Paragraphs</td>
<td>A. Pauk, 26 stories from Six-Way Paragraphs</td>
<td>Students will:</td>
</tr>
<tr>
<td>B. Timed Readings</td>
<td>B. Spargo, 12 stories from Timed Readings</td>
<td>1. Learn how to find main ideas, inferences and conclusions to improve reading comprehension.</td>
</tr>
<tr>
<td>D. Skimming</td>
<td>D. Spargo, pp. 117-120 Reader's Digest</td>
<td>3. Read stories to improve speed and comprehension with a reading pacer in technical materials.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Apply skimming techniques to general reading materials.</td>
</tr>
</tbody>
</table>
APPENDIX B

SAMPLE COURSE SYLLABUS
Development Ed. 1812 * Reading/Study Skills
Autumn 1992
Tuesday and Thursday

Instructor: Karen Becker   Dept. Office Phone Number: 227-2478

Text:
The College Student by Edward Spargo
Six-Way Paragraphs by Walter Pauk
[These two books are available in the bookstore. Handouts and textbooks from other courses should be used for practice.]

Credit: 3 quarter hours - Institutional Credit

Course Objectives:
1. To increase student's self-confidence.
2. To increase student's ability to use various reading skills on textbook materials.
3. To increase student's reading ability to a minimum of 10th grade level or the level required by specific technologies.
4. To increase student's understanding of all study skills techniques.
5. To provide practical application of all reading and study skills in the course.

Course Procedures: Reading and Study Skills 1812 will involve group and individual work. There will be discussions and demonstrations on how to do all the skills covered in this course. Practice is the key to improvement in reading and study skills. Therefore, you must complete all assigned worksheets and journals, and hand them in as assigned. Also, it is to your advantage to apply the skills and logic to class work as soon as possible — both in this class and in others. A 3-ring binder is suggested.

Grading: See separate sheet. NO LATE WORK WILL BE ACCEPTED!!! All work must be turned in on the same day assignment is listed on syllabus, unless otherwise arranged with the instructor. If you are absent, the work is due the day you return to class, and it is your responsibility to hand it in and do make up work.

Attendance Policy: After two (2) unexcused absences, five points will be deducted for each class you miss. In order to have an absence excused, verification of illness, etc. must be provided from a doctor or the like. A valid medical excuse is necessary to make up a test.
SYLLABUS - T-TH
Page 2

SYLLABUS
[Follow closely and be aware of changes that may occur!]

Week 1
Sept. 24
1. Discuss course content and grading system.
2. Fill out Student Information Sheet.
3. Nelson/Denny Reading Test (20 mins.)
4. Receive "Bad Habits" article.
5. Receive Packet #1 (Worksheets #1-5)

Week 2
Sept. 29
1. Discuss worksheets #1 and #2.
2. Discuss pre-test results.
4. Read speed and comprehension articles.
5. Assign Journal #2.
Assignment due: * Worksheet #1 "Diagnosing Strengths and Weakness," (p. 13)
* "Bad Habits" article
* Inventory Sheets (in packet)
* Worksheet #2 "Listening Effectively" (p. 151)
* Journal #1

Oct. 1
1. Discuss Worksheet #4.
2. Lecture and discussion on SQ4R Study Method for studying textbooks.
3. Apply SQ4R Study Method to own textbook. Bring College Student book to class.
Assignment due: * Read SQ4R hand out (in packet)
* Worksheet #4 "Building Vocabulary" (p. 43)
* Journal #2

Week 3
Oct. 6
1. Discuss Worksheets #3 and #5.
2. Practice underlining in class and finding signs and signals. Bring College Student to class.
3. Practice Left-to-Right Eye Movement.
Assignment due: * Worksheet #3 "Marking Texts" (p. 85)
* Worksheet #5 "Author's Signs and Signals" (p. 61)
* Journal #3

Oct. 8
1. Practice Left-to-Right Eye Movement.
2. Begin Six-Way Paragraphs. Bring text to class!
SYLLABUS - T-TH
Page 3

Week 4
Oct. 13
1. Review for Test I.
2. Practice Left-to-Right Eye Movement

Oct. 15
TEST I -- covers Worksheets #1 - 5 and SQ4R Study Method and "Bad Habits" article
Assignments due: * Hand in Packet #1
* Journal #4

Week 5
Oct. 20
1. Begin Reading Lessons with Shadowscopes (#1).

Oct. 22
1. Go over Test I.
2. Journal #5 in class.
4. Reading Lesson (#2).
5. Receive Packet #2.
Assignments due: * 12 or 14 of the 26 Six-Way Paragraphs

Week 6
Oct. 27
1. Discuss Worksheet #6 & 7.
2. View and discuss movie -- "Time of Your Life."
Assignment due: * Worksheet #6 "How to Study" (p. 217)
* Worksheet #7 "Dictionary" (p. 93)
* Complete Time Schedule according to instructions in packet
* Journal #6

Oct. 29
1. Discuss Worksheet #8.
2. Receive Journal assignment #7, 8, & 9.
3. Reading Lesson (#3). [Remember: If you've done 2 at 70%
then increase your reading speed on the pacetr!]
Assignment due: * Worksheet #8 "Concentration" (p. 143)

Week 7
Nov. 3
1. Discuss Worksheet #9 and #10.
2. Begin Timed Readings (#1 & 2).
3. Reading Lesson (#4).
Assignment due: * Worksheet #9 "Memory Training" (p. 135)
* Worksheet #10 "Taking Notes" from hand out in packet

Nov. 5
1. Discuss readings for Journal #7, 8, & 9.
2. Review for Test 2.
3. Reading Lesson (#5).
4. Timed Readings (#3 & 4).
5. Do Journal #10 in class.
Assignment due: * Complete the reading of F. Smith article for Journal assignment [take notes]
Week 8  
Nov. 10  
1. TEST II -- covers Worksheets #6 - #10 and movie.  
2. Receive Packet #3.  
Assignment due: * Hand in Packet #2  

Nov. 12  
1. Discuss Test II.  
2. Timed Reading (#5 & 6).  
3. Reading Lesson (#6).  
4. Journal #11 in class.  
5. Assign Journal #12.  
Assignment due: * Journal 7, 8, & 9 (notes and response)  

Week 9  
Nov. 17  
1. Begin skimming and reading Reader's Digest.  
2. Discuss Worksheet #11 and 12.  
3. Reading Lesson (#7).  
4. Journal #13 in class.  
Assignment due: * Worksheet #11 "Test Anxiety" hand out in packet  
* Worksheet #12 "Reviewing for Exams" (p. 187)  
* Test Reaction Sheets (in packet)  
* Journal #12  

Nov. 19  
1. Discuss Worksheets #13 & 14 and Essay Form.  
2. Reading Lesson (#8).  
3. Timed Reading (#7 & 8).  
Assignment due: * Worksheet #13 "Taking Exams" (p. 195)  
* Worksheet #14 "Taking Essay Exams" (p. 203)  
* Journal #14 (first draft)  

Week 10  
Nov. 24  
1. Discuss Worksheet #15.  
2. Timed Reading (#9 & 10).  
3. Reading Lesson (#9).  
4. Skim and Read Reader's Digest.  
5. Revise for Test III.  
Assignment due: * Worksheet #15 "How to Skim" (p. 117)  
* Journal #14 (Final Form)  

Nov. 26  
HOLIDAY  

Week 11  
Dec. 1  
1. TEST III -- over Worksheets #11 - 15.  
2. Reading Lesson (#10).  
3. Skim and Read Reader's Digest  
Assignment due: * Hand in Packet #3
Dec. 3
1. Discuss Test III.
2. Reading Post Test. Bring #2 pencil to class.
3. Summarize progress in course. (Bring a calculator.)
4. Review for Final Exam.

Assignment due: * Journal #15
* Hand in all lab assignments
  10 Reading Lessons  26 Six-Way Paragraphs
  12 Timed Readings  3 Reader's Digests

Week 12
Dec. 7-11 FINAL EXAM. T.B.A.

W.P.M. Formula
Words Per Minute)

FORMULA: \[ \text{W.P.M.} = \frac{\text{words}}{\text{seconds}} \times 60 \]
* Figure \( t \) seconds by multiplying each minute by 60 and adding remaining seconds.

ON PAPER: \[ \frac{\text{words}}{\text{seconds}} \times 60 = \text{W.P.M.} \]

ON A CALCULATOR: \[ \frac{\text{words}}{\text{seconds}} \times 60 = \text{W.P.M.} \]
APPENDIX C

JOURNAL ASSIGNMENTS AND ESSAY QUESTIONS
JOURNAL ASSIGNMENTS #1-5

Journal #1

* What do you remember about the way you were taught to read?
* What were your reading experiences at home and at school?
* What kinds of reading do you do now?
* What kinds of reading do you enjoy?
* Name what reading "bad habit" you have and how to overcome it.

Journal #2

In your own words, from your own experience, describe the difference between how YOU read for enjoyment and how YOU read a text.

OR

Given your WPM’s and comprehension from "Mighty Men" and "Grain Size," what have you learned about how you read different kinds of materials?

Journal #3

Practice the SQ4R study method on your own for this class or another. Describe how you will use the SQ4R method. Discuss what you’ve added or taken out of the process and why that’s the way you need it.

Journal #4

How do you motivate yourself to "get through" difficult reading materials? Describe what you become aware of that is a clue that you are in need of motivation and then describe in detail what you do to re-focus your attitude.
Journal #5

Choose one or two questions I asked you as I responded to your last four journal entries. Answer them to your fullest potential. Hand in the original plus your new response.

OR

Ask me a question about the class that will clear up for you what you’re supposed to be doing in this class. Then try to answer the question.
JOURNAL ASSIGNMENTS #6-10

Journal #6
(to be completed in class)

Journals #7, 8 & 9
5 pts. = notes
10 pts. = response

Directions:
1. Do worksheets #9 and #10.
2. Read and take notes on article "Problems and Possibilities of Memory" by Frank Smith. Hand in notes. (5 pts.) Use second article as background information for "Problems and Possibilities."
3. For 10 points: Relate what you learned about memory to how you
   - take notes in class
   - take notes from a textbook
   - prepare for a test.
   [In other words, how does LTM and STM get used differently in each of these study events? How is comprehension and memorization involved with the LTM and STM in these events?]

Reading and notes due:
Response due:
NAME: 

Journal #10
(Write your answers on this page)

1. What is your current WPM's from the Shadowsscopes?

2. Has your comprehension score stayed at 70% or better? If not, why not?

3. What is your average WPM's from the Timed Readings?
   (Add 4 WPM's together; divide sum by 4)

4. Are you reading faster with or without the Shadowscope? How is your comprehension when you're reading faster?

5. Because one of the goals for this class is to increase your reading speed and because we're measuring this increase as you do the Shadowscope and Timed Reading exercises, tell me about your progress based on your lab exercises so far, and what you're doing to increase your speed.
Journal #11

1. Have you read "The Paragraph" (p. 9-10) and/or "To the Student" (p. 13-21) in the beginning of your *Six Way Paragraph* book? If so, was it helpful? Do you have any questions about anything?

2. How will/has doing the Six Way Paragraph exercises helped improve your reading?

3. In terms of improving your reading, how are the Six Way Paragraph exercises different from Shadowscopes?

   Timed Readings?

   Reader's Digest?
Journal #12

If given the choice to keep writing journals and doing worksheets as we have OR just doing worksheets for 10 pts. (rather than 5 each), which would you choose and why?

OR

What happens for you when as you're studying you the material makes sense to you or you are suddenly able to make it meaningful and understand it? (AKA: "The Ah-ha syndrome" "the light bulb went on" and/or "By George I think I've got it!")
Journal #13

1. Summarize what you think is true about yourself as a test-taker based on your responses to the test reaction sheets in your packet.

2. After doing worksheets #11-14, what skills, ideas and/or strategies have you learned that will be the most helpful in making you feel more confident about test-taking? How will you implement these into your test-preparing and test-taking routine? How is this different from what you have done in test-preparing and test-taking so far?
Journal #14
(Attempt your best essay form)

Which do you prefer to take, an essay test or an objective test? Why? What is it about your second choice that you don't like?

* Skip lines.
* Balance the outline

Journal #15

You're the instructor of this course. Remembering that the final is cumulative, come up with an appropriate essay question for the final exam AND answer it! The essay question should be adequate for fulfilling 20 out of 100 points on the exam.
TEST 1

Essay (20 pts.) Answer the following question to the best of your ability. Be sure to answer all parts to the question.

What have you learned about study skills so far? Choose one study technique suggested in this class and explain

* how you've used it
  - include modification you had to make
  - try to use a specific example of when you use the technique to study/learn

* how it has helped you
  - improvements
  - how the improvements have shown up so far
TEST 2

Essay (20 pts.) Choose one of the following questions and answer it in your best essay style. Suggestions are given for ways to begin to organize your answer. (Be sure to *proofread* your answer before handing it in!)

1. Many of the worksheets, ideas, and hand-outs discussed in this class stress setting goals. These include goals for studying, goals for the next 6 months, and long term goals. **Name** one of your ACADEMIC goals that you have set for yourself **so far this quarter**. **Explain** the steps that you will have to take to accomplish that goal. **Describe** how you know you have reached or accomplished this goal.

   *You might want to first list or outline your response to be sure you include everything that's important to you and to answer the question; then write it out as an essay. Try to keep your answer to 1 to 1.5 pages.*

2. In the article on memory that I gave you, Frank Smith says, "Comprehension takes care of memorization."

   *Given our discussions and your understanding of that article, what does that statement mean to you.*

   *You might start out with an example of how you know this statement is true (or false) OR by defining the words "comprehension" and "memorization," and then go on with what the statement means to you.*)
TEST 3

Essay (20 pts.)
Please explain how YOU prepared for this test. (I'm not looking for the textbook answer!) Examine what you did differently from past experiences with tests. Comment on your memorizing vs. comprehending strategies -- which did you do? How did you do it? Why did you do it that way?

This is an essay, so remember to have
  an opening statement (restate the question, adding your main points),
  a body (supporting evidence/details),
  and a conclusion/ending.

Think (plan, outline, web) before you write! 5/20 pts. of your grade will be for your essay style.
FINAL EXAM

IV. ESSAY. Choose one of the following essay questions to answer in paragraph(s). Remember to include an introduction or topic sentence in the first paragraph and a conclusion sentence or paragraph at the end. (20 pts.)

1. Describe at least two ways in which ORGANIZATION is important to a student's success in college.

2. Why is it important for a student to have GOOD LISTENING HABITS? What obstacles might stand in the way of such good habits and how would you suggest someone overcome them?

3. Summarize your PROGRESS WITH READING SKILLS (reading speed and comprehension) over this quarter. Explain how well the lab exercises worked for you. You may want to explain how any of your "bad habits" have changed. I don't expect you to tell me about improvements if there weren't any. If there weren't any, tell me what stood in the way of that and if there were things that you tried to do to overcome them. I would like to know about your process of reading for speed and comprehension during this quarter. Just be sure to talk about your process of becoming an efficient, active, flexible reader using the objectives listed below for the different reading activities.
   - Shadowscopes in which the objective was to read stories to improve speed and comprehension with a reading pacer.
   - Six-way Paragraphs in which you read short articles and answered questions to sort out your difficulties with 6 main categories of comprehension.
   - Timed Readings in which you read articles striving for good speed and comprehension (70% or better without a reading pacer).
   - Reader's Digest in which you were to practice speed in pleasure-type reading. This was also a way for you to experiment with skimming an article.

Thanks for a great quarter! I've enjoyed working with each of you!

Happy Holidays!
APPENDIX D

"WHAT DO I ALREADY KNOW?"
WHAT DO YOU ALREADY KNOW?

This is a course in which you will develop reading and study skills as a college student. One good study strategy is to acknowledge what you know or would like to know before beginning a class or an assignment. This worksheet is a way for you and I to become aware of what you already know and consider to be true about yourself in terms of the topics we'll be talking about in this class. Please follow the directions below.

DIRECTIONS:
In Column A you will find the concepts of reading and study skills that we will be covering in this class. Read all of them first before doing anything. In Column B, next to each of the listed concepts, please answer the question: What do I already know about the following aspects of reading and studying? In Column C, next to each of the listed concepts, please answer the question: What do I know to be true about myself and my abilities with these concepts of reading and studying?

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Column C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note-taking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>during lectures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Column A</td>
<td>Column B</td>
<td>Column C</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Note-taking from textbooks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essay tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final exams</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Write down any questions or concerns you have about the things you've written about above:
APPENDIX E

"WHAT HAVE I LEARNED?"
WHAT HAVE I LEARNT?

You may recall having filled out a form like this at the beginning of the quarter in which you wrote down what you already knew about these items and what you knew to be true about yourself in regard to the items. Now as you complete this course, let's take a look at what you've learned about all these items pertaining to reading and study skills.

Directions: You will need two different colored writing utensils (i.e., a red pen and a black pen, or a pen and a pencil). You will use one color for each step.

STEP 1: Go through all the items on the page and answer the following questions next to each of the listed concepts. Use the first color utensil.

In Column B: What have I learned about the following aspects of reading and studying?
In Column C: What do I know to be true about myself and my abilities with these concepts of reading and studying?

STEP 2: Pick up your "What Do I Already Know?" worksheet from the instructor. With another colored pen or pencil, go through all the items and comment on how and why your understanding about these items have changed since you filled in the first worksheet at the beginning of the quarter. Then answer the question at the bottom of page 2.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Column C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note-taking during lectures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Column A | Column B | Column C
---|---|---
Note-taking from textbooks |  |  
Memory techniques |  |  
Test Anxiety |  |  
Objective tests |  |  
Essay tests |  |  
Final exams |  |  

In which category have you made the most significant improvement? Was that the category that you felt you needed the most work on when you filled out the worksheet at the beginning of the quarter? If not, what did you learn about yourself as a result of this class in those categories (the one you thought you'd need help with and then the one that you found you needed to work on)?
APPENDIX F

CONSENT FORMS
CONSENT FOR PARTICIPATION IN
AUDIO-TAPING OF READING/STUDY SKILLS
Developmental Education 1812
Autumn 1992

I consent to participation in research entitled *An Investigation of Personal Meaning-Making in a Community College Reading and Study Skills Course*. Karen Becker, the researcher and instructor, has explained the purpose of the study and the fact that she is audio-taping classes as part of her data-collection. I am aware that no data-analysis will take place until after the course is completed and the instructor has turned in grades.

I consent that statements and questions that I may add to the class during this quarter may be quoted in the written report of this study. To assure my anonymity and confidentiality I would like to be referred to by the pseudonym__________ in any written documentation from class tapes.

I acknowledge that I have had the opportunity to obtain additional information regarding the study and that any questions I have raised have been answered to my full satisfaction. Further, I understand that my participation in class discussions is expected as part of the course and that if I decide to discontinue participation in the study that this will not effect my course grade.

Finally, I acknowledge that I have read and fully understand this consent form. I sign it freely and voluntarily. A copy has been given to me.

Signed:______________
(participant)

Signed:______________
(investigator)
CONSENT FOR FURTHER PARTICIPATION
IN RESEARCH
Developmental Education 1812
Reading and Study Skills

I hereby give my consent to further participate in research entitled *An Investigation of Personal Meaning-Making in a Community College Reading and Study Skills Course*. Karen Becker, the research and instructor of the course, has previously described the purpose of the study. I understand that my further participation is without jeopardy to my completion of the course Reading and Study Skills, Developmental Education at Columbus State University.

I have freely chosen to further participate in this by (check those that you are willing to do):

- submitting all my written work from the course, including journals, tests, and worksheets with my chosen pseudonym written on each. I have been assured that after analysis all my work will be returned to me upon my request.

- working as a tutor which includes audio-taping sessions with tutee; keeping a journal about this interaction, and being interviewed during the process as well as next quarter.

- taping interactions with others in which the course is topic or becomes topic of discussion or is relevant to your understanding of the course.

- interview(s) next quarter to look at how course has paid off and/or how further meaning has been added to the course.

- extra journaling to reflect instances in which the course material is used in other life experiences.

I am aware that my grade will not be affected by my choices of whether or not I participate further in this study. I am also aware that no analysis of these materials will be made by the researcher until after the course grades have been submitted to CSCC. My anonymity will be protected by the use of a pseudonym I chose earlier.

Finally, I acknowledge that I have read and fully understand this consent form. I sign it freely and voluntarily. A copy has been given to me.

Signed: ____________________________

(participant)

Signed: ____________________________

(investigator)
APPENDIX G

QUESTIONNAIRE
January 25, 1993

Dear Study Volunteer,

Hi! Thanks for volunteering to participate in my doctoral dissertation study. Enclosed please find a questionnaire that I would like you to fill out. The purpose of this questionnaire is to gather some information about your experiences related to Reading and Study Skills 1812. The first section of the questionnaire asks you to rate statements about yourself BEFORE and during the course and the second section asks you to rate statements about yourself during and AFTER the course.

When filling out the questionnaire, please use the pseudonym (false name) you chose when you signed the consent forms last quarter. Once you have answered the 27 questions on the first section and the 27 questions on the second sections, please put the questionnaire in the enclosed envelope and mail it to me by Friday, February 5, 1993.

In the meantime, I may be contacting you to set up an appointment if you are willing to be interviewed. Also, many of you indicated on your consent forms last quarter that you'd be willing to tutor students this quarter. Let me know if you are interested -- I know of several students who need a tutor. Remember that this is a paid position through Columbus State and the Developmental Education department. Further, if you are willing to keep a journal for me this quarter about how your 1812 experience has come to play in your schooling, please contact me as soon as possible.

Please take the time to fill out this questionnaire at your earliest convenience. I hope this will be a nice opportunity to reflect on how you are using the materials from 1812 in your other courses. Please remember that neither your grade nor my opinion of you will be affected by your responses. My study will only be benefited by your honesty. Should you have any questions or decide to contact me about tutoring or journaling, please feel free to call me at home (■■■■■■■). You may also stop by the Developmental Education office (2nd floor of Franklin) to leave me a note, or try to catch me before or after my MWF 1-2 and 2-3 classes in Franklin 251.

Thanks for your prompt response & your time!

Sincerely,

Karen Becker
PART I
To complete Part I, think back to last September when you first started and during the time you took Developmental Education 1812. Please read each statement and rate the statements by circling: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), or Strongly Disagree (SD). Please do your best to give a true response and not one you think I want to hear. Space has been provided at the end of each section for you to write comments about your choices.

1. When I started 1812 last September I had difficulty reading.  
   SA  A  N  D  SD

2. Before taking 1812 I thought reading was boring.  
   SA  A  N  D  SD

3. When I started this course I saw reading as away to relax.  
   SA  A  N  D  SD

4. Before starting this course I thought reading was a waste of time.  
   SA  A  N  D  SD

5. At the beginning of fall quarter I believed I would struggle in college.  
   SA  A  N  D  SD

6. Upon starting 1812 I did not see any value to the course for me.  
   SA  A  N  D  SD

7. When fall quarter began I considered myself a good student.  
   SA  A  N  D  SD

8. When I entered this course last fall I needed to improve my note-taking during lectures.  
   SA  A  N  D  SD

9. Before taking 1812 I already had my own system for taking notes during lecture.  
   SA  A  N  D  SD

10. When I started 1812 I knew I had to work on my textbook note-taking skills.  
    SA  A  N  D  SD
11. Before taking 1812 I already had my own system for taking notes from textbooks.  

12. At the beginning of last quarter I believed the best way to pass a test was to memorize everything.  

13. Before this course, I already used mnemonics, I just didn't know what they were called.  

14. Prior to taking 1812, when I studied I crammed the night before a quiz or test.  

14. When I started this course I had test anxiety.  

16. Before taking this course I was sufficiently preparing for tests.  

17. Before taking this course I was comfortable taking objective tests.  

18. Before taking this course I was comfortable taking essay tests.  

19. Before taking this course I was comfortable taking final exams.  

20. When I started 1812 I didn't look forward to having to read.  

21. When I started this course I didn't think it would help me with my study habits.  

22. During this course I experimented with ways to get interested in my textbooks.  

23. Upon entering this course I believed the instructor would give me all the information.
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>24. During fall quarter I improved my ability to read by taking 1812.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
</tr>
<tr>
<td>25. By taking 1812 my attitude toward reading changed for the better.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
</tr>
<tr>
<td>26. I only took this class because it was required.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
</tr>
<tr>
<td>27. I took this class because I had some weaknesses that I wanted to work on.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
</tr>
</tbody>
</table>

In the space below, please write any comments you have about the things you've circled in Part I. Please indicate specific question numbers in reference to your comments.
PART II

Reflecting back over last quarter, what have you learned and experienced by taking 1812? Please read each statement and indicate whether you Strongly Agree (SA), Agree (A), are Neutral (N), Disagree (D), or Strongly Disagree (SD) with these statements. Your honesty will be appreciated.

1. This course helped me identify weaknesses I didn't know I had.  
   
2. Having completed 1812, I now know useful study techniques.  
   
3. I use the SQ4R study technique as introduced in class when reading a textbook.  
   
4. I am using the strategies I learned in 1812 to take notes during lectures.  
   
5. I use the highlighting and underlining techniques introduced in class while studying a textbook.  
   
6. I am using the same note-taking techniques for lectures that I used before taking 1812.  
   
7. I am using the same note-taking techniques for textbooks that I used before taking 1812.  
   
8. Because of 1812, I make a better effort to comprehend material.  
   
9. I now have strategies for dealing with a textbook that I think is boring.  
   
10. Because of 1812, I now use mnemonics to memorize long lists.  
   
11. My test anxiety has decreased because of taking 1812.
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td>In this course, I developed strategies for managing my time.</td>
<td>SA A N D SD</td>
</tr>
<tr>
<td>13.</td>
<td>Last quarter, I developed strategies for dealing with stress.</td>
<td>SA A N D SD</td>
</tr>
<tr>
<td>14.</td>
<td>I don't look forward to reading.</td>
<td>SA A N D SD</td>
</tr>
<tr>
<td>15.</td>
<td>I do more reading for enjoyment since taking 1812.</td>
<td>SA A N D SD</td>
</tr>
<tr>
<td>16.</td>
<td>Since taking 1812, I prepare for objective tests differently than I prepare for essay tests.</td>
<td>SA A N D SD</td>
</tr>
<tr>
<td>17.</td>
<td>Because of my experience in 1812, I review continuously rather than cram.</td>
<td>SA A N D SD</td>
</tr>
<tr>
<td>18.</td>
<td>In the future I will set up a separate study schedule for final exams.</td>
<td>SA A N D SD</td>
</tr>
<tr>
<td>19.</td>
<td>I now can read different kinds of material at different reading speeds and still comprehend well; I am a flexible reader.</td>
<td>SA A N D SD</td>
</tr>
<tr>
<td>20.</td>
<td>I realize that the techniques I learned in Reading and Study Skills could be used in my other courses.</td>
<td>SA A N D SD</td>
</tr>
<tr>
<td>21.</td>
<td>My attitude and self-confidence as a student improved because of this course.</td>
<td>SA A N D SD</td>
</tr>
<tr>
<td>22.</td>
<td>I feel more positive about my abilities as a college student because of 1812.</td>
<td>SA A N D SD</td>
</tr>
<tr>
<td>23.</td>
<td>I saw no change in my reading ability.</td>
<td>SA A N D SD</td>
</tr>
<tr>
<td>24.</td>
<td>I saw no change in my study habits.</td>
<td>SA A N D SD</td>
</tr>
</tbody>
</table>
25. I am comfortable with an instructor asking me my opinion about class topics.  
26. The instructor's job is to give me all the information I need to know.  
27. I didn't always know how to describe my progress with the reading labs. 

In the space below, please feel free to comment about anything you have circled on Part II. Please indicate specific question numbers in reference to your comments.
APPENDIX H

INTERVIEW SCHEDULE
1. Think back on all the classes you've taken in school. Which ones do you feel you succeeded in? Which one were you unsuccessful in? How did that make you function/react as a student? Define a successful student. Why? Be specific. What does this say about the student/values?

- Q. #5 -- struggle in college -- What struggle(s) did you anticipate?
- Q. #7 -- "good" student -- What is a "good student"? attitude toward rdg./learning/studying/tests

2. What were your expectations about the class before taking it? [content, procedures, teaching/learning] Why did you expect that?

Were there any surprises?

What were the strong points of the course for you?
- Were there any new situations or ways of thinking that you encountered?

What was problematic in the course for you? [worksheets, journals, labs, tests, discussions, concepts]

3. Did you use any of the course content to succeed in this course? Explain.

Do you think you could do as well or better on 1812 tests now that you've had a chance to practice and use them on your own this quarter?

4. Do you use the 1812 content now? How?
Use of Info now => Conditionalized knowledge

1. How are things going for you this quarter?
   - Do you use 1812 techniques, strategies, ideas in your classes this quarter? Which ones?
   - Did you just start using them or did you have to recall your 1812 experiences to put them into action?
   - Describe how you "recalled" the strategies?

2. How do you know when you've learned something?
   What does "learning" mean to you?

3. Don't think about just me or just this course, but once again from your experience with school, what makes good teaching?
   [=> process of learning; change]

4. What's your ultimate goal or agenda for getting a college education?
   Why do you need a college education?
Demographics
  age
  gender
  marital status
  technology/career goals
  life roles
  work history
    spouse
  no. of children/ages/schooling
  languages spoken
  ethnicity
  previous education
    spouse
REFERENCES


206


