

THE IMPACT OF A CAREER PLANNING AND DECISION-MAKING COURSE
ON FIRST YEAR COMMUNITY COLLEGE STUDENTS

by

Dorothy Cosby Cooke

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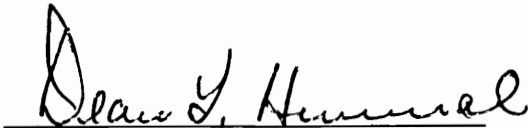
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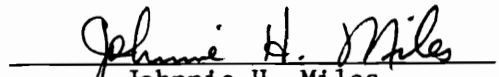
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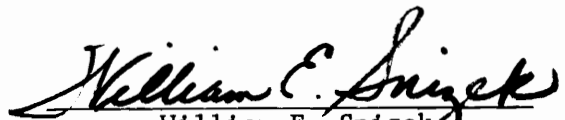
APPROVED:


Carl O. McDaniels, Chairperson


Dean L. Hummel


Johnnie H. Miles


Dennis E. Hinkle


William E. Snizek

May, 1982

Blacksburg, Virginia

This dissertation is dedicated to my family.

Gratitude is especially extended
to my husband, Nathaniel, Sr. and son, Nathaniel, Jr.
for their support over the years
in
my educational pursuits.

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Chapter 1

INTRODUCTION

Rapid changes that dictate the need for extensive training and retraining for tomorrow's careers are increasingly taking place in our occupational structure. In recent years, the economy of the country has experienced a period of economic stress, characterized by high unemployment rates and inflation. A vast number of technological advances has changed the nature and quality of living in the country. The rate of change in life styles has been accompanied by changes in values and standards of living and has surpassed the rate at which individuals have prepared for such changes.

The challenge with which every individual is confronted is that of being able to cope and make decisions which will lead to a productive and satisfying life in both the "work world" and "leisure world". A greater emphasis on developing career planning and decision-making skills is an indication that society is becoming more concerned about the career decisions faced by individuals.

Education has been concerned historically with fostering and facilitating the development of individuals for transition to the "world of work". However, transition from the "world of education" to the "world of work" has not occurred as successfully as expected. The problems of the undereducated, unemployed and the underemployed continue to plague our nation. The employed are becoming increasingly dissatisfied with the occupations in which they are engaged. Much

energy is being expended to improve the economy and reduce unemployment. Consequently, new programmatic aspects in education have been designed to respond to individual and societal needs.

Development of the concept of career education focuses on extending the academic world to the world of work by providing opportunity for development of skills of employability, adaptability and promotability. Work values are being stressed as part of personal values. Fusion of those elements of society that are external to the schools, but essential in a person's life in the creation of awareness and development of information bases upon which rational decisions can be made regarding life careers, are continuously taking place. The implication is that career education is a natural enhancer of transition from the "world of education" to the "world of work"; thus education must play a significant role in career education in resolving the problems with which the country is confronted.

Embedded in the concept of career education has been a focus on the significance of the development of self concept, awareness of careers, choice of careers, preparation for careers, and job entry, as well as advancement on the job. It is felt that if educational experiences are to be meaningful, they must contribute to one's total development in order to provide for adequate functioning in the modern world.

Several studies in recent years have indicated that American youth are in need of assistance in (1) understanding themselves, (2) exploring both the world of work and the world of leisure, (3) planning

and making decisions, and (4) implementing their decisions. In 1974, Prediger, Roth, and Noeth published the results of a nationwide study of eighth, ninth, and eleventh graders. Attention was focused on what the students would "say", "do", and "know" about certain aspects of career development. The findings indicated a sharp contrast between the students' need for assistance with career planning and the assistance they had been receiving. The results revealed that almost 80 percent of the respondents desired assistance with career planning while almost half of them had received either little or no assistance with their career planning. Even though almost half felt they could see a counselor when they wished, they expressed a need for career development.

Gallagher and Scheuring (1979) conducted a student needs survey at the University of Pittsburgh in 1977. Completed by 785 students, more than 50 percent of the respondents cited the need for more assistance in job information and job search strategy. Carney and Barak (1976) reported the results of their findings in a survey of 212 seniors at Ohio State University regarding their needs, use and satisfaction with student services, and demographic characteristics. It was revealed that the greatest concern the students had was choice of major and career.

Krupta and Vener (1978) in a report on Career Education and the University: A Faculty Perspective stated that "students lack reliable information regarding various majors and career possibilities", (p. 112). They continued by noting that even graduating seniors are

frequently not aware of their occupational goals. Their report revealed 6,395 changes of majors among the 14,000 undergraduate freshmen and sophomore populations at Michigan State University.

Vener (1965) referred to colleges and universities as the gateways through which one must pass in order to reach high level jobs. It is recognized that many freshmen enter college without being certain of what they want to do in life or even being aware of their potentials. Because a substantial number say "undecided" when asked about their intended major, guidance professionals are becoming increasingly concerned about providing career awareness and other activities to fulfill this need. Educational leaders have begun to confront the issue of career needs in different ways. Among the ways are increased personnel in secondary settings, establishment of career resource centers, and the offering of career planning courses. With regard to the post-secondary level, studies have been conducted to ascertain what is being done to assist college students with choosing majors and developing career plans.

In another study, questionnaires were forwarded to 1,521 placement offices listed in the 1972-73 edition of the Dictionary of College Placement Offices. Of the 656 usable questionnaires that were returned, 78 or ten percent of the institutions reported offering a course in career development. Fifteen (15) percent or 123 institutions reported plans to offer such a course. (Devlin, 1974)

Haney and Howland (1978) reported the results of a comprehensive study which was conducted by the American College Personnel

Association in 1975. Twenty-four hundred (2,400) four- and two-year colleges were surveyed and selected institutions were identified for a follow-up. Of the respondents, 353 institutions offered credit courses in career planning while 563 did not. Those institutions selected for the follow-up were the 353 that offered credit courses, and it was revealed that approximately 33 percent were offered for one credit while approximately 20 percent were offered for either two or three credits.

Regarding staff engaged in teaching the courses, the results indicated that counselors taught most of the courses - a total of 166 with placement personnel totaling 73 and faculty the least, 58. The findings revealed that the following textbooks were most frequently used: (1) Richard N. Bolles' What Color is Your Parachute? (1980), (2) Howard E. Figler's Path, (1979), and (3) Edward Chapman's Career Search, (1976).

The findings cited above indicate that students perceive a need for assistance in career planning and that educational institutions are making attempts to meet those needs through their curricular offerings. These courses are being developed either by the institutions and/or produced and marketed commercially. An important part of the process is an evaluation of these courses to determine their effectiveness in meeting individuals' career development needs. Such evaluations serve a useful purpose in providing pertinent information needed by school personnel in selection of materials to be used appropriately with the clientele they serve. A review of the

literature, however, indicates very little has been done in the area of evaluation.

STATEMENT OF THE PROBLEM

Purpose

The major purpose of this study was to determine if the course, Career Planning and Decision-Making, was effective in assisting freshmen community college students in developing their career planning and decision-making skills and enhancing their career decision-making behavior. The secondary purpose of the study was to obtain the students' evaluations of the course.

This study is a modified replication of the Williamson (1979) study which was conducted to assess the effectiveness of the career planning and decision-making course with freshmen and sophomore students enrolled at Virginia Polytechnic Institute and State University. Williamson (1979) recommended that similar studies be conducted with other populations enrolled in colleges whose mission and purposes were different from those of a large, four-year, comprehensive land grant university where she conducted her study. The focus of the current study was to determine if similar findings occurred, where appropriate, when conducted with freshmen students at a community college.

RESEARCH HYPOTHESES

The research hypotheses, which will be tested in this study, are based, with modification, on the hypotheses tested in the study

conducted by Williamson (1979) to determine the effectiveness of the course, Career Planning and Decision-Making, in assisting freshmen and sophomore students at a four-year institution in developing their career planning and decision-making skills. A secondary purpose of the study conducted by Williamson was to obtain evaluative data on the published course from the students' perspectives. The null hypotheses of the current study are as follows:

1. There is no difference between achievement of course objectives by the students who complete the course, Career Planning and Decision-Making, as measured by the Career Planning and Decision-Making Student Surveys, and those students who do not complete the course.
2. There is no difference between the rational decision-making style of those students who complete the course, Career Planning and Decision-Making, and those who do not complete the course, as measured by the Assessment of Career Decision-Making instrument (ACDM -Form C). (Harren, 1976)
3. There is no difference between the students' degrees of progress through the three sequential stages (Induction, Reformation, and Integration) of the decision-making process with regard to implementation of their decision to come to Rappahannock Community College by those students completing the course and those not completing the course, as measured by the Assessment of Career Decision-Making instrument (ACDM - Form C). (Harren, 1976)
4. There is no difference between the students' degrees of progress through the four sequential stages (Exploration,

Crystallization, Choice, and Clarification) of the decision-making process with regard to choice of major of the students who complete the course and those who do not, as measured by the Assessment of Career Decision-Making instrument (ACDM - Form C). (Harren, 1976)

5. There is no difference between the students' degrees of progress through the four sequential stages (Exploration, Crystallization, Choice, and Clarification) of the decision-making process with regard to choice of planned occupation of those students who complete the course and those who do not complete the course, as measured by the Assessment of Career Decision-Making instrument (ACDM - Form C). (Harren, 1976)

NEED FOR THE RESEARCH

In the introduction, a need for educational institutions to implement instructional activities and programs designed to assist students in making vocational choices was discussed. Numerous researchers have focused on the need for post-secondary students to receive assistance in developing their career planning and decision-making skills. Titley and Titley (1980) conducted a study of college-bound students to determine the extent to which college freshmen's declarations of majors might be characterized as tentative, uncertain, or undecided. Using behavioral and subjective report measures, it was revealed that in at least three out of four college freshmen, there existed some form of undecidedness, tentativeness, or uncertainty about choice of majors. Similar needs were revealed in a longitudinal study

conducted in 1966 by Astin. Later in 1972, Astin conducted a follow-up study and noted that over 50 percent of the entering students changed their majors. Astin (1977) reported that a significant number of college students made changes in their majors following their freshmen year, thereby indicating a change in career plans.

Studies cited in the review of the literature in Chapter 2 further document the need for career development courses in educational settings. As a result, considerable interest has been sparked across the nation in elementary, secondary, and post-secondary career education and career planning programs. Unfortunately, it becomes increasingly difficult to provide materials and resources due to financial restraints. It, therefore, becomes necessary that specified procedures and materials be evaluated for recognizable benefits. The purchase of career development teaching materials needs to be preceded by observations of appropriate measures.

DEFINITION OF TERMS

The following terms were used in the study:

Career. Career consists of all a person's work activities and extends throughout the person's lifetime. Rather than being static, one's career changes to reflect growth in the individual and changes in society. Individuals can develop a satisfying career by clarifying their needs, values, and goals and then finding and choosing ways to meet or achieve them through work (Appalachia Educational Laboratory, 1980, p. 3). Tolbert (1974), defined career as the sequence of occupations in which one engages.

Career development. Regarded as a lifelong process, career development is the process whereby persons develop realistic goals for both their professional and personal life styles. Based on personal needs and direction-orientation as well as the dynamics of one's social and economic environment, strategies are established for movement to these goals through examination of alternatives or options. (Haney and Howland, 1978)

Career education. Hoyt, et. al., (1974) defined career education as "the total effort of public education and the community to help all individuals become familiar with the values of a work-oriented society, to integrate those values into their lives in such a way that work becomes possible, meaningful, and satisfying to each individual," (p. 15).

Career plan. The way in which one gives account of the sequence, time, and resources needed to achieve a goal is a career plan. (Appalachia Educational Laboratory, 1979).

Career theme. Appalachia Educational Laboratory (1979) defined career theme as the overriding principle that gives structure and meaning to work and the sequence of one's work activities. Made up of one's values or pattern of values, this principle constitutes the basis for the individual's career goal when projected into the future.

Decision-making. Regarded as a psychological process, one organizes information, examines alternatives, and commits oneself to a course of action. (Harren, 1979)

Self exploration. Self exploration entails persons examining their experiences to determine their preferences and establishing a personal relevance to the world of work.

Rational decision-making style. This style may be characterized as one in which the decision-maker accepts the responsibility for decision-making. Possessing the ability to recognize the consequences of earlier decisions for later decisions, the decision-maker also prepares for decision-making by seeking information about self and its relationship to the decision situation. Subsequently, there is a logical follow-through on the decisions made. (Harren, undated)

LIMITATIONS OF THE STUDY

Because the population was drawn from one institution, the results may not be applicable to some colleges. The college in this study is a small, rural community institution. Because colleges vary considerably in their environments, the results of this investigation may be somewhat similar to the results which would be found in those colleges in a like category, but not for those colleges in dissimilar environments.

Another existing limitation which by nature is similar to the one previously discussed is that the control and experimental groups were volunteers. Because the sample was not selected from the college at large, but a pool of volunteers, interpretation of the results must be restricted to similar groups with similar characteristics. However,

the subjects who will be enrolled in a course of this nature are always likely to be volunteer subjects since it is unlikely that such a course will be a required one.

Another limitation was that the control group and experimental group data were investigated in terms of group effects. The results of the study do not reflect any findings related to individual growth patterns.

ORGANIZATION OF THE STUDY

Chapter 1 includes the introduction, the statement of the problem, the research hypotheses, the need for research, the definition of terms, the limitations of the study, and the organization of the study. Chapter 2 includes a review of the literature. The review focuses upon the following areas: (1) theories of career development, (2) career development theory as it relates to the current study, (3) career education practices in higher education, and (4) major published career development programs in use in higher education. Chapter 3 includes a description of the subjects, a description of the course, one of the independent variables, the procedure for data collection and study design, a discussion of the instruments used in data collection, and procedures for data analysis. Chapter 4 includes the presentation and analysis of the data. Both statistical and nonstatistical analyses will be presented. Chapter 5 includes a summary of the study, discussion of the results, findings, and recommendations for further research.

Chapter 2

REVIEW OF LITERATURE

Implementation of effective career education and career planning programs necessitates an understanding of career development theories. The Career Planning and Decision-Making program which will be assessed in this study is based on the career development theory of Tiedeman and O'Hara, to be discussed later. The Assessment of Career Decision-Making instrument which is one of the instruments to be used in this study is also based on Tiedeman and O'Hara's theoretical framework.

Career development is regarded by many as a part of human development. During the course of an individual's life, career is shaped through the sequence of occupations, positions, or jobs which will be held during that lifetime. Several factors through their interaction influence that shaping. Psychological, sociological, economic, physical, as well as chance factors, exert considerable impact on one's total lifestyle. Career development theories provide a framework or body of knowledge from which goals and objectives can be established for career programs that reflect those factors that influence vocational development.

The review of the related literature is divided into four areas: (1) an overview of relevant career development theories, (2) a detailed review of career development theory as it relates to the current study, (3) career education practices in higher education, and

(4) major published career development programs in use in higher education.

THEORIES OF CAREER DEVELOPMENT

A theory of career development is a system of concepts about the nature of man and related career aspects. Formalized around some theoretical base upon which planning and decision-making are based, one functions according to specific assumptions. Theory components hold implications for career guidance practices and the guidance of individual choices. (Severinsen, 1973)

Osipow (1973) identified the following four major approaches to career development theory: (1) trait-factor, (2) sociology and career choice, (3) self-concept, and (4) vocational choice and personality. A discussion of these theories follows:

Trait-factor approach. The trait-factor approach focuses upon such personal "traits" as aptitudes, interests, and how they relate to those traits required by a specific job. The basic assumption underlying this approach, the oldest theoretical approach, is that vocational decision concerns can be resolved by matching individual traits with occupational trait requirements. Herr and Cramer (1972) stated that those individual aptitudes can be identified by such objective means as psychological tests or inventories which are then profiled to represent the individual's potential, (p. 30).

Sociology and career choice. A second approach, the sociological theory, focuses upon those factors which are beyond individual control, yet exert considerable influence upon the career choices which are made. It is believed that one's social structure can create much uncertainty and problems in decision-making and vocational crystallization. Moynihan (1964) noted that a distinctive milieu is produced by the circumstances within which one lives - conditioning responses, educational achievement, ambition, and the like. Lipsett (1962) listed the following social factors which interact in career development: (1) social class membership, (2) home influences, (3) school, (4) community, (5) pressure groups, and (6) role perception.

Self-concept theory. The self-concept approach, which is also known as a developmental theory, focuses on the development of the individual over time. Developmental stages, tasks, or phases are regarded as part of a life-long process. It is felt that some degree of control and freedom of choice is possible even though environmental factors play a role as well. Major proponents of this approach are Super, Ginzberg, and Tiedeman. Focusing on the individual self-concept, the developmental approach which has prompted the greatest attention and research is that of Donald Super and his colleagues (1973). Recognized as a comprehensive and integrative approach, it emphasizes the significance of interaction between environmental and personal variables in vocational behavior. That is, self-concept is the product of the interaction between inherited characteristics and

one's environment and this product is reflected in one's vocational development. The underlying basis for Super's theory is that individuals' self-concepts are portrayed by the occupations they choose since their choice will be the occupation which they feel will allow the greatest amount of self-expression. Super further contended that one's life stages of development determine those behaviors in which individuals engage to implement their self-concept vocationally. Super stated that the self-concept realizes stability as the individual matures. He also stated that conditions external to the individual influence vocational development of the self-concept. That is, vocational decisions made during different life stages will vary according to specific phenomena and changing demands characteristic of the life stage.

Personality theory. Tolbert (1974) defined personality as "characteristics such as the self-concept, values, needs, and ways of relating to others" (p. 81). He further discussed personality as encompassing occupational prestige ranks and levels of aspiration. Pietrofesa and Splete (1975), in a discussion of need foundations and career development, included vocational choice and personality needs. It is stated that career guidance is based upon the proposition that job satisfaction is a necessary prerequisite to self-fulfillment and happiness. Thus, every individual seeks to find within the job chosen that which is needed to satisfy the needs of the basic personality.

The major proponents of this approach are Roe and Holland. Roe (1956 and 1957) contended that psychological needs are important in that one's interests develop as a result of early relationships which eventually lead to and affect occupational choice. In conducting research and establishing her theory, Roe made use of Maslow's hierarchy of needs and stressed the impact of unconscious needs in which gratification has been delayed. Holland (1973) maintained that people can be categorized by their resemblance to each of six personality types: realistic, investigative, artistic, social, enterprising, and conventional. If an individual has close resemblance to a particular type, then it is probable that he will portray the personal traits and behaviors that are associated with the type. Holland further maintained that an individual can be characterized according to his resemblance or drive to seek six model work environments: realistic, investigative, artistic, social, enterprising, and conventional. It is possible to pair individuals and environments and, subsequently, predict outcomes that will result from the pairing.

CAREER DEVELOPMENT THEORY AS IT RELATES TO THE CURRENT STUDY

The framework for the development of the Career Planning and Decision-Making course which will be investigated in this study is based on Tiedeman's theory of vocational choice and Tiedeman and O'Hara's elaboration of Tiedeman's original theory. Tiedeman and O'Hara (1963) presented a body of thought similar to Super's in terms

of staging and development of vocational behavior. The role of self-concept in negotiating the developmental stages is stressed. Career development is viewed by them as a function of the developing self which becomes increasingly differentiated and complex. The approach is regarded as the process of building a vocational identity as one faces work through "differentiation" and "integration." Situational, social, and biological factors are regarded as essential elements in the emerging self. The self is viewed as an entity which constantly expands or contracts and necessitates critical decision-making at various points. The decision-making process which encompasses a compromise between self and society results in the formation of a new identity which is regarded as an ego identity for work.

"Ego identity is the accumulating meaning one forges about himself as he wrestles with his meeting with society. Ego identity is a psycho-social phenomenon. It is the crystallizing premise of existence which one forges both where one can and where one may in order to establish one's self in the world. Career development includes the development of an orientation toward work which evolves within the psycho-social process of forming an ego identity." (Tiedeman and O'Hara, 1963, p. 4).

The decision-making process of differentiation and integration consists of a sequence of steps or stages which may be repeated throughout one's life span. At different stages, different problems will be confronted. The two phases are anticipation or preoccupation and implementation and adjustment.

Four stages make up the anticipation phase:

1. Exploration. Consideration is given to several goals by reviewing past experiences, assessing abilities, determining goal desirability, as well as prediction of the consequences of actions and role playing. Courses of action, that is, alternatives and possible goals are differentiated and evaluated for desirability and practicality.

2. Crystallization. This phase reflects stabilization of thought as one proceeds to move in a specific direction based on the assessment of alternatives with selection of those goals which are viewed as most likely to offer the greatest rewards.

3. Choice. Following crystallization, choice is realized when decisions of commitment to goals are made.

4. Clarification. The differentiation phase is concluded with clarification which entails an analysis of the choice made. During the waiting period in which anticipated events unfold, resolution of doubts and uncertainties can take place. (Tiedeman and O'Hara, 1961, 1963)

The "phase of implementation and adjustment" allows for implementation of choice by putting plans into effect. The phase consists of the following three stages:

1. Induction. Reality testing occurs by entrance into the situation. Approval and recognition of self by the group or

organization is sought. Specific aspects of self are given up and submission to the demands on the new situation characterize this step. (Tolbert, 1974)

2. Reformation. Following acceptance by the new situation, one develops a new concept of self as an individual in relation to the group and expresses a sense of self by acting upon the group as well as by being acted upon by it. (Tolbert, 1981 and Tiedeman and O'Hara 1963). Dansart (1974) stated that efforts are directed toward changing the environment by modifying the group's goals, purposes, and/or values.

3. Integration. Achievement of collaborative activity between the demands of the group and individual needs is realized. Individuals develop a new concept of self as they relate to the group and view themselves as successful and are perceived as such by the group. This state is not a permanent one, and thus as it changes the processes of differentiation and integration are again initiated. (Tiedeman and O'Hara, 1963)

Much research has been conducted to test various aspects of this theory. The hypotheses that (1) changes do exist in the vocational self-concept with increase in age, (2) clarification of the self-concept occurs as self-knowledge increases, (3) the differentiation and integration process is identifiable by stages, and (4) individuals can be at different stages on different problems are all supported by the studies of O'Hara and Tiedeman (1959) and Harren

(1966). Harren (undated) noted that individuals are always in at least one of the seven stages just previously discussed in their career development and it is possible for these stages to overlap. It is recognized that the process is progressive, for the most part. However, recycling and regression often occur.

CAREER EDUCATION PRACTICES IN HIGHER EDUCATION

Included in this discussion will be brief background information regarding studies of higher education offerings. A summary of selected career education offerings in higher education that have been identified from a review of the literature will also be presented as an overview of the impact such offerings have had on students in higher education settings.

Background Information

As early as 1920 the first study was conducted by the Bureau of Vocational Guidance of Harvard University and the United States Bureau of Education to investigate college sponsored activities for the vocational needs and guidance of their students (Maverick, 1926). The study revealed that the first known college-level course dealing with the study of occupations and careers was offered by the College of the Pacific. Offered since 1917, the course for which academic credit was given was entitled Vocational Opportunities for Women.

Recent studies have been conducted to ascertain the degree to which colleges are providing curricular offerings which assist students with career planning. The results of a survey of all two- and four-

year colleges and universities, totaling 1,850 were reported by Calvert, Carter, and Murphy (1964). With 55.3 percent of 1,023 responding, it was revealed that 70 or 6.8 percent offered occupational adjustment courses for credit.

Of the occupational adjustment course offerings at the 70 institutions, four types were identified: (1) job-seeking techniques, (2) adjustment to careers, (3) personal vocational selection or career planning, and (4) introduction to the world of work. The authors reported that these courses seemed to have been offered according to instructor interest as opposed to being a part of the curriculum. Therefore, course offerings were often terminated with the departure of the instructor who had volunteered to teach the course. The findings also stimulated the authors to conclude that liberal arts colleges, which needed the courses the most, were the ones least likely to offer such courses.

Koehn (1978) reported the results of a survey conducted by the Career Planning and Placement Center at the University of California, Berkeley. It was designed to determine "what" was being done with their career programs and "by whom". Information was obtained about the following: (1) topics covered, (2) courses and series, (3) attendance, (4) staffing patterns, materials and media used, and (5) problems experienced by the Placement Centers in their offerings and specific strategies utilized to resolve the problems encountered. The procedure included submission of a seven-page questionnaire to 37 career planning and placement centers in California during Spring,

1977. Sixteen campuses of the California State College and University System (43 percent of the sample), 7 campuses of the University of California System (19 percent of the sample), and 14 private schools (38 percent of the sample) were included in the survey with a 60 percent response rate. Findings were as follows in the areas surveyed as noted earlier.

Program Topics

Four career planning program topics and six job search program topics were identified. The former were listed as skills identification, values clarification, and speaker specialists of particular fields. The latter were identified as resumé writing and interview techniques.

Course and Series

Forty-two (42) percent of the schools responding to the survey offered credit courses in career planning. The amount of credit varied as did the department sponsoring the course. Of the respondents, 67 percent reported offering structured sequential series of career programs that were interdependent, but were not a course as such.

Attendance

It was reported that the speakers on job hunting, careers, and finding a summer job had the largest attendance. Those programs having the least in attendance were skills identification, values clarification, and decision-making.

Staffing

Sixty-eight (68) percent of the responding career planning and placement centers indicated that they used professional staff and student peer counselors. Forty two (42) percent or ten schools used peer counselors.

Materials

The book used most often among those responding (92 percent) is Richard Bolles' What Color is Your Parachute? (1980). Other materials reportedly popular among the centers surveyed are Crystal's and Bolles' Where Do I Go From Here With My Life? (1974), which was used by 58 percent; and Figler's Path - A Career Workbook for Liberal Arts Students (1979), which was used by 42 percent.

Media

Multimedia approaches were shown to be favored by the centers. Videotape was identified as the most popular multimedia form as it was reported to be used by 71 percent of all those responding. Forty-six (46) percent reported using cassette tapes.

Common Problems and Strategies for Coping

Four major themes were identified as problem areas: (1) vacillating interest and unpredictable attendance at programs, (2) staffing, (3) space, and (4) academic linkage. A variety of strategies were utilized to deal with those problems. Included were modification of program offerings, schedules, and format as determined by students' needs and interests. Staffing problems were minimized by using student

peer counselors to decrease the demand for professional staff time. The promotion of more and better faculty contacts was among the strategies used to encourage academic linkages.

Menning (1981) presented the results of a study designed to show how career services assist undeclared majors. A nondegree General Registration (GR) College was established in 1974 at South Dakota State University for the purpose of providing assistance in career and academic planning to those students who had not declared a major. Included in the college was a Career-Academic Planning (CAP) center which offered a one-credit course in career planning and development, personal advisement, various workshops, seminars and other presentations. A 25 percent increase in use of the center was realized from Fall 1974 to Fall 1979. The attrition rate for students who had not declared a major decreased from 30 percent to 16 percent. For those students who enrolled in the course, pretest and posttest assessments were completed, using a 20-item Career Awareness Inventory (CAI). This instrument measured the students' self-assessed awareness of the relationships among types of career information and their knowledge, use and sources of career information. Pretest scores revealed no differences between the fall and spring sections of the course. However, t-tests showed significant increases in CAI scores from pretest to posttest for both groups.

Effects of College Courses in Career Decision-Making

A study of freshmen and sophomore students who were undecided about their academic major or career was described in an article by

Evans and Rector (1978). Assigned to an elective guidance course in career-related decision-making, 790 students remained in the course and were given varied independent assignments and met in small groups with a counselor. All completed the Vocational Decision Checklist (VDC) and evaluated the course.

The findings revealed that more than 70 percent of the students felt they were closer to selecting a major and career than they were before completing the course. Analysis of variance on the pre- and posttest VDC scales showed that student vocational development was improved by the course.

Babcock and Kaufman (1976) reported the results of a study of three groups of students in Cornell University's College of Human Ecology. A group of 18 students were enrolled in a course in Career Environment and Individual Development; another group of 23 students sought individual career counseling; and a third group of 36 students neither received counseling nor participated in the course. The relative effectiveness of the course was evaluated by use of a self-report questionnaire and a counseling assessment form. One-way analysis of variance and the Scheffe procedure were used to analyze the results which revealed that those students enrolled in the course demonstrated greater gain in self-knowledge and the relationship of such knowledge to occupation than the other two groups. Furthermore, reported changes in expressed occupational choice were more prevalent among those students requesting counseling than those students in the control group. It was concluded that vocational development is facilitated by a systematic learning experience.

Cochran, Hetherington, and Strand (1980) reported the findings of a study which was designed to determine the difference in effect of credit courses in career decision-making skills and career orientation. An analysis of the two groups revealed that the gain realized by the skills group was significantly greater than that of the career orientation group. These results were used to support the argument for the effectiveness of a classroom setting in teaching career decision-making skills.

Tillar and Hutchins (1979) reported the findings of a study which was designed to assess the effectiveness of (1) self-appraisal of needs and values and (2) interviews with college alumni to explore career options in a program of career development. Significantly greater career decidedness was shown by those college freshmen who participated in the program than those in the control group.

In 1970, at Everett Community College, four groups of college males were studied to determine the impact of counseling on entering freshmen: (1) a control group entered via the induction process, (2) a second group completed the American College Testing Guidance Profile, (3) a third group had on-campus interviews with the counselors and also completed the Profile, and (4) a fourth group had the interview, completed the Profile, and enrolled in a career planning course. Course activities included completion of achievement batteries, development of awareness of occupational information sources, completion of a research paper, completion of a resumé, and at least one synthesizing interview with the counselor. At the end of the year,

the career planning students showed the following gains or improvement over the control group: (1) a grade-point average of 2.6 compared to 2.1, (2) more positive attitudes toward college, (3) greater degree of satisfaction with their field of study, (4) greater certainty that they would complete their programs, and (5) more appropriate educational-vocational choices. There was no difference between the four groups on interest in studies. There tended to be improvements in the other two experimental groups over the control group, but they did less well than the career planning group. (Adams, 1974)

In a study of community college students, Malacos (1975) described a study in which fifty volunteers were randomly assigned to one of the following four groups for vocational counseling: (1) traditional one-to-one counseling, (2) programmed self-instruction, (3) programmed self-instruction plus multi-media materials or (4) a control group. Analysis of the data was conducted in a 4 x 2 fixed factorial design (group by sex) and a multivariate analysis of covariance using age and self-control as covariates. There were significant differences between the groups with the third group making the greatest change toward a specific career area as well as rating the highest on 8 of the 12 dependent measures.

Healy (1974) discussed a study in which eight graduate students, enrolled in the University of California at Los Angeles' counselor education program, conducted group career counseling with 35 freshmen from Santa Monica and Rio Hondo, both junior colleges. The students being studied were given the opportunity to do the following:

"(a) identify their career goals and assets, (b) examine alternatives in terms of those attributes, (c) select an appropriate one, (d) plan to obtain training and entry, and (e) begin execution of their plan."
(p. 34)

At the beginning and at the end of the program, the students rated their educational and career plans and completed Super's Career Development Inventory scale. The results at both junior colleges showed that a counseling procedure can be effective when theoretically derived, and that a replicable program can be conducted by novice counselors. Students at Santa Monica felt more certain about their career plans, were more knowledgeable about intended occupations, and had given more thought to their careers following completion of the course (p. 37). All but one of the 22 students at Rio Hondo who completed the course indicated they were satisfied. Data indicated that the students showed an increase in certainty about their career goals and specifics of their planning (p. 38).

Aiken and Johnston (1973) described a project conducted at the University of Missouri at Columbia with 94 vocationally undecided freshmen and sophomore males. Following administration of the Vocational Preference Inventory (VPI) and the Vocational Development Inventory (VDI), the students were divided into four groups: (1) consistent VPI patterns and vocational maturity on the VDI, (2) consistent VPI patterns and vocational immaturity, (3) inconsistent VPI patterns and vocational maturity, and (4) inconsistent VPI patterns and vocational immaturity. Members of the control group

answered research questionnaires only and members of the experimental group attended two or three small group sessions of one and one-half hours each. Positive reinforcement of the student's search for information regarding self-knowledge, choice process, motivation, choice independence, job knowledge, goal attainment awareness, time factors, and self-in-the-world-of-work were offered by the counselors. Pre- and post-, and post- posttest information seeking behavior was measured by means of a Vocational Checklist consisting of 71 statements. Information-seeking responses were increased among the vocationally consistent treated students to a greater degree than the vocationally inconsistent treated students. Cognitive scores among the four treated groups increased to a similar degree. It was revealed that the vocationally consistent treated students' posttest information-seeking responses were increased while the vocationally consistent control students' scores were decreased. In the posttesting, scores for the vocationally inconsistent treated students increased more than the vocationally inconsistent control students, but at a lower level than the consistent. More thought was given to explorative behavior by the treated than the control groups in the posttesting.

Rubinton (1980) reported the results of an instructional experiment. One hundred twenty students at an urban community college who had indicated occupational indecision on the Vocational Survey Questionnaire (VSQ) were administered the Decision-Making Styles section of the Assessment of Career Decision-Making instrument (ACDM) and the Attitude Scale (AS) of the Career Maturity Inventory. The ACDM and AS

measure respectively, rational, intuitive, or dependent decision-making style and vocational maturity. Following the administrations, the students were assigned to one of the following four training groups: (1) an experimental group involving training in career decision-making with an intuitive method, (2) an experimental group using a rational method, (3) an attention - placebo group, and (4) no-treatment control group. Following instructions the students completed the VSQ and the AS.

No significant pretest differences were revealed among the groups on the AS or the VSQ or in the proportions of each type of decision style within groups. Analyses of variance and chi-square were used. The posttest VSQ and AS results for both experimental groups revealed significant increases in occupational certainty as well as vocational maturity. Additionally, the rational and intuitive decision-makers revealed significant increases in all groups except the no-treatment control group. Decreases on both measures regardless of the group was shown by the dependent decision-makers. The greatest gains were shown in the experimental groups by those students matched to their decision-making style. No significant interactions between style and treatment were realized.

Williamson (1979) conducted a study to determine if the published course, Career Planning and Decision-Making, which was developed by Appalachia Educational Laboratory was effective in assisting freshmen and sophomore students at Virginia Polytechnic Institute and State University in choosing or examining their choice of

a major and an occupation, in implementation of the decision to come to college, and enhancing their career decision-making style. The study was also designed to obtain evaluative data on the course. The following instruments were used to gather data: (1) the Assessment of Career Decision-Making (Harren, 1976), (2) the Rotter Internal-External Scale (1966), (3) end of unit evaluations, and (4) a structured interview schedule. Analysis of variance, using the .05 level of significance was computed to determine the significance of the difference between the control and experimental groups on the I-E Scale and pretest. Following the treatment, the difference between the groups was determined by analysis of covariance with the I-E and pretest as covariates.

The course, Career Planning and Decision-Making, was taught during the Winter Quarter, 1979 at Virginia Polytechnic Institute and State University in Blacksburg, Virginia. The sample was selected from a population of freshmen, sophomore, and transfer pre-education majors. Random assignment was made to the control and experimental groups, each consisting of twenty-one (21) students.

The following results were obtained: (1) no significant difference at the .05 level on the Rotter Internal-External Scale scores or the Assessment of Career Decision-Making pretest results, (2) no significant posttest difference on the decision to attend college or selection of a major at the .05 level, (3) significant posttest differences in decision-making styles and choice of occupation at the .001 level. A review of the structured interview results revealed that the students perceived the course as being instrumental

in their becoming more effective decision-makers as well as enhancing their progress in choosing a major and an occupation. All of the students expressed satisfaction with the course and recommended that it become a permanent offering. It was concluded that the course was effective for teaching students career planning techniques and decision-making skills in a college setting.

MAJOR PUBLISHED CAREER DEVELOPMENT PROGRAMS IN USE IN HIGHER EDUCATION

As discussed earlier, Haney and Howland (1978) reported the results of a survey conducted by the American College Personnel Association in 1975 to ascertain which published career development programs were being utilized by two- and four-year colleges most frequently. Of the three reported as most frequently used two are discussed below: (1) Richard N. Bolles' What Color is Your Parachute? (1980), and (2) Howard E. Figler's Path (1979).

What Color Is Your Parachute?

What Color Is Your Parachute? developed by Richard Nelson Bolles is a practical manual for job-hunters and career changers. It is revised annually and solicits input from its users for additions, corrections, and other suggestions. Bolles (1980) presented a revised and enlarged edition and focused attention on the following areas:

Chapter One: A-Job-Hunting We will Go

The ills of traditional job search procedures used by the average person.

Chapter Two: Rejection Shock

Understanding the job-hunting system; what it is, how it works, its limitations; when it doesn't work for you.

Chapter Three: You Can Do It

The prescription for creating a job hunting system that works for you - key to success.

Chapter Four: What About Getting Help

Finding resources to meet your needs and wants.

Chapter Five: Only You Can Decide: What Do You Want To Do?

Getting to know "who" you are, "where" you are, "where" you want to go, and "how" you can get there.

Chapter Six: Where Do You Want To Do It?

Researching the job market; what is available and where, deciding who you want to work for and going after them.

Chapter Seven: You Must Identify the Man or Woman Who Has the Power to Hire You and Show Them How Your Skills Can Help Them With Their Problem.

Who to see, who to avoid, surviving the interview process effectively.

Additional features of this text are the inclusion of a resources guide and research notes for career changers as well as others involved in career planning and decision-making.

Path

The Path Career Development Program which was developed by Figler (1979) consists of twenty exercises. Its major focus is on assisting liberal arts students in their career development. A segment of the program consisting of ten exercises is identified as the Core Program. It is recommended that extensive exploration of this segment be pursued when time limitations prevent coverage of the complete program. Also, it is suggested that selected activities from the workbook be used as supplementary exercises. While the text is designed to be self-instructional, Figler states that group sessions

can be conducted effectively by trained leaders. It is recommended that the sessions not exceed two and a half hours.

The Life/Career Development System (1975), is another career program frequently used by colleges. Representatives from several Virginia Community Colleges were trained to utilize these materials. A discussion of the program format follows:

Life/Career Development System

Walz and Benjamin (1975) developed the Life/Career Development System for use with high school and college students and adults. The total program, consisting of nine modules, requires approximately fifty-five 50 minute sessions for completion. If desired, a modified version of the program may be conducted via workshops or as a one or two semester course. Users have the option to modify as appropriate to meet the needs of those being served. The following areas are covered in the nine modules:

1. Self Exploration
2. Values Clarification
3. Goal Setting
4. Options
5. Overcoming Obstacles
6. Utilization of Information
7. Developing Effective Work Habits
8. Developing Meaningful Relationships
9. Looking to the Future

Also emphasized in the program are such activities as: work attitudes, choosing graduate programs, values clarification, achievements and failures, self assessment of abilities, vocational and leisure activities review; and job search strategies. Self-assessment and the translation of these assessments into career significance are emphasized. Minimal emphasis is placed on those dimensions of career choice regarded as being external such as the job market.

SUMMARY

A review of the literature reveals that career development course offerings in post secondary institutions are being established in response to a growing concern over the need exhibited by college students for assistance in the area of career development. The review also indicates that structured offerings in the area of career development are effective in influencing students' career behavior and skill development in a positive direction.

Prediger, Roth and Noeth (1974) stated - "If we were speaking of physical development rather than career development, we would describe American youth as hungry, undernourished, and physically retarded", (p. 103). It was speculated by Marland (1974) that at least 50 percent of all college students have no real career goals.

Chapter 3

METHODOLOGY

In this chapter, the methods and procedures used to complete the study will be discussed. Included are: selection of subjects; an overview of the independent variable, the published course Career Planning and Decision-Making (1979); instrumentation, the Career Planning and Decision-Making Course Student Surveys (Pre and Posttest), The Assessment of Career Decision-Making (ACDM) instrument, the End-of-Unit Evaluation, and the Interview Schedule; also procedures for data collection and study design; methods of analysis, and the research hypotheses.

POPULATION AND SAMPLE

The need for career development activities at Rappahannock Community College is evidenced by the number of students (approximately eighty percent) who respond on a decisional status survey conducted during new student orientation that they are not certain about the majors they have chosen or their career plans. The inventory is designed to elicit responses which would indicate student's certainty and satisfaction with regard to college, major, and future occupation. Additional evidence of the need is revealed by the number of students (approximately forty percent) who change their majors each quarter.

Established in 1970, Rappahannock Community College serves thirteen rural Virginia counties encompassing nearly 3,000 square

miles with population density at about forty seven people per square mile. The region has a total population of approximately 120,000. Known as the Middle Peninsula/Northern Neck region, it is bounded on the north by the Potomac River, on the east by the York River, and on the west by Interstate 95. The college has two campuses; the South Campus at Glens which opened in September 1971, and the North Campus at Warsaw which opened in September, 1973.

On each of the two campuses, designed to serve in excess of seven hundred students, comprehensive programs are offered. Included are occupational-technical, university parallel or college transfer, general and adult education offerings. Also, special training and developmental (preparatory) programs are offered as well as specialized regional and community services.

The population from which the sample for this study was selected consisted of forty five freshmen students enrolled at Rappahannock Community College in a transfer program, Winter Quarter, 1981, who volunteered to enroll in a career guidance class. An invitation to participate was extended to all freshmen transfer students who were enrolled informing them of the availability of the course. From the group of forty five volunteers, eighteen students were randomly selected for enrollment in the course. From the remainder of the volunteers, an equal number was randomly selected for the control group. The total sample consisted of thirty-six students.

OVERVIEW OF THE INDEPENDENT VARIABLE:
CAREER PLANNING AND DECISION-MAKING COURSE

The primary aim of this study was to determine the effectiveness of the course, Career Planning and Decision-Making. The course, which was developed by Appalachia Educational Laboratory (AEL), a regional laboratory established by the Office of Education in 1966, was one of the independent variables. It consists of a student text containing six career guidance curriculum units; an Instructor's Guide; ten filmstrips and the AEL's Career Information System (CIS).

There are ten filmstrips to be used with various parts of the course, one each with units I, III, IV, V, VI, and five with unit two.

The CIS is a comprehensive organization and management system for career information resources to be used with the course. Linked to all other course materials, it includes self assessment as well as orientation materials which students may use in exploring the world of work as it relates to their personal characteristics.

The course was offered for three quarter hours of credit and met for a total of thirty hours. Twenty sessions were held during the quarter, each for one hour and a half twice per week. The following objectives are delineated for the course. Upon completion of the course, each student will be able to:

1. Apply the concept of CAREER and the decision-making process in examining his or her own experiences (Unit I).
2. Establish an occupational preference by integrating knowledge of self and of the world of work (Unit II).

3. Identify personally relevant career goals by learning to project his or her own values into the future (Unit III).
4. Develop a detailed career plan based upon his or her goals, and discuss knowledge of college options, and personal criteria (Unit IV).
5. Demonstrate the ability to decide and act with respect to taking the initial steps of his or her career plan (Unit V).
6. Comprehend that planning and deciding is a continuous process, and understand the role of this process in controlling and shaping Career (Unit V). (Appalachia Educational Laboratory Career Planning and Decision-Making Instructor's Guide, 1980).

The course consists of six units which emphasize planning and deciding. Built upon three major dimensions of career development and decision-making - CAREER COMPREHENSION, CAREER VALUES, AND CAREER ACTION, the course provides for student integration of external (world of work) and internal (self exploration) factors in choosing or examining their college major. The units may be described as follows:

Unit I - Career Development

The concepts of career, career theme, and decision-making are introduced. Students will examine the meaning of work and career, identify their decision-making styles, and learn to use a decision-making strategy.

Unit II - Career Exploration

Students will be allowed to build a personal profile based on knowledge of the world of work (work activities, work situations, and other worker traits). Students will learn how to locate and evaluate occupational information; and will be introduced to the Career Information System. Students will also identify and articulate their values in this unit.

Unit III - Career Goals

Students will be assisted in clarifying their short-term, intermediate, and long-term goals. The concept of career theme will be used as a basis for projecting values into the future and establishing career goals.

Unit IV - Career Planning

Based on knowledge of the credentials and competencies required for specific occupations, students will explore options, establish tentative career plans and identify alternative courses of action.

Unit V - Career Action

Students will make choices involving selection of a college major or examine any commitment to a major previously selected. Action will be taken on career plans.

Unit VI - Career Progress

Students will be assisted in understanding, planning and deciding as processes which are continuous. This knowledge will enable students to learn to manage their own career development.

PROCEDURE FOR DATA COLLECTION AND STUDY DESIGN

The names and addresses of all new freshmen students who were enrolled in transfer programs were obtained from the Admissions Office. A letter (Appendix A) was sent to each of them informing them of the availability of the course and inviting them to enroll. A flyer (Appendix B) designed to provide additional information about the course was enclosed in each letter and copies were posted on the bulletin boards.

From the pool of volunteers, selection was conducted by placing each student's social security number in a box. From forty five volunteers, twenty-one were randomly selected. Only eighteen of the twenty-one were able to enroll in the class because of prior commitments during the time the class was taught. For the control group, eighteen students were randomly selected, making the total sample, thirty-six.

Basically, the design used in this study was a modified replication of the Williamson (1979) study which was conducted to assess the effectiveness of a career planning and decision-making course. The focus of the current study was to determine if similar findings occurred. Williamson had recommended that students who are not education majors be included in a similar study. The writer had hoped that those students volunteering to take the course would represent a broad range of majors and it happened that such did occur.

In an effort to control for sources of internal validity, a True Experimental Design using pretest posttest control groups as described by Campbell and Stanley (1968) was utilized in the current study.

True Experimental Design

| Group | n | Pretest | Career Planning and Decision-Making Course | Posttest |
|--------------|----|---------|--|----------|
| Experimental | 18 | 0 | X | 0 |
| Control | 18 | 0 | | 0 |

Williamson studied locus of control as measured by Rotter's Internal-External Scale in her research. The results indicated no significant differences in internal-external orientation between those students completing the career planning and decision-making course and those not completing the course, as measured by the Rotter Scale. Therefore, the null hypothesis was not rejected. In the current study the researcher chose to focus attention specifically on those selected variables for which the course was designed to effect change. Thus, locus of control was not studied. As utilized by Williamson, the writer selected the following instruments: end-of-unit evaluation, structured interview, and the Assessment of Career Decision-Making instrument devised by Harren in 1976. Additionally, the writer used the Career Planning and Decision-Making Course Student Surveys (Pre and Posttests) to assess students' precourse and postcourse status related to the course goals and objectives.

During the second class session before any content instruction, the treatment group was administered the Student Survey Pretest for

experimental students and the ACDM. The control group completed both instruments during the first week of classes; the Student Survey Pretest for control students and the ACDM.

The Student Survey Posttest for the experimental group was administered after instructional Unit V and the ACDM was also administered at that time as a posttest measure of decision-making levels following treatment. During the same week, the control students were administered the Student Survey Posttest for control students and the ACDM was completed as a posttest measure of their decision-making levels.

Upon completion of each unit during the course, students were asked to complete the end-of-unit evaluation. A structured interview of approximately thirty minutes in length was held with each student following the last session. These interviews were conducted by the writer and taped, with student permission, to insure availability of all student responses.

INSTRUMENTATION

The five instruments used in the study were: The Career Planning and Decision-Making Student Pretest Survey, the Career Planning and Decision-Planning Student Posttest Survey, the Assessment of Career Decision-Making Instrument, the end-of-unit evaluation, and a structured interview.

Career Planning and Decision-Making Student Pretest Survey

This instrument was administered at the beginning of the course to ascertain the student's precourse status related to the course goals and objectives. Designed to collect data on each student's knowledge of self, occupations, college majors, and the decision-making process, the instrument consisted of two parts: one affective and one cognitive. The student's self estimated knowledge of career development concepts was measured by the affective part, and the student's career development knowledge was objectively measured by the cognitive part.

The items were of multiple choice, matching, and short answer format. The multiple choice items were set in Likert Scale format. The responses were equidistant ranging from "none" to "a great deal." Scoring instructions were designed to provide criteria for assignment of points to each item.

With the exception of the first item, the pretest was identical for the control and experimental groups (see Appendices C and D). While the control students were asked about their willingness to enroll in a career planning and decision-making course, the experimental group was asked about their reason for enrollment.

Career Planning and Decision-Making Student Posttest Survey

The student posttests for the experimental and control groups contained identical items to the pretests to allow for comparisons; pre-posttest and experimental - control groups.

With the following exceptions, the posttest was identical for the experimental and control groups (see Appendices E and F), The first two questions asked of the experimental group were: (1) "How prepared are you to make career plans?" and (2) "Having completed the course Career Planning and Decision-Making, how much better prepared are you to make career decisions?" The first two questions asked of the control group were: (1) "During this term, have you talked with anyone enrolled in a career planning/decision course?" and (2) "During this term, have you been exposed to any career planning and decision-making materials? If yes, which materials?" One additional difference existed in the noncognitive items section. The experimental posttest consisted of two parts in this section for the following reason: It was revealed in the results of the field tests conducted by Appalachia Educational Laboratory that there was a tendency for the students to rate their career development knowledge high on the pretest. Results further revealed that once the students were exposed to a career development learning experience they became more cognitive of how much knowledge really exists of which they were not aware, and thus lowered their pretest ratings. In an effort to compensate for this on the posttest, a second subitem was added to each noncognitive item requiring self appraisal. This subitem required students to assess the amount of knowledge they had gained through the course.

Pretest and Posttest items development for the surveys were based on the course content and objectives. Test items were pilot tested during the field testing of the student text and were field tested in the Spring of 1980.

Inter- and intra-rater reliability results were obtained and the results, based on Pearson Product Moment Correlations, were as follows:

.9764 = inter, (N = 58); and .9897 = intra, (N = 29), (p < .001).

(Baker, 1979)

To obtain validity data, Student Survey total scores were correlated with Assessment of Career Decision-Making Total Decision-Making Task scores to obtain an r of .5383 for 209 sets of scores. Reviewers who were experts in career guidance and knowledgeable of the course objectives provided content validity while the field tests results revealing a significant difference on every item between those students completing the course and those not completing the course supported the construct validity of the instrument. Scoring instructions for the surveys are in Appendix G.

| <u>Course Goals and Objectives Content Item</u> | <u>Related Survey Item Number</u> |
|---|-----------------------------------|
| Knowledge about majors offered at the school | 3 |
| Knowledge about the relationship between majors and occupations | 4 |
| Knowledge about occupations that interested them | 5 - 9 |
| Student's status in selection of major | 10 - 12 |
| Student's understanding of self in relation to work | 13 - 18 |
| Process used by student to make decisions | 19 |
| Student's rating of the effectiveness of his/her career decision-making process | 19 |
| Student's understanding of the terms "work" and "career" | 20 - 21 |

| <u>Course Goals and Objectives Content Item</u> (Continued) | <u>Related Survey Item Number</u> |
|--|-----------------------------------|
|--|-----------------------------------|

| | |
|--|---------|
| Student's knowledge of career information sources | 22 - 26 |
| Student's knowledge of criteria to be used for evaluating career information | 27 |
| Student's ability to identify correct career concept definitions. | 28 |

Assessment of Career Decision-Making Form C

A third instrument used was the Assessment of Career Decision-Making Form C (ACDM) (Harren, 1978). This instrument (Appendix H) as the course, was developed using Tiedeman's Theory of Vocational Choice as the framework. It measures a person's decision-making style, and level of career decision-making in three areas. The instrument consists of four major sections: (1) Decision-Making Style (DMS), (2) Decision-Making Task - College (DMT-C), (3) Decision-Making Task - Major (DMT-M), and (4) Decision-Making Task - Occupation (DMT-O). Section I identifies three relatively independent decision-making styles: Rational, Intuitive, and Dependent. Section II measures progress in making and implementing the decision to go to college. Progress in selecting a college major is measured by Section III and progress in selecting a future occupation following completion of college is measured by Section IV. Developed by Vincent Harren as an extension of an earlier instrument, the Vocational Decision-Making Checklist which was developed by Harren in 1964 and revised in 1966, the ACDM has been used in

numerous studies. No technical data is available for the current version released in September 1978. Steps to do so have produced results for each stage of the various subscales of decision-making tasks. These results are not being reported here because the current study focused on total subscale measures. The following reliability coefficients for subscales were reported by Harren, et. al., (1978) revealing the results obtained when a sample of seventy-three students completed the two subscales (DMS and DMT-M) of the ACDM twice over a two-week period: .85 for DMS-Rational and .84 for the DMT-M.

Construct validity evidence is offered by the results of factor analysis of the data by Harren (1976).

Reliability estimates were computed by the writer using the test-retest and split-half internal-consistency methods. Utilizing the test-retest method the ACDM instrument was administered twice to 28 students. The intervening period of time between the administrations was two weeks. The pair of scores was correlated by computing the Pearson Product - Moment Coefficient.

Computation of reliability coefficients using the split-half method utilized results obtained from a single administration by dividing the test into odd and even items. Scores were obtained on the two halves and correlated. Since each result represented a reliability coefficient for half the test, the Spearman - Brown formula was utilized to compute the reliability for the whole test. All estimates computed by the writer are presented in the chart below.

Reliability Estimates for ACDM
Decision-Making Subscales

| Subscales | Pearson Product-Moment Coefficient (Test-Retest in 2-week Interval) | Split Half Internal Consistency |
|------------------|---|---------------------------------------|
| DMS - Rational | .76 | .80 |
| DMT - College | .79 | .66 |
| DMT - Major | .56 | .72 |
| DMT - Occupation | .75 | .76 |

End-of-Unit Evaluation

At the completion of each unit, students in the experimental group evaluated the unit in terms of compatibility of unit activities with achievement of the unit objectives and understanding of the unit concepts.

The form (Appendix I) used was the one developed by the researcher whose study was replicated. Williamson (1979) developed the form as an adaptation of an evaluation form developed by Forrester (1977). Prior to use in the Williamson Study, a preliminary form was examined for clarity and comprehension by the researcher.

Interview Schedule

During the last week of class the researcher conducted an individual interview with each member of the experimental group. Each interview was approximately one-half hour in length. The interview generated responses related to the effectiveness of the course in facilitating their choosing of a major or establishing of career goals. The instrument was developed by Williamson (1979) as an adaptation of a form developed by Appalachia Educational Laboratory. See Appendix J for schedule.

PROCEDURES FOR DATA ANALYSIS

Analysis of variance was completed to determine any significant differences between the experimental and control groups on the pretest scores for each of the following subscales: Self-Estimates scale and Cognitive scale of the Student Survey; Part I Decision Making Style - Rational, Part II Decision Making Task - College, Part III Decision Making Task - Major, and Part IV Decision Making Task - Occupation of the ACDM. Repeated analysis of variance was computed and posttest differences between the experimental and control groups for each of the subscales were examined.

Hypothesis 1, pertaining to achievement of course objectives, was submitted to analysis of variance, using the .05 level of significance, to determine the significance of the difference between the control and experimental groups on the pretest. Repeated measures

analysis of variance was computed at the .05 level of significance to determine the difference between the groups following treatment. The instruments used were the Career Planning and Decision-Making Student Survey Pre- and Posttests.

Hypothesis 2, was submitted to analysis of variance and repeated analysis of variance to determine whether significant differences existed between the rational decision-making style of the two groups at the .05 level of significance on the pretest and posttest scores, respectively.

Hypothesis 3, pertaining to the progress of the students with regard to implementation of the decision to attend Rappahannock Community College by those students completing the course and those not completing the course, was submitted to analysis of variance and repeated analysis of variance at the .05 level of significance. The Assessment of Career Decision-Making (ACDM) instrument was used to collect data.

Hypothesis 4, was tested at the .05 level of significance using analysis of variance and repeated analysis of variance to determine whether there was a significant difference between the groups with regard to their progress in choice of major. The Assessment of Career Decision-Making was used as the measuring instrument.

Hypothesis 5, pertaining to the difference between the progress of the two groups of students with regard to planned occupation, was

also submitted to analysis of variance and repeated analysis of variance at the .05 level of significance. The instrument used in the collection of data was the Assessment of Career Decision-Making.

The nonstatistical aspects of the study included a discussion of the end-of-unit evaluations, the structured interviews, and the posttest responses of the experimental group on the Student Survey assessing their gains, having completed the course. Additional nonstatistical aspects of the study comprised a comparison of the current study with the original study by Williamson (1979).

Because the researcher did not have access to the raw data from the original study, a nonstatistical analysis was conducted. The descriptive analysis consisted of a statement of the facts of the situation for the original study as well as an explanation of those facts, where appropriate. No cause and effect relationships were established. The analysis was designed to show if and how student characteristics and other variables as well as the results differed. It was important to exercise caution to avoid misinterpretations of this information. Such information could not be overlooked, however, in that it makes a valuable contribution to the body of knowledge already available. It was important to know how results differed even if we did not know precisely why. Inferences were drawn where deemed appropriate.

A descriptive analysis of the major similarities and differences between the two studies was completed for each of the following factors: the subjects, the course materials, the procedure, the physical setting, the experimenters, the instrumentation, the hypotheses, and the statistical findings.

Chapter 4

PRESENTATION OF RESULTS

The major purpose of this study was to explore the impact of the Career Planning and Decision-Making course on students' achievement of course objectives in general and their decision-making style with an emphasis on the rational approach; and to explore the impact of the course on students' degrees of progress through sequential decision-making stages with respect to each of the following decision-making tasks: (1) implementation of the decision to come to college, (2) choosing of a major and (3) choice of an occupation. The secondary purpose of the study was to obtain the students' evaluations of the course. An experimental group and control group were randomly selected from among a broad range of majors at Rappahannock Community College (RCC) who volunteered for the course. Initially, the CPDM course which served as the treatment was the single independent variable in the study and was offered during the Winter Quarter, 1981. Time was subsequently incorporated as a second independent variable. The design of the study was a True Experimental Design, utilizing pretest and posttest control groups.

All of the students in the investigation were freshmen transfer students at RCC. All of the students completed the Career Planning and Decision-Making Student Surveys and the Assessment of Career Decision-Making (ACDM). Pretest and posttest scores were obtained for the treatment (N = 18) and control (N = 18) groups. Demographic data

pertaining to sex and age were obtained for all students as well as their precourse status with regard to choice of major.

For the statistical analysis, the researcher had proposed using analysis of variance and analysis of covariance. Analysis of variance was utilized, as proposed, to determine if differences existed between pretest means. Analysis of covariance was proposed as the procedure for examining adjusted posttest means, using the pretest as a covariate. However, the assumption of Homogeneity of Regression was violated in three of the six analyses utilizing analysis of covariance. This violation indicated that the analysis of covariance procedure was inappropriate for testing for significant differences between posttest means. Thus, repeated measures two-way analysis of variance was chosen as an alternate test of significance with the treatment (CPDM Course) serving as one independent variable. Although the violation was identified in only three of the scales, repeated measures was utilized to test significance in all six scales for consistency. Using the "two factor design" with repeated measures, the focus was on the significance of group and time interaction.

On the three scales where the interaction was statistically significant, the results were represented graphically by plotting the cell means to facilitate examination of the interaction. A significant interaction would indicate that the change from pretest to posttest was not the same for the experimental and control groups across time. Thus, the null hypothesis would be retained or rejected based upon the statistical significance of the interaction.

Subsequently, the Tukey post hoc multiple comparisons was utilized to find out exactly which means were significantly different. The test statistic for the Tukey method (Q) is:

$$Q = \frac{\bar{X}_i - \bar{X}_j}{\sqrt{MS_w/n'}}$$

Where \bar{X}_i = sample mean for group i

\bar{X}_j = sample mean for group j

MS_w = Mean Square within cell from the two-way analysis of variance

n' = number of observations in each of the two groups summed over the appropriate cells.
(Hinkle et. al., 1979)

An end-of-unit evaluation was obtained from each student in the treatment group. Also, upon completion of the course, a structured interview was conducted with each member of the treatment group.

DESCRIPTIVE DATA ANALYSIS

Demographic Data

A total of thirty-six students were included in the study and data for all were reported in the results. The sample consisted of eight (22.2 percent) males and twenty-eight (77.8 percent) females. The ages of the students ranged from eighteen to fifty with the majority (n = 25) or 69.4 percent ranging from eighteen to twenty-two. All were freshmen students planning to transfer to a four-year institution.

Pre-Treatment Decisional Status

Question number one in the Career Planning and Decision-Making Student Survey for experimental students was "Why did you enroll in this course?" Responses to this question are in Appendix K. These responses reinforce earlier findings of surveys and studies as reported in the literature review that students perceive a need for assistance in developing their career planning and decision-making skills. Generally, the students expressed a need for assistance in the following four areas: (1) exploring career options, (2) exploring the world of work, (3) career planning, and (4) decision-making.

The responses of the students in the Control group to question one, "Would you enroll in a career planning and decision-making course if one were offered?" was yes. This response was expected since all students had volunteered to enroll in such a course. It is very likely that their reasons for enrolling in such a course if they had been selected for the experimental group would have been similar to the responses of those in the experimental group.

Item 11 in the Student Survey reads "At what point are you in deciding upon a college major?" Possible responses to this item are:

- I have no idea about what my college major will be.
- I have very little idea about what my college major will be.
- I have some idea about what my college major will be, but have not completely decided. I am currently considering . . .
- I have decided upon a college major. It is . . .

Table 1 summarizes the students' responses to item 11 for both the experimental and control groups. The response most frequently given was "some idea".

RESULTS PERTAINING TO HYPOTHESES

The results for each of the five hypotheses are presented in this section. Certain responses on the Student Posttest Survey for experimental students and the structured interview deserve special attention. Those responses on the survey which provided information regarding the students' perceptions of the impact of the course are discussed. Also, the responses to questions on the structured interview which are related to the hypotheses are discussed.

Hypothesis 1. There is no difference between achievement of course objectives by the students who completed the course, Career Planning and Decision-Making, as measured by the CPDM Student Survey, and those who did not complete the course.

Tables 2 - 5 summarize the analysis of variance for the data pertaining to this hypothesis. On the pretest, there were no significant differences at the .05 level between the groups on the Self Estimates subscale or Cognitive subscale. This indicated similarities between the groups on these measures prior to treatment. In the repeated measures analysis of variance, there were significant group/time interaction on the Self Estimates subscale ($F = 95.59, p < .0001$) and the Cognitive subscale ($F = 299.02, p < .0001$). Thus the null hypothesis was rejected.

TABLE 1

Responses to Item Eleven of the Student Pretest Survey
 "At What Point Are you in Deciding Upon a College Major?"

| GROUP | No Idea | | Very Little Idea | | Some Idea | | Have Decided | |
|--------------|---------|-----|------------------|------|-----------|------|--------------|------|
| | n | % | n | % | n | % | n | % |
| Experimental | 1 | 5.6 | 4 | 22.2 | 10 | 55.6 | 3 | 16.7 |
| Control | 0 | 0 | 4 | 22.2 | 7 | 38.9 | 7 | 38.9 |

TABLE 2

Pretest and Posttest Mean Scores on Self Estimates
of the Student Survey

| Group | <u>n</u> | Pre | | Post | | Gain |
|-------|----------|-------|-------|-------|-------|---------|
| | | Mean | SD | Mean | SD | |
| E | 18 | 26.00 | 10.42 | 52.89 | 7.96 | + 26.89 |
| C | 18 | 32.56 | 13.43 | 35.56 | 11.78 | + 3.00 |

ANOVA F Ratio on Pretest = 2.69, df = 1, 34, p > .05

TABLE 3

Posttest ANOVA Summary Table for Self Estimates Subscale of the Student Survey

| Source/Effect | SS | df | Ms | F |
|-----------------|---------|----|---------|-------|
| Grp | 3375.68 | 1 | 3375.68 | 32.58 |
| ID (Grp) | 3522.81 | 34 | 103.61 | |
| Time | 378.13 | 1 | 378.13 | 4.90 |
| Grp X Time | 7381.13 | 1 | 7381.13 | 95.59 |
| Time X Id (Grp) | 2625.25 | 34 | 77.21 | |

TABLE 4

Pretest and Posttest Mean Scores on Cognitive Subscale
of the Student Survey

| Group | <u>n</u> | Pre | | Post | | Gain |
|-------|----------|------|------|-------|------|---------|
| | | Mean | SD | Mean | SD | |
| E | 18 | 5.94 | 4.22 | 41.67 | 6.85 | + 35.73 |
| C | 18 | 8.44 | 4.71 | 7.72 | 5.09 | - .72 |

ANOVA F Ratio on Pretest = 2.82, df = 1, 34, $\underline{p} > .05$

TABLE 5

Posttest ANOVA Summary Table for Cognitive Subscale of the Student Survey

| Source/Effect | SS | df | Ms | F |
|-----------------|---------|----|---------|--------|
| Grp | 4449.39 | 1 | 4449.39 | 122.26 |
| ID (Grp) | 1237.39 | 34 | 36.39 | |
| Time | 5512.50 | 1 | 5512.50 | 275.78 |
| Grp X Time | 5976.89 | 1 | 5976.89 | 299.02 |
| Time X Id (Grp) | 679.61 | 34 | 19.99 | |

Both the experimental and control groups showed a mean change score in a positive direction on the Self Estimates subscale; 26.89 for the experimental and 3.00 for the control. For the experimental group, mean scores changed in a positive direction for the Cognitive subscale while the control group showed a negative change.

To help convey the meaning of the significant interaction F ratios of the Self Estimates and the Cognitive subscales, Figures 1 and 2 respectively, are presented as graphical representations of the interactions. In each graph, the mean scores (dependent variable) are shown along the vertical axis, the levels of the repeated measures variable (pre and post) are shown along the horizontal axis and the two groups (experimental and control) are designated by the lines within the graphs. The nonparallel lines connecting the cell means represent interaction. The nature of the interaction is further explored by use of the Tukey Test to determine where significant differences actually occurred between means; that is, experimental and control pretest means, experimental and control posttest means, experimental pre-and posttest means or control pre-and posttest means.

Data for the Tukey procedure for the Self Estimates and Cognitive Subscale are summarized in Tables 6 and 7 respectively. For both, significant differences exist between the (1) experimental and control groups posttest means and (2) experimental pre- and post-test means. These results were to be expected since the experimental group was exposed to the treatment while the control was not and suggest that

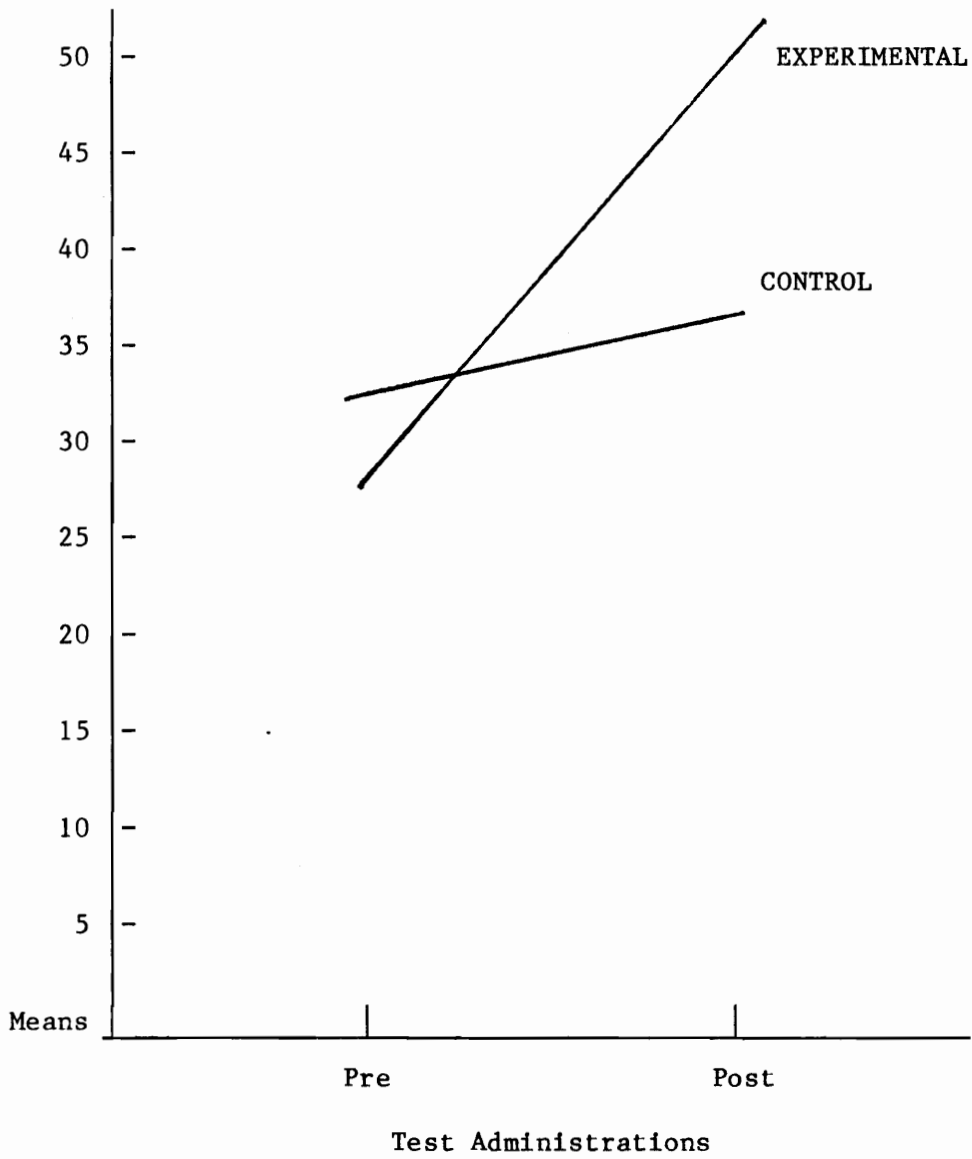


FIGURE 1

Plot of Interaction for Self Estimates Data on Student Survey

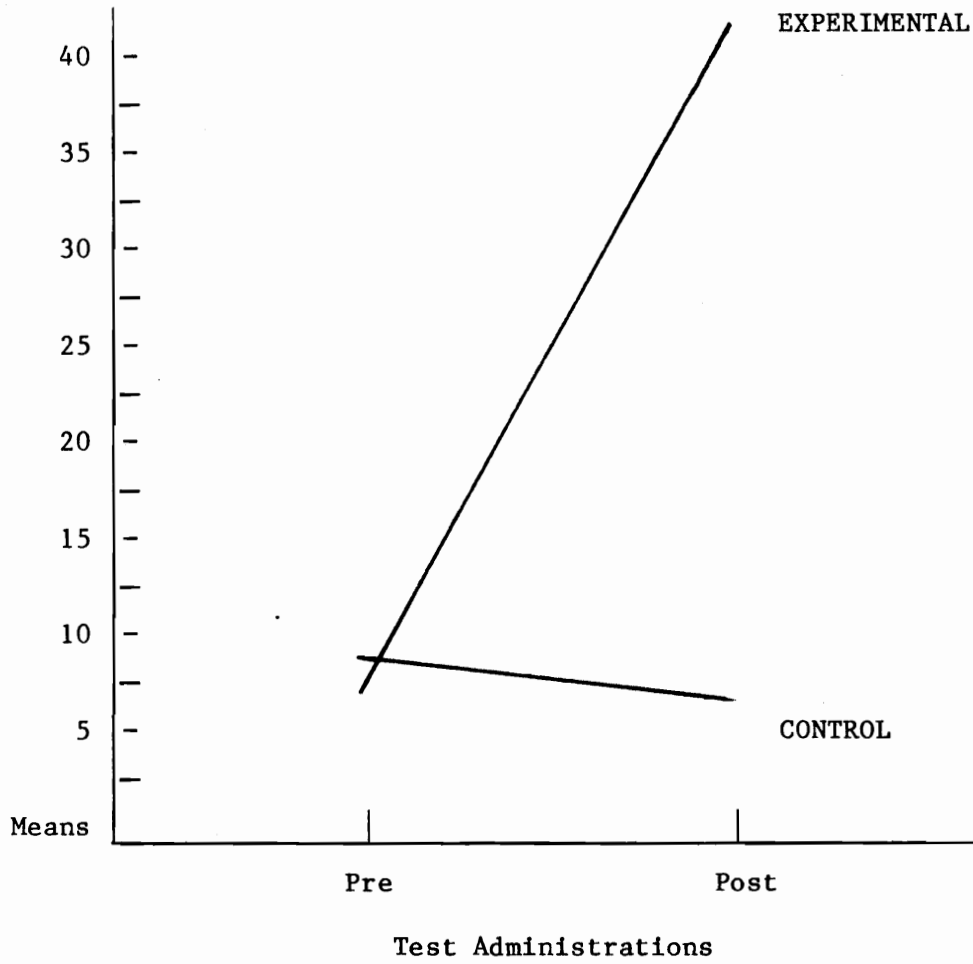


FIGURE 2

Plot of Interaction for Cognitive Data on Student Survey

TABLE 6

Data for Tukey Comparisons for Self Estimates Subscale

| Group | Pre E | Pre C | Post E | Post C |
|---|-------|-------|--------|--------|
| \bar{X} | 26.00 | 32.56 | 52.89 | 35.56 |
| $\bar{X}_i - \bar{X}_j$ | | 6.56 | 26.89 | _____ |
| | | | _____ | 3.00 |
| | | | | 17.33 |
| $Q = \frac{\bar{X}_i - \bar{X}_j}{\sqrt{MS_e/n}}$ | | 3.17 | 12.99* | _____ |
| | | | | 1.45 |
| | | | | 8.37* |

*P < .05, $Q_{cv}(.05) = 3.40$ for df = 34

TABLE 7

Data for Tukey Comparisons for Cognitive Subscale

| Group | Pre E | Pre C | Post E | Post C |
|---|-------|-------|--------|--------|
| \bar{X} | 5.94 | 8.44 | 41.67 | 7.72 |
| $\bar{X}_i - \bar{X}_j$ | | 2.50 | 35.73 | _____ |
| | | | _____ | .72 |
| | | | | 33.95 |
| $Q = \frac{\bar{X}_i - \bar{X}_j}{\sqrt{MS_e/n}}$ | | 2.38 | 34.03* | _____ |
| | | | | .69 |
| | | | | 32.33* |

*P < .05, $Q_{cv(.05)} = 3.40$ for $df = 34$

the course was effective in influencing students' self estimates of their knowledge and skills in the area of career planning and decision-making as well as their cognitive awareness. That is, over the period of time from the pre-to posttest administration, the experimental group gains exceeded those of the control group.

A review of the CPDM Student Survey posttest responses for the experimental group revealed the following assessment of knowledge gained, having completed the Career Planning and Decision-Making course. Possible responses were "none", "very Little", "some", "a moderate amount", and "a great deal". A breakdown of student responses follows; categories in which there were no responses are not listed.

Question 3B. Having completed this course, how much understanding have you gained about the college majors offered at your school?

Percent Selecting Possible Responses

| <u>Response</u> | <u>N</u> | <u>%</u> |
|-------------------|----------|----------|
| a moderate amount | 5 | 27.8 |
| a great deal | 13 | 72.2 |

All of the students felt they had gained a moderate amount or a great deal from the course.

Question 4B. Having completed this course, how much understanding have you gained about the occupations and opportunities for employment that relate to college majors?

Percent Selecting Possible Responses

| <u>Response</u> | <u>N</u> | <u>%</u> |
|-------------------|----------|----------|
| some | 1 | 5.6 |
| a moderate amount | 3 | 16.7 |
| a great deal | 14 | 77.8 |

Seventy-eight percent of the students felt they gained a great deal.

Question 5B. Having completed the course, how much understanding have you gained about the qualifications for employment in occupations that interest you?

Percent Selecting Possible Responses

| <u>Response</u> | <u>N</u> | <u>%</u> |
|-------------------|----------|----------|
| a moderate amount | 5 | 27.8 |
| a greatdeal | 13 | 72.2 |

Seventy-two percent of the students felt they had gained a great deal from the course.

Question 6B. Having completed this course, how much understanding have you gained about the salary and benefits of occupations that interest you?

Percent Selecting Possible Responses

| <u>Response</u> | <u>N</u> | <u>%</u> |
|-------------------|----------|----------|
| some | 1 | 5.6 |
| a moderate amount | 6 | 33.3 |
| a great deal | 11 | 61.1 |

Ninety-four percent of the students felt they had gained a moderate amount or a great deal.

Question 7B. Having completed this course, how much understanding have you gained about future job openings in the occupations that interest you?

Percent Selecting Possible Responses

| <u>Response</u> | <u>N</u> | <u>%</u> |
|-------------------|----------|----------|
| a moderate amount | 6 | 33.3 |
| a great deal | 12 | 66.7 |

All of the students felt they had gained a moderate amount or a great deal.

Question 8B. Having completed this course, how much understanding have you gained about occupational advancement in the occupations that interest you?

Percent Selecting Possible Responses

| <u>Response</u> | <u>N</u> | <u>%</u> |
|-------------------|----------|----------|
| a moderate amount | 8 | 44.4 |
| a great deal | 10 | 55.6 |

All of the students felt they had gained a moderate amount or a great deal.

Question 9B. Having completed this course, how much understanding have you gained about college preparation for employment in the occupations that interest you?

Percent Selecting Possible Responses

| <u>Response</u> | <u>N</u> | <u>%</u> |
|-------------------|----------|----------|
| some | 1 | 5.6 |
| a moderate amount | 2 | 11.1 |
| a great deal | 15 | 83.3 |

Eighty-three percent of the students felt they had gained a great deal from the course.

Question 13B. Having completed the course, how much understanding have you gained about your occupational interests?

Percent Selecting Possible Responses

| <u>Response</u> | <u>N</u> | <u>%</u> |
|-------------------|----------|----------|
| a moderate amount | 4 | 22.2 |
| a great deal | 14 | 77.8 |

Seventy-eight percent of the students felt they had gained a great deal from the course.

Question 14B. Having completed this course, how much understanding have you gained about your work values?

Percent Selecting Possible Responses

| <u>Response</u> | <u>N</u> | <u>%</u> |
|-------------------|----------|----------|
| a moderate amount | 4 | 22.2 |
| a great deal | 14 | 77.8 |

Seventy-eight percent of the students felt they had gained a great deal from taking the course.

Question 15B. Having completed this course, how much understanding have you gained about your career goals?

Percent Selecting Possible Responses

| <u>Response</u> | <u>N</u> | <u>%</u> |
|-------------------|----------|----------|
| a moderate amount | 4 | 22.2 |
| a great deal | 14 | 77.8 |

Seventy-eight percent of the students felt they had gained a great deal from taking the course.

Question 16B. Having completed this course, how much understanding have you gained about your aptitudes.

Percent Selecting Possible Responses

| <u>Response</u> | <u>N</u> | <u>%</u> |
|-------------------|----------|----------|
| some | 1 | 5.5 |
| a moderate amount | 6 | 33.3 |
| a great deal | 11 | 61.1 |

Ninety-four percent of the students felt they had gained a moderate amount or a great deal from the course.

The statistical findings revealed that experimental posttest results were significantly greater than the control posttest results at the .05 level of significance. That is, after the course CPDM students' self estimates of their knowledge of career development concepts as well as their real knowledge or recognition of career development concepts were significantly greater than non-CPDM students as measured by the Student Survey. These results suggested that the experimental students'

understanding of career concepts and their development of career planning and decision-making skills were enhanced during the course.

The experimental students' responses to the subitems relating to growth recognition for each of the noncognitive items revealed that the students felt that they had gained direction in their career planning as a result of course completion.

Thus, there is evidence of increased understanding of career planning and decision-making concepts and growth recognition of those students who completed the course. Implications are that the course was effective.

Hypothesis 2. There is no difference between the rational decision-making style of those students who completed the course and those who did not complete the course, as measured by the ACDM.

Tables 8 and 9 summarize the analysis of variance results. On the pretest, there were no differences between the groups ($F = 0.07$; $P > .05$). This indicated similarities between the groups initially. In the repeated measures analysis of variance on the posttest scores there was significant group/time interaction on rational decision-making style ($F = 12.51$, $p = .0012$). Thus the null hypothesis was rejected.

For further examination of the meaning of the significant interaction F ratio of the Rational Decision-Making Style subscale, Figure 3 is presented as a graphical representation of the interaction. As illustrated in the Self Estimates and Cognitive subscales, the nonparallel lines show the interaction that is occurring. The

TABLE 8

Pretest and Posttest Mean Scores on Decision-Making
Style Rational Subscale of the ACDM

| Group | <u>n</u> | Pre | | Post | | Gain |
|-------|----------|------|------|------|------|--------|
| | | Mean | SD | Mean | SD | |
| E | 18 | 5.94 | 2.53 | 8.78 | 1.93 | + 2.84 |
| C | 18 | 6.17 | 2.43 | 6.72 | 2.56 | + .55 |

ANOVA F Ratio on Pretest = .07, df = 1, 34, p > .05

TABLE 9

ANOVA Summary Table for Decision-Making Style Rational Subscale of the ACDM
 Posttest

| Source/Effect | SS | df | Ms | F |
|-----------------|--------|----|-------|-------|
| Grp | 15.13 | 1 | 15.13 | 1.60 |
| ID (Grp) | 320.69 | 34 | 9.43 | |
| Time | 51.68 | 1 | 51.68 | 27.68 |
| Grp X Time | 23.35 | 1 | 23.35 | 12.51 |
| Time X Id (Grp) | 63.47 | 34 | 1.87 | |

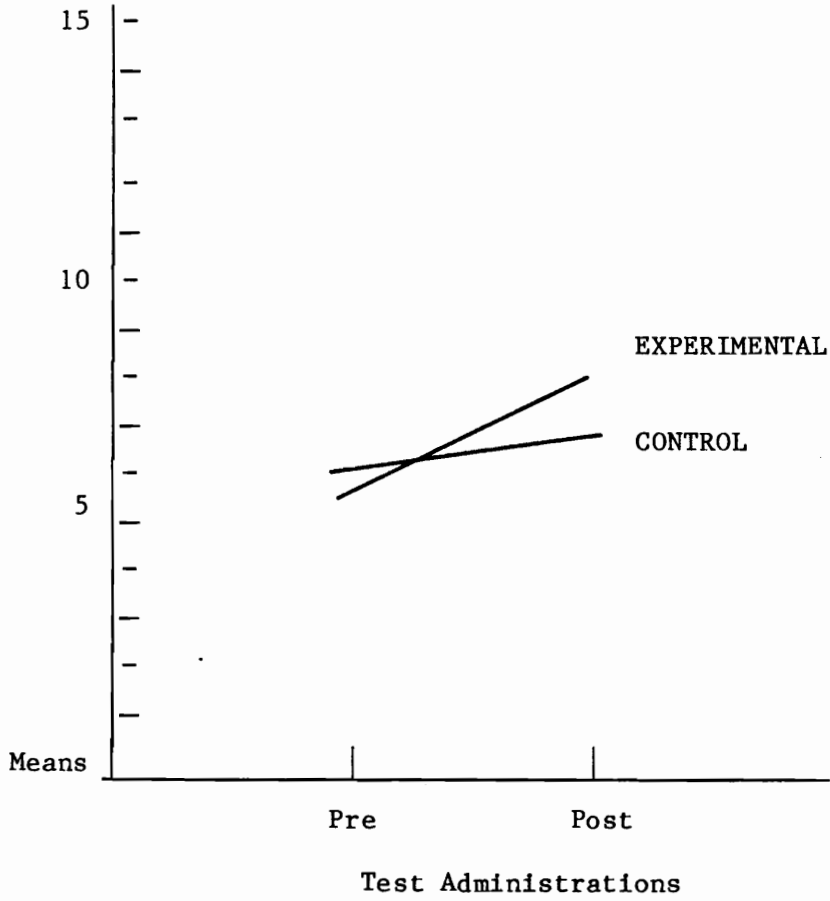


FIGURE 3

Plot of Interaction for Decision-Making Style
(Rational) Data on ACDM

experimental group showed a mean change score, in a positive direction of 2.84. The control group showed a gain, in a positive direction, of .55. Again, the Tukey procedure (Table 10) was utilized to further identify exactly what means differed. The results show significant differences occurring between the (1) experimental and control groups posttest means and (2) experimental pre- and posttest means. These results further supported the effectiveness of the course and, more specifically, with regard to the students' rational decision-making style.

Table 11 summarizes the percent of students relying on the rational approach to decision-making prior to and following treatment. While pretest scores revealed 67 percent of the experimental group utilizing the rational approach, the posttest results revealed 94 percent with a rational orientation. That is, 17 out of 18 in the experimental group were relying primarily on the rational approach to decision-making following treatment. These results indicated that the course had influenced the students' decision-making style with focus on a rational approach.

Item number 14 of the Interview Schedule (Appendix J) was related to Hypothesis 2. It stated :

14. How has your decision-making style changed since enrolling in this course?

Probe: a. Do you think you are a more effective decision-maker since enrolling in this course?
_____ Yes _____ No

b. Can you tell me a little about that?

TABLE 10

Data for Tukey Comparisons for DMS-R Subscale

| Group | Pre E | Pre C | Post E | Post C |
|---|-------|-------|--------|--------|
| \bar{X} | 5.94 | 6.17 | 8.78 | 6.72 |
| $\bar{X}_i - \bar{X}_j$ | | .23 | 2.84 | _____ |
| | | | _____ | .55 |
| | | | | 2.06 |
| $Q = \frac{\bar{X}_i - \bar{X}_j}{\sqrt{MS_e/n}}$ | | .72 | 8.88* | _____ |
| | | | | 1.72 |
| | | | | 6.44* |

*P < .05, $Q_{cv}(.05) = 3.40$ for $df = 34$

TABLE 11

Percent of Students Relying on Rational Style of
Decision-Making

| GROUP | Pretest | | Posttest | |
|--------------|---------|----|----------|----|
| | n | % | n | % |
| Experimental | 12 | 67 | 17 | 94 |
| Control | 12 | 67 | 10 | 56 |

Fifteen (83 percent) of the eighteen students in the experimental group indicated that their decision-making style had changed and those fifteen felt they were more effective decision-makers. Typical responses were:

I try to put things in order of importance now.

I try to find out more facts, information.

I take more time to weigh pros and cons.

I seek information I don't know.

I take more time to think about the issue.

I think about future as well as present.

I don't make quick decisions anymore, have to think about it and analyze it.

I was a plunger, used to go on impulses.

Hypothesis 3. There is no difference between the students' degrees of progress through the sequential stages of the decision-making process with regard to implementation of their decision to come to college by those students completing the course and those not completing the course.

Tables 12 and 13 summarize the data for the analysis of variance and repeated measures analysis of variance. On the pretest, there were no differences between the groups ($F = 0.59$; $P > .05$). This indicated similarities between the groups prior to treatment. The results were nonsignificant for the test of group/time interaction as well as for the test of time as a main effect. This indicated that there was no variation in the groups with the passage of time. The null hypothesis was not rejected.

TABLE 12

Pretest and Posttest Mean Scores on Decision-Making
Task-College Subscale of the ACDM

| Group | <u>n</u> | Pre | | Post | | Gain |
|-------|----------|-------|------|-------|------|-------|
| | | Mean | SD | Mean | SD | |
| E | 18 | 22.11 | 1.84 | 22.17 | 1.10 | + .06 |
| C | 18 | 21.61 | 2.03 | 21.61 | 1.79 | 00 |

ANOVA F Ratio on Pretest = .59, df = 1, 34, p > .05

TABLE 13

Posttest ANOVA Summary Table for DMT-C Subscale of the ACDM

| Source/Effect | SS | df | Ms | F |
|-----------------|--------|----|------|------|
| Grp | 5.01 | 1 | 5.01 | 1.18 |
| ID (Grp) | 144.36 | 34 | 4.25 | |
| Time | 0.01 | 1 | .01 | .01 |
| Grp X Time | 0.01 | 1 | .01 | .01 |
| Time X Id (Grp) | 58.47 | 34 | 1.72 | |

For the experimental group, however, mean scores did change in a positive direction while the control group mean scores showed no change. The findings of no significant difference may be attributed to students having already been committed to their choice to attend college as well as their having adjusted to the college setting.

Hypothesis 4. There is no significant difference between the students' degrees of progress through the sequential stages of the decision-making process with regard to choice of major of the students who completed the course and those who did not, as measured by the ACDM.

Tables 14 and 15 summarize the analysis of variance and repeated measures analysis of variance results. On the pretest, there were no differences between the groups ($F = .03$; $p > .05$) which indicated similarities between the groups prior to treatment. The test results for group/time interaction as well as for time as a main effect were nonsignificant. Thus, there was no variation in the groups across time with regard to progress made in choosing a major. The null hypothesis was not rejected.

These results were surprising since the course was designed to assist students in establishing commitments to a major already chosen or in choosing a major and it would be expected that the experimental group would have realized a significant gain following the treatment. Possible causes for this not occurring are that the treatment was ineffective or the instrument may have produced inadequate measurement in this area. It was also surprising that the control group realized a

TABLE 14

Pretest and Posttest Mean Scores on Decision-Making Task-Major
Subscale of the ACDM

| Group | n | Pre | | Post | | Gain |
|-------|----|-------|------|-------|------|-------|
| | | Mean | SD | Mean | SD | |
| E | 18 | 25.11 | 4.16 | 25.56 | 4.41 | + .45 |
| C | 18 | 25.33 | 3.74 | 26.22 | 2.53 | + .89 |

ANOVA F Ratio on Pretest = .03, df = 1, 34, $p > .05$

TABLE 15

Posttest ANOVA Summary Table for DMT-M Subscale of the ACDM

| Source/Effect | SS | df | Ms | F |
|-----------------|--------|----|-------|------|
| Grp | 3.56 | 1 | 3.56 | .15 |
| ID (Grp) | 798.22 | 34 | 23.48 | |
| Time | 8.00 | 1 | 8.00 | 1.57 |
| Grp X Time | .89 | 1 | .89 | .17 |
| Time X Id (Grp) | 173.11 | 34 | 5.09 | |

greater mean score gain than the experimental group. No data was obtained from the study to explain this occurrence.

Items number 2 and 3 of the interview schedule were related to Hypothesis 4. They stated:

2. Have you changed you major since enrolling in the course, Career Planning and Decision-Making? _____ Yes _____ No

3. Do you feel more committed to your major since completing the course, Career Planning and Decision-Making?

- Probe:
- a. What factors did you consider in establishing your commitment to your major?
 - b. What experience in the course made you feel more committed to your major?
 - c. At what point in the course was this commitment made?

In response to item 2, three students responded "yes", fourteen students responded "no", and one indicated she planned to change her major.

Regarding commitments to their majors, twelve students responded "yes" they were more committed; six said "no" they were not more committed to their major. In response to Probe a, the majority of the students indicated that a greater awareness of their interests, values, and work preferences were factors contributing to establishment of commitments to their majors. In response to Probe b, several aspects of course experiences were cited as contributing factors to commitment to their majors.

Even though the statistical findings did not indicate differences between the groups, the results from the interview schedule

revealed that the majority of the students perceived the course as being effective in assisting them in establishing commitments to a major already chosen. The students' responses on the schedule also indicated that the course created within them a greater awareness of their interests, values, and work preferences. These factors were noted as influential in their becoming more committed to their majors. Possible effects of the course are further indicated by the students' responses that several aspects of course experiences contributed to their establishing firmer commitments to chosen majors.

Hypothesis 5. There is no difference between the students' degrees of progress through the sequential stages of the decision-making process with regard to choice of planned occupation of those who completed the course CPDM and those who did not complete the course, as measured by the ACDM.

Tables 16 and 17 summarize the analysis of variance and the repeated measures analysis of variance for the data pertaining to the students' decisions regarding planned occupations. The pretest scores indicated no differences between the groups at the .05 level. On the posttest, there was no significant group/time interaction.

However, the results for "time" as a main effect were significant. Those results indicated that while both groups did change across time, the change was the same for both. The null hypothesis was not rejected.

TABLE 16

Pretest and Posttest Mean Scores on Decision-Making Task-Occupation
Subscale of the ACDM

| Group | <u>n</u> | Pre | | Post | | Gain |
|-------|----------|-------|------|-------|------|--------|
| | | Mean | SD | Mean | SD | |
| E | 18 | 25.0 | 2.17 | 27.11 | 3.32 | + 2.11 |
| C | 18 | 25.50 | 2.09 | 26.17 | 2.43 | + .67 |

ANOVA F Ratio on Pretest = .49, df = 1, 34, $\bar{p} > .05$

TABLE 17
 Posttest ANOVA Summary Table for DMT-0 Subscale of the ACDM

| Source/Effect | SS | df | Ms | F |
|-----------------|--------|----|-------|-------|
| Grp | .89 | 1 | .89 | .08 |
| ID (Grp) | 355.89 | 34 | 10.47 | |
| Time | 34.72 | 1 | 34.72 | 13.56 |
| Grp X Time | 9.39 | 1 | 9.39 | 3.67 |
| Time X Id (Grp) | 86.89 | 34 | 2.56 | |

For the experimental group there was a mean score change of +2.11 while the control group showed a change of +.67. These changes indicated that the students in the experimental group moved up the scale in choosing an occupation, to a larger degree than those in the control group.

Item 5 of the interview schedule was related to Hypothesis 5. It stated:

5. Are you closer to selecting an occupation then before you enrolled in the course, Career Planning and Decision-Making?

_____ Yes _____ No

- Probe: a. Had you thought about an occupation before you enrolled in the course?
- b. Did the course make you consider a different occupation?

In response to item 5, fifteen students responded "yes" and two responded "no". One was not certain. All eighteen students responded "yes" they had thought about occupations before enrolling in the course in response to Probe a. In response to Probe b, all eighteen students responded "yes" that the course had made them consider different occupations.

The results of the interview schedule suggested that the students perceived an increase in their progress toward selection of an occupation to pursue after college following completion of the course even though the statistical findings did not indicate this. Eighty-three percent of the students responded that they were closer to selecting an occupation following completion of the course suggesting that the course may have stimulated movement in a positive direction.

All of the students responded that the course was influential in their considering different occupations.

To address the secondary purpose of the study, evaluation of the course from the students' perspective, the end-of-unit evaluations and the interview schedules were used to compile data. A discussion of this data follows:

END-OF-UNIT-EVALUATIONS

Tables 18-23 present the data pertaining to the end-of-unit evaluations. The items on the forms were evaluated or rated as students perceived its success in the course.

Filmstrips. The majority of the students rated the filmstrips for units 1-4 "very helpful" or "somewhat helpful" (Unit 1, 100 percent; Unit 2, 100 percent; unit 3, 72.22 percent; and Unit 4, 66.66 percent). For Unit 5, 44.45 percent rated the filmstrips as "very helpful" or "somewhat helpful" while 38.89 percent could not recall. Sixteen and sixty-seven hundredths (16.67) percent rated them as "not very helpful". In Unit VI, 44.44 percent rated them as "very helpful" or "somewhat helpful" with 16.67 percent neutral and 33.33 percent could not recall.

Lecture Presentations. For all six units, the majority of the students rated the lectures/presentations as "very helpful" or "somewhat helpful" (Unit 1, 100 percent; Unit 2, 100 percent; Unit 3, 88.88 percent; Unit 4, 100 percent; Unit 5, 88.89 percent; and Unit 6, 88.89 percent).

TABLE 18

Percentages of Responses Per Item to End-of-Unit Evaluations - Unit I

| | Very Helpful 1. | Somewhat Helpful 2. | Neutral 3. | Not Very Helpful 4. | Hinder/ Disturbing 5. | Can't Recall 6. |
|---|-----------------------|---------------------------|---------------|---------------------------|-----------------------------|-----------------------|
| 1. Filmstrips | 15 83.33 | 3 16.67 | | | | |
| 2. Lecture/ Presentations | 10 55.56 | 8 44.44 | | | | |
| 3. Instructor Contact | 16 88.89 | 2 11.11 | | | | |
| 4. Amount of Time Spent on Unit | 7 38.89 | 11 61.11 | | | | |
| 5. Reading Text Career Planning and Decision-Making | 8 44.44 | 10 55.56 | | | | |
| 6. Supplementary Reading | 7 38.89 | 10 55.56 | 1 5.56 | | | |
| 7. Support Group Discussions | 18 100.00 | 0 | | | | |
| 8. In-Class Writing Assignments | 5 27.78 | 12 66.67 | 1 5.56 | | | |
| 9. Out-of-Class Work Assignments | 3 16.67 | 14 77.78 | 1 5.56 | | | |

TABLE 19

Percentages of Responses Per Item to End-of-Unit Evaluations - Unit II

| | Very Helpful 1. | Somewhat Helpful 2. | Neutral 3. | Not Very Helpful 4. | Hinder/ Disturbing 5. | Can't Recall 6. |
|---|-----------------------|---------------------------|---------------|---------------------------|-----------------------------|-----------------------|
| 1. Filmstrips | 3 16.17 | 12 66.67 | 3 | | | |
| 2. Lecture/ Presentations | 10 55.56 | 8 44.44 | | | | |
| 3. Instructor Contact | 8 44.44 | 10 55.56 | | | | |
| 4. Amount of Time Spent on Unit | 15 83.33 | 3 16.67 | | | | |
| 5. Reading Text Career Planning and Decision-Making | 16 88.89 | 2 11.11 | | | | |
| 6. Supplementary Reading | 14 77.78 | 4 22.22 | | | | |
| 7. Support Group Discussions | 16 88.89 | 2 11.11 | | | | |
| 8. In-Class Writing Assignments | 13 72.22 | 4 22.22 | 1 5.56 | | | |
| 9. Out-of-Class Work Assignments | 5 27.78 | 12 66.67 | 1 5.56 | | | |

TABLE 20

Percentages of Responses Per Item to End-of-Unit Evaluations - Unit III

| | Very Helpful 1. | Somewhat Helpful 2. | Neutral 3. | Not Very Helpful 4. | Hinder/ Disturbing 5. | Can't Recall 6. |
|---|-----------------------|---------------------------|---------------|---------------------------|-----------------------------|-----------------------|
| 1. Filmstrips | 5 27.78 | 8 44.44 | 3 16.67 | 2 11.11 | | |
| 2. Lecture/ Presentations | 8 44.44 | 8 44.44 | 2 11.11 | | | |
| 3. Instructor Contact | 17 94.44 | 1 5.56 | | | | |
| 4. Amount of Time Spent on Unit | 3 16.67 | 12 66.67 | 3 16.67 | | | |
| 5. Reading Text Career Planning and Decision-Making | 3 16.67 | 13 72.22 | 2 11.11 | | | |
| 6. Supplementary Reading | 3 16.67 | 13 72.22 | 1 5.56 | 1 5.56 | | |
| 7. Support Group Discussions | 14 77.78 | 4 22.22 | | | | |
| 8. In-Class Writing Assignments | 6 33.33 | 9 50.00 | 3 16.67 | | | |
| 9. Out-of-Class Work Assignments | 7 38.89 | 9 50.00 | 2 11.11 | | | |

TABLE 21

Percentages of Responses Per Item to End-of-Unit Evaluations - Unit IV

| | Very Helpful 1. | Somewhat Helpful 2. | Neutral 3. | Not Very Helpful 4. | Hinder/ Disturbing 5. | Can't Recall 6. |
|---|-----------------------|---------------------------|---------------|---------------------------|-----------------------------|-----------------------|
| 1. Filmstrips | 4 22.22 | 8 44.44 | 3 16.67 | | | 3 16.67 |
| 2. Lecture/ Presentations | 10 55.56 | 8 44.44 | | | | |
| 3. Instructor Contact | 13 72.22 | 2 11.11 | 3 16.67 | | | |
| 4. Amount of Time Spent on Unit | 5 27.78 | 12 66.67 | | | 1 5.56 | |
| 5. Reading Text Career Planning and Decision-Making | 9 50.00 | 7 38.89 | 2 11.11 | | | |
| 6. Supplementary Reading | 1 5.56 | 8 44.44 | 9 50.00 | | | |
| 7. Support Group Discussions | 7 38.89 | 9 50.00 | 2 11.11 | | | |
| 8. In-Class Writing Assignments | 3 16.67 | 12 66.67 | 1 5.56 | 2 11.11 | | |
| 9. Out-of-Class Work Assignments | 10 55.56 | 7 38.89 | 1 5.56 | | | |

TABLE 22

Percentages of Responses Per Item to End-of-Unit Evaluations - Unit V

| | Very Helpful 1. | Somewhat Helpful 2. | Neutral 3. | Not Very Helpful 4. | Hinder/ Disturbing 5. | Can't Recall 6. |
|---|-----------------------|---------------------------|---------------|---------------------------|-----------------------------|-----------------------|
| 1. Filmstrips | 1 5.56 | 7 38.89 | | 3 16.67 | | 7 38.89 |
| 2. Lecture/ Presentations | 9 50.00 | 7 38.89 | 2 11.11 | | | |
| 3. Instructor Contact | 13 72.22 | 4 22.22 | 1 5.56 | | | |
| 4. Amount of Time Spent on Unit | 4 22.22 | 9 50.00 | 5 27.78 | | | |
| 5. Reading Text Career Planning and Decision-Making | 2 11.11 | 15 83.33 | 1 5.56 | | | |
| 6. Supplementary Reading | 3 16.67 | 10 55.56 | 4 22.22 | | | 1 5.56 |
| 7. Support Group Discussions | 7 38.89 | 8 44.44 | 2 11.11 | 1 5.56 | | |
| 8. In-Class Writing Assignments | 14 77.78 | 4 22.22 | | | | |
| 9. Out-of-Class Work Assignments | 10 55.56 | 7 38.89 | | 1 5.56 | | |

TABLE 23

Percentages of Responses Per Item to End-of-Unit Evaluations - Unit VI

| | Very Helpful 1. | Somewhat Helpful 2. | Neutral 3. | Not Very Helpful 4. | Hinder/ Disturbing 5. | Can't Recall 6. |
|---|-----------------------|---------------------------|---------------|---------------------------|-----------------------------|-----------------------|
| 1. Filmstrips | 2 11.11 | 6 33.33 | 3 16.67 | 1 5.56 | | 6 33.33 |
| 2. Lecture/ Presentations | 5 27.78 | 11 61.11 | 2 11.11 | | | |
| 3. Instructor Contact | 12 66.67 | 5 27.78 | 1 5.56 | | | |
| 4. Amount of Time Spent on Unit | 1 5.56 | 9 50.00 | 1 5.56 | 2 11.11 | 5 27.78 | |
| 5. Reading Text Career Planning and Decision-Making | 3 16.67 | 13 72.22 | 1 5.56 | 1 5.56 | | |
| 6. Supplementary Reading | 2 11.11 | 2 11.11 | 3 16.67 | 3 16.67 | | 8 44.44 |
| 7. Support Group Discussions | 9 50.00 | 9 50.00 | | | | |
| 8. In-Class Writing Assignments | 1 5.56 | 8 44.44 | 9 50.00 | | | |
| 9. Out-of-Class Work Assignments | 1 5.56 | 7 38.89 | 9 50.00 | 1 5.56 | | |

Instructor Contact. For all units, the majority of the students rated the instructor contact as "very helpful" or "somewhat helpful" (Unit 1, 100 percent; Unit 2, 100 percent; Unit 3, 100 percent; Unit 4, 83.33 percent; Unit 5, 94.44 percent; and Unit 6, 94.45 percent).

Amount of Time Spent on Unit. For all units the majority of students felt the amount of time spent on the units was "very helpful" or "somewhat helpful" (Unit 1, 100 percent; Unit 2, 100 percent; Unit 3, 83.34 percent; Unit 4, 100 percent; Unit 5, 94.44 percent; and Unit 6, 55.56 percent).

Reading Text, Career Planning and Decision-Making. For all the units, the majority of the students felt reading the text was "very helpful" or "somewhat helpful" (Unit 1, 100 percent; Unit 2, 100 percent; Unit 3, 88.89 percent; Unit 4, 88.89 percent; Unit 5, 94.44 percent; and Unit 6, 88.89 percent).

Supplementary Reading. For units 1, 2, 3, and 5 the majority of the students rated the supplementary readings as "very helpful" or "somewhat helpful" (Unit 1, 94.45 percent; Unit 2, 100 percent; Unit 3, 88.89 percent; and Unit 5, 72.23 percent). For Unit 4, 50 percent rated the readings as "very helpful" or "somewhat helpful" while 50 percent indicated a neutral rating. For Unit 6, 22.22 percent rated the supplementary readings as "very helpful" or "somewhat helpful" and 44.44 percent rated "can't recall".

Support Group Discussions. The majority of the students rated the support group discussions as "very helpful" or "somewhat helpful" for all units (Unit 1, 100 percent; Unit 2, 100 percent; Unit 3, 100 percent; Unit 4, 88.89 percent; unit 5, 83.33 percent; and Unit 6, 100 percent).

In-Class Writing Assignments. For units 1-5, the majority of the students rated the in-class writing assignments as "very helpful" or "somewhat helpful" (Unit 1, 94.45 percent; Unit 2, 94.44 percent; Unit 3, 83.33 percent; Unit 4, 83.34 percent; and Unit 5, 100 percent). For Unit 6, 50 percent of the students rated the assignments as "very helpful" or "somewhat helpful" while 50 percent were "neutral".

Out-of-Class Work Assignments. For units 1-5, the majority of the students rated the out-of-class work assignments as "very helpful" or "somewhat helpful" (Unit 1, 94.45 percent; Unit 2, 94.45 percent; Unit 3, 88.89 percent; Unit 4, 94.45 percent; and Unit 5, 94.45 percent). For Unit 6, 44.45 percent rated the assignments as "very helpful" or "somewhat helpful" while 50 percent were neutral.

Overall, the end-of-unit evaluations elicited positive responses from the majority of the students toward the various components of each course unit. However, movement toward responses in the categories "not very helpful", "hinder/disturbing," and "can't recall" were observed toward the end of the course. Possible causes for this are fatigue or lack of concentration due to "end-of-quarter" responsibilities demanding

their attention. Perhaps further research would be beneficial for observing the variation in responses throughout the course and the factors which may contribute to this variation.

STRUCTURED INTERVIEWS

In addition to the responses on the Structured Interviews already reported in the discussion of the hypotheses, the following responses are presented below:

Question 1. The following majors were indicated: Liberal Arts, 3; Nursing, 2; Business, 7; Teacher Education, 2; Police Science, 2; and Science, 2.

Question 4. Only three students responded that their knowledge of majors available at RCC had not expanded as a result of the knowledge acquired through course discussions. A review of the college catalog and its use were mentioned as being the most helpful in increasing their knowledge of available majors.

Question 6. All of the students were able to define "values" and give examples.

Question 8. Most students gave adequate definitions of interests and examples. Those who had difficulty giving a clear definition were able to give examples.

Question 9. It was indicated by all of the students that the Personal Profile had made a significant contribution to their self-awareness and understanding.

Question 10. The majority of the students responded that the Worker Trait Group Guide (1978) and the Chronicle Occupational Library (1980) of the Career Information System files were most helpful in learning about qualifications for employment.

Question 11. The resources given as most helpful in learning about future job openings were: the Occupational Outlook Handbook (1978), and the Career Information System Files.

Question 12. All students indicated that the Occupational Outlook Handbook (1978) had been the most helpful in learning about future job opening.

Question 13. With the exception of three students who submitted partial recall statements, all others were able to discuss the three dimensions of a decision situation.

Question 15. The majority of the students responded that they would still be "very unsure" and in the beginning stages of their career planning and development if they had not enrolled in the course.

Question 16. Most students responded that they had made considerable progress in making decisions about their careers and felt that they were able to plan more effectively.

Question 17. The majority of the students felt the class discussions during Unit 2 were the most helpful aspects of the course in developing their career plans.

Question 18. Only two students identified aspects of the course which were least helpful in developing their career plans. The aspects noted were the "Aptitudes Self Estimates" exercise and the "5-10 year Plan Projection".

Question 19. Most of the students felt the course in general was not difficult. However, the following were identified as difficult aspects: (1) weekly logs, (2) use of a large number of resources, (3) the self-examination exercises, and (4) the time required for completion of exercises.

Question 20. On a scale of 1 (Dissatisfied) to 5 (Extremely Pleased), nine (50 percent) rated the course 5; six (33.3 percent) rated it 4 and 3 or 16.7 percent rated it 3. Several commented that they were extremely pleased with the course, but it had been very time consuming.

Question 21. The majority of the students responded that they had enrolled in the course to get a better idea of what they wanted to do with their lives.

Question 22. In regards to what they had received from the course, most of the students indicated they understood themselves better, had a better understanding of the work world and how to go about planning for their futures.

Question 23. All of the students felt that the course should be a permanent offering at RCC and that it should be offered at the freshmen level to provide assistance to students early in their college life and planning.

The structured interview approach proved to be invaluable in securing information pertinent in assessing aspects of the course. Valuable data were obtained which would not have been secured with the Student Surveys and ACDM only. The interview required approximately thirty minutes to administer and consisted of twenty-three questions.

The following summarizes some of the responses which are deemed to be very important and deserving of special emphasis.

1. Several students stated that the development of the Personal Profile was a new and worthwhile experience. Activities throughout the course required students to examine themselves thoroughly to identify their interests, values, preferences and to develop their profile.

2. Students indicated that they were not aware of the wealth of materials available in the area of career planning. Required use of resource materials in the College's Counseling Center and the complete Career Information System (CIS) organized by the researcher made them aware of materials of which they would not have been aware if they had not enrolled in the course.

3. Several students perceived the developmental approach of the course as being very worthwhile in their personal and academic growth. According to discussions during the interviews, emphasis on the career

planning process as being continuous and all encompassing of one's total life experience gave students a new perspective on their lives and their responsibilities for planning their lives.

4. The majority of the students felt that the course had contributed to their decision-making endeavors. Students indicated they were applying techniques learned in class to everyday decision-making.

5. Students' responses indicated that they had acquired a sense of direction for their careers and lives. Additionally, they indicated that they felt adequately prepared to deal with aspects of their lives which would require them to modify their courses of action and choose alternatives.

COMPARISON WITH THE ORIGINAL STUDY

A comparison between the current study and the original study revealed the following:

The Subjects. In the original study, there were forty-two students compared to thirty-six in the current study. The sample of the original study consisted of nine (23.7 percent) males and twenty-nine (76.3 percent) females. Ages ranged from eighteen to twenty-eight with the majority being eighteen (52.6 percent) or nineteen (34.2 percent) years old. The sample of the current study was similar to the original in that there were eight (22.2) percent males and twenty-eight (77.8 percent) females. A broad range of ages were represented with the majority of the students being eighteen or nineteen (28 percent) or

twenty-one and twenty-two (36 percent) years old. The overall range was eighteen to fifty with one student fifty years old, one thirty-five years old, two thirty years old, two twenty years old, two twenty-eight, two twenty-five, and two twenty-three years old. Also, both studies were predominately female. Another similarity between the groups with regard to subjects is that volunteers from a college setting were utilized in both studies.

The major difference between the subjects in the two studies is that the original study was conducted with four-year college freshmen and sophomores while the current study was conducted with freshmen community college students.

The Course Materials. The course content for both studies was basically the same. However, in the original study, the researcher conducted her investigation as part of Field Test II of the CPDM course as a whole and of the individual course components. In the current study the materials utilized were those that had undergone two field tests and revisions that were based on the field test results. These materials were published following the evaluations and revisions.

The Procedure. One similarity is that both studies investigated the data in terms of group effects and findings related to individual growth patterns were not reported.

Another similarity is that the major and secondary purposes of both studies were the same. In each study, the major purpose was to determine if the course, Career Planning and Decision-Making, was effective for assisting college students in choosing or examining their

career decision-making behavior. The secondary purpose in both studies was to obtain the students' evaluations of the course. Also, both studies used analysis of variance for testing pretest means. While the original study used analysis of covariance for testing posttest means, the current study used repeated measures analysis of variance.

The Physical Setting. The original study was conducted in a land grant four-year institution; consisting of eight colleges with an enrollment of approximately 19,000. In addition to undergraduate fields of study, fields of study leading to a master's degree and doctorate are among the offerings. The current study was conducted at a small rural community college. Included in the offerings are fields of study leading to a certificate or associate degree. The enrollment is approximately 1,500 for two campuses.

The Experimenters. Both experimenters were specialists in guidance and counseling and group processes. The experimenter for the original study had worked as an intern at Appalachia Educational Laboratory, developers of the course, and had participated in the final stages of course development.

The Instrumentation. Both the original and current studies utilized the ACDM, the end-of-unit evaluations, and a structured interview. Locus of Control was one of the variables studied in the original study and was measured by the Rotter Internal-External Scale. This scale was not used in the current research because Locus of Control was not studied. The Student Survey Instrument which was developed and

published by AEL as a measure of achievement of course objectives was used in the current research, but not in the original study.

The Hypotheses. Hypotheses 3 - 5 in the original and current studies were identical. Hypotheses 2 in both studies dealt with decision-making style. The original study included measurements for the three styles rational, intuitive, and dependent. However, the researcher for the current study chose to focus attention on the rational approach only since the course is designed for teaching this approach and thus could be expected to effect change on this variable.

The Statistical Findings. In both the original and current studies, Hypothesis 2 dealing with no difference between the two groups on decision-making style was rejected. On the rational subscale in the original study there was a significant difference between the two groups on the adjusted posttest means with the experimental group having the higher mean which reflected a positive change from pretest to posttest. There was significant group/time interaction in the current study and thus the null hypothesis was rejected. Also, Hypothesis 3 in both studies dealing with no difference between the two groups of students on implementation of their decision to come to college was not rejected. Hypothesis 4 in both the original and current studies revealed no significance with regard to choice of major and, thus, was not rejected. In the original study, the results for Hypothesis 5 testing for differences between the two groups with regard to progress made in choosing an occupation was rejected. However, in the current study,

Hypothesis 5 was not rejected when results revealed no significance with regard to progress made in choosing an occupation following treatment.

The results of the descriptive analysis comparing the original study with the current study suggest the following:

1. The findings of the current study support the findings and conclusions of the original study that the course, Career Planning and Decision-Making was effective in influencing students' rational decision-making orientation.

2. The findings of neither the current or original study indicated that the students' degrees of progress through the decision-making processes of implementation of the decision to come to college or in choosing a major were enhanced, as measured by ACDM. While the original findings did show an increase in the students' degrees of progress in choosing an occupation, the results of the current study did not support this finding utilizing ACDM. The nonsignificant findings were surprising since the course was designed to increase the students' degrees of progress through the decision-making process with regard to choosing a major and choosing an occupation. Possible reasons for nonsignificant differences as noted above are that the treatment was ineffective or that the measurement in these areas was inadequate. Also, students had already made the decision to come to college and were possibly in an advanced stage of implementation of this decision through commitment and subsequent adjustment. Also, due to the nature of the course, the concept of "implementation of the decision to come to college" may have been an inappropriate one to consider.

3. From a composite point of view findings in the current study, which was a modified version of the original study in several ways, tended to reinforce the assumptions of the original study that the course CPDM does improve students' career planning and decision-making skills for the following reasons: (1) significant results were observed on the Student Survey developed by AEL for the purpose of measuring the achievement of course objectives, (2) significant results were also observed on the ACDM which was used as an additional measure of the concept of rational decision-making style, thus reinforcing the findings on the Student Survey, and (3) the positive course evaluations obtained on both the end-of-unit evaluations and structured interviews as well as the posttest responses of the experimental students on the Student Survey with regard to perceived gains, having completed the course.

4. That CPDM course can be an influence on college students whose characteristics are similar to those subjects in the studies in both community and four-year institutions. We can, perhaps, conclude that the subjects in both studies are representative of those subjects who would likely take such a course. In both studies the subjects were selected from a pool of volunteers. It is not likely that a course in Career Planning and Decision-Making would be a required course so the population to be served by such a course offering would likely be a volunteer population. Therefore, any characteristics of the subjects in the two studies that may relate specifically to volunteerism would likely be representative of those characteristics of subjects choosing to take such a course.

SUMMARY

The statistical and descriptive analyses of the data have been presented in Chapter 4. The statistical procedures used were analysis of variance and repeated measures analysis of variance.

Hypothesis 1 investigated the differences in pretest and posttest Student Survey scores with regard to achievement of course objectives. In the repeated measures analysis of variance, there were significant group/time interaction on the Self-Estimates and Cognitive subscales. Thus, the null form of Hypothesis 1 was rejected.

Hypothesis 2 examined the differences in pretest and posttest ACDM scores with regard to the rational subscale of the decision-making style scale. A significant F value was obtained on the posttest indicating group/time interaction. Therefore the null form of hypothesis 2 was rejected.

Hypothesis 3 examined the differences in the pretest and posttest ACDM scores relative to implementation of the decision to come to college. A significant F value was not obtained on the posttest; therefore the null form of hypothesis 3 was not rejected.

Hypothesis 4 examined the differences in the pretest and posttest ACDM scores with regard to choosing a major. A significant F value was not obtained on the posttest; therefore, the null hypothesis of no difference was not rejected.

Hypothesis 5 examined the differences in the pretest and posttest ACDM scores relative to choosing an occupation. Significance was not observed on the posttest; therefore, the null form of Hypothesis 5 was not rejected.

The end-of-unit evaluations and the structured interviews examined students' evaluations of the course. Overall, all of the students responded positively to the course on these instruments.

A comparison between the current study and the original study was conducted to identify similarities and differences and to determine if similar findings occurred upon completion of the course, Career Planning and Decision-Making. The statistical findings in both studies provided evidence of the effectiveness of the course in enhancing students' rational style of decision-making. The findings resulting from analyses in both studies on the end-of-unit evaluations and the structured interviews revealed positive evaluations from the students in terms of course effectiveness.

The statistical findings did not provide evidence in the original or current study that the course was effective in facilitating students' progress in the decision-making tasks of implementing the decision to come to college or choosing a major, as measured by the ACDM. As indicated previously, the measure of "implementation of the decision to come to college" may have been an inappropriate one.

Chapter 5

SUMMARY, DISCUSSION, FINDINGS, AND RECOMMENDATIONS

The major purpose of this study was to investigate the extent to which the course, Career Planning and Decision-Making (CPDM) was effective in enhancing students' understanding of themselves and of the world of work as a basis for planning and choice. A secondary purpose of the study was to assess students' perceptions of course effectiveness. The Career Planning and Decision-Making Student Surveys were used to measure students' achievement of course objectives and the Assessment of Career Decision-Making was used as a supplementary measure to identify rational decision-making style and to measure levels of career decision-making. End-of-unit evaluations and structured interviews were used to summarize students' evaluations of the course.

The population consisted of forty-five freshmen transfer students enrolled in the Fall Quarter of 1980 at Rappahannock Community College in Virginia who volunteered to enroll in the CPDM course to be offered Winter Quarter, 1981. From this group only eighteen of the twenty-one who were randomly selected to participate in the course enrolled. Because of schedule conflicts the other three could not take the course. This eighteen comprised the experimental group. Eighteen additional students were selected at random from the remaining pool of volunteers for participation in the control group.

Several instruments were used to collect the data. They were:

Career Planning and Decision-Making Course Student Surveys. All

students in both the experimental and control groups were administered the appropriate pretest form of the instrument during the first week of classes. During the last week of classes, both experimental and control students completed appropriate posttest forms.

Assessment of Career Decision-Making. All participants were administered this instrument during the first week of the quarter. Readministration of the ACDM was completed during the last week of the quarter to assess post course status with regard to decision-making style and decision-making levels.

End-of-Unit Evaluations. Upon completion of each unit in the text, students in the experimental group completed the end-of-unit evaluation.

Structured Interview. A structured interview was completed with each student in the experimental group, during the last week of the quarter.

Analysis of variance was used to determine any pretest differences between the experimental and control groups at the .05 level of significance. Repeated measures analysis of variance was used to examine any posttest differences at the .05 level.

SUMMARY

Hypothesis 1 investigated the differences in pre- and posttest scores on the Student Surveys, measuring achievement of course objectives. An analysis of variance was conducted on pretest scores to

examine any differences between groups before treatment; and repeated measures analysis of variance was completed on posttest scores to examine any differences following treatment. Pretest results revealed no significant differences between the groups at the .05 level on the Self Estimates and Cognitive subscales. These results suggested that the groups were similar at the beginning of the course. Posttest results suggested that the treatment contributed to students achievement of course objectives. Findings observed in the posttest results revealed a significant F value for both measures, Self Estimates and Cognitive. This indicated significant group/time interaction. Therefore, the null form of Hypothesis 1 was rejected. The data revealed a mean change score, in a positive direction, for the experimental group on both measures. For the control group, a relatively small mean change in a positive direction was observed on the Self Estimates subscale and a negative change was observed for the Cognitive subscale.

For Hypothesis 2, the null hypothesis of no difference between the two groups in rational decision-making orientation was rejected. Significant differences did not exist between the groups on the pretest; the posttest results revealed significant group/time interaction. The experimental group showed a mean change score of +2.84 while the Control group only showed a change of +.55. The results indicated that the course influenced the students' approach to decision-making.

Hypothesis 3 examined the differences in pre- and posttest ACDM scores relative to implementation of the decision to attend

college. Pretest results indicated no initial differences between the groups. The posttest scores revealed no significant differences following treatment. The mean scores for the experimental group changed in a positive direction while the control group mean scores showed no change. The results indicated that the treatment did not make a significant contribution to the students' progress with regard to implementation of the decision to come to college.

The results for null Hypothesis 4 revealed no significant differences on the posttest with regard to choice of a major, as measured by the ACDM. Therefore, the null hypothesis of no difference was not rejected. No significance on the pretest indicated similarities prior to treatment. A mean change score of $+0.45$ was observed for the experimental group with a mean change score of $+0.89$ observed for the control group. As indicated earlier, the data for this study does not provide any information which explains why a greater gain was realized by the control group.

Hypothesis 5. The null form of Hypothesis 5 was not rejected. Pretest scores indicated similarities between the two groups with regard to choice of planned occupation. Posttest results revealed no significant differences as measured by the ACDM, in students' degrees of progress through the sequential stages of the decision-making process with regard to choosing an occupation. While no significant differences were observed, the experimental group showed a gain in the mean score of $+2.11$ while the control group showed a gain of $+0.67$. These results indicate that the experimental students may have been influenced by the treatment in their movement up the scale in choice of an occupation.

Students' evaluations of and reactions to the course were investigated through examination of the end-of-unit evaluations and the structured interviews. The end-of-unit evaluations provided students with the opportunity to evaluate the degree of effectiveness of each in assisting them in accomplishing the course objectives. Utilizing ratings of "very helpful", "somewhat helpful", "neutral", "not very helpful", "hinder/disturbing", and "can't recall", the majority of the students rated most aspects of the course as "very helpful" or "somewhat helpful". The following aspects of the course were evaluated by the students: (1) filmstrips, (2) lecture/presentations, (3) instructor contacts, (4) amount of time spent on unit, (5) reading text, (6) supplementary reading, (7) support group discussions, (8) in-class writing assignments, and (9) out-of-class work assignments. Generally, the students perceived the materials and activities as being appropriate for teaching the course concepts. This is evidenced by their positive reactions to and reception of the majority of the materials and activities which were utilized.

The structured interviews allowed the students the opportunity to share their perceptions of the effectiveness of the course in facilitating their choosing a major or of establishing career goals. In summarizing their experiences in the course, the students' responses indicated that overall they were pleased with the course. Responses further indicated that the students were receptive to the organization of the course materials as well as class presentations and that the course experiences had contributed significantly to their growth in personal and career identity.

The comparison of the original and current studies revealed similar results and reinforced assumptions of the original study that overall the Career Planning and Decision-Making course was effective in assisting students in developing their career planning and decision-making skills.

DISCUSSION

The results of the Student Surveys, End-of-Unit Evaluations, and Structured Interviews produced evidence, in a collective way, of the adequacy and effectiveness of the course in providing students the opportunity to do research in their chosen majors and/or occupations such that they became more informed of their personal suitability for the choice as well as the availability of job opportunities. This was evidenced by the number of students who changed their majors (3 or 17 percent) as a result of the course and the number (12 or 67 percent) who indicated they had established firmer commitments to their majors as a result of the course. One or six percent planned to change her major. Upon learning the realities of their chosen majors and/or occupations and becoming more aware of their abilities, interests, and desires, they were able to determine that they had either chosen suitable majors and thus became more committed or that they needed to consider changing their majors.

The purpose of the study was twofold: (1) to determine the effectiveness of the course in assisting the students in developing their career planning and decision-making skills and enhancing their career decision-making behavior and (2) to obtain the students'

evaluations of the course. The five instruments used in the study were: The Career Planning and Decision-Making Student Pretest Survey, the Career Planning and Decision-Making Student Posttest Survey, the Assessment of Career Decision-Making (ACDM) Instrument, the end-of-unit evaluations, and a structured interview. Evidence of the effectiveness of the course was provided by the significance of the results as measured by the Student Surveys. Significant results obtained utilizing the ACDM in measuring the concept of rational decision-making style provided additional evidence supporting course effectiveness. The nonsignificant results obtained utilizing the ACDM in measuring decision-making tasks levels did not provide evidence supporting the effectiveness of the course. In addressing the secondary purpose of the study, the end-of-unit evaluations and the structured interview were used to collect data. Attention was also focused on the experimental students' responses on the posttest indicating their assessment of achievement in various areas, having completed the course. These results provided nonstatistical support for the effectiveness of the course. It must be noted that these results may be biased (at least in part) because of the relationship between the respondents and the investigator who was the course instructor.

Three of the most distinguishing positive features of the course which, seemingly, impacted on changes were: (1) the class discussions, (2) the high level of student-instructor interaction, (3) the creation of an awareness in the students of the available career resources, and (4) the development of a personal profile by each student.

In addition to identification of the statistical significance of the course outcomes in this study, the practical importance of outcomes cannot be overemphasized in determining overall course effectiveness. Major evidence of practical importance is that of the students' evaluations of their course experiences and instructor observations. To reiterate the findings and their implications, students responses indicated that:

1. the course could serve as an important function of a college in providing experiences in career planning and decision-making.
2. they were able to utilize concepts and practices learned in the course in their daily lives in a personal way as well as in career planning per se; and
3. they would recommend that other students take such a course at the freshmen level.

As the researcher, my personal observations of the students' behaviors and responses further support the practical importance of such a course. Though no empirical data is available there was evidence that the course activities and materials stimulated an interest in the students to become more aware of their unique characteristics and abilities, more knowledgeable of their environment and more concerned about how they might gain a greater sense of control over their lives.

The feelings of the instructor prior to teaching the course that such an offering would provide institutional benefits were reinforced. Implications are that retention of students at the institution can be increased when students are provided intense guidance services in becoming more goal oriented. Secondly, students are often not aware of the varied services which are available in the counseling and career centers. The offering of such a course which requires utilization of available career resources could stimulate awareness of and appreciation for costly materials which often are utilized minimally. Practical importance of the course is further provided by the students' positive reactions on the course impact and usability.

FINDINGS

Based upon the results of the study, the following findings are summarized:

1. Analysis of the results revealed: (1) significant differences between CPDM and non-CPDM students at the .05 level of significance on achievement of course objectives as measured by the Student Surveys and (2) significant differences at the .05 level of significance between CPDM and non-CPDM students on the Rational style of decision-making. There were no significant differences at the .05 level in (a) progress made with regard to implementation of the decision to go to college, (b) progress made with regard to selecting a major, and (c)

progress made with regard to selecting an occupation to pursue after college completion, as measured by ACDM.

2. The results from the statistical analysis obtained utilizing the Student Surveys and the results from the nonstatistical analysis summarizing the end-of-unit evaluations and structured interviews indicate that overall the course concepts and skills were beneficial to students in their career planning and decision-making.

3. The comparison of the statistical findings from the current study with the original study do not provide evidence that the course was beneficial to the students in facilitating their progress through the decision-making tasks with regard to (1) implementation of the decision to come to college and (2) choosing a major, as measured by ACDM. The statistical findings of the original study provided evidence of the effectiveness of the course in assisting students in choosing an occupation, as measured by ACDM. However, the statistical findings of the current study did not support these findings of the original study.

4. The statistical and nonstatistical findings for the original and current studies as a whole suggest that the course can be effectively used in a career development program for community college students as well as four-year college students.

RECOMMENDATIONS

The recommendations are presented in two categories: (1) those based on the findings of the study and (2) general.

Recommendations Based on Findings

Considering the results and observations in this investigation, the following recommendations are made:

1. Similar studies should be conducted with larger samples drawn from a non-volunteer population to determine if similar findings occur upon completion of the course, Career Planning and Decision-Making.
2. Similar studies should be conducted which investigate findings related to individual growth patterns as opposed to group effects solely.
3. Further research should be conducted to determine what factors may have contributed to the dissimilarities between the results obtained from the Student Surveys and the Assessment of Career Decision-Making (ACDM) in measuring students' degrees of progress in the areas of the career decision-making tasks, choosing a major and choosing an occupation.
4. Additional data should be gathered through research to determine whether the ACDM is an appropriate measure of the effectiveness of the CPDM course in assisting students in choosing a major and choosing an occupation.
5. Further research should be conducted which investigates the usefulness of the results obtained from responses on the end-of-unit

evaluations, the structured interviews, and the experimental students' responses on the Student Surveys indicating their status following completion of the course, in determining the effectiveness of the CPDM.

6. More research is needed to identify factors which may have contributed to the tendency for responses on the end-of-unit evaluations to move toward the less positive end of the rating scale as the course progressed to completion.

General

1. Similar studies should be conducted with samples which have been controlled for such factors as age, grade point average, soci-cultural background and/or sex.

2. A follow-up of students completing such a course, should be conducted to ascertain the degree to which their courses of action, subsequent to completion of the course, would be consistent with plans developed in the course for college majors and planned occupations; as well as the degree to which decision-making skills taught in the course are utilized.

3. Similar studies should be conducted which utilize other methods for teaching career planning and decision-making skills along with CPDM such that comparisons can be made of the varied methods of treatment.

4. Institutions of higher learning should give consideration to adopting the CPDM as a permanent offering since the results provide evidence of the effectiveness of the course in assisting students in their career planning and decision-making.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Adams, Glenn A. "'Preventative' Career Counseling - Proving That it Works." Journal of College Placement, 974, 34 (3), 26-33.
- Ahmann, J. and M. Glock. Measuring And Evaluating Educational Achievement, Boston: Allyn and Bacon, 1971.
- Aiken, T. and J. Johnston. "Promoting Career Information Seeking Behavior in College Students." Journal of Vocational Behavior 1973, 81-87.
- Appalachia Educational Laboratory. Career Information System Guide. Bloomington, Illinois: McKnight, 1978.
- _____. Career Planning and Decision-Making Student Text-Workbook. Bloomington, Illinois: McKnight, 1979.
- _____. Career Planning and Decision-Making - Instructor's Guide, Bloomington, Illinois: McKnight, 1980.
- _____. Career Planning and Decision-Making Course Assessment Package. Unpublished, undated.
- _____. College - Major Occupation Index. Bloomington, Illinois: McKnight, 1979.
- _____. School-Subject Occupation Index. Bloomington, Illinois: McKnight, 1978.
- _____. Worker Trait Group Index to USOE Clusters. Bloomington, Illinois: McKnight, 1980.
- _____. Worker Trait Group Guide. Bloomington, Illinois: McKnight, 1978.
- Ary, D.L., C. Jacobs, and A. Razavich. Introduction to Research in Education. New York: Holt, Rinehart and Winston Company, 1972.
- Astin, A.W. Four Critical Years. San Francisco: Jossey-Bass Publishers, 1977.
- Babcock, R.J., and M.A. Kaufman. "Effectiveness of a Career Course." Vocational Guidance Quarterly, 1976, 24, 261-266.
- Barker, S.B. Career Planning and Decision-Making Course for College Students Final Evaluation Report. Appalachia Educational Laboratory, 1979.

- Bowles, Richard N. What Color Is Your Parachute? Berkeley: Ten Speed Press, 1980.
- Calvert, R. Jr., E.M. Carter, and I Murphy. "College Courses in Occupational Adjustment." Personnel and Guidance Journal, 1964.
- Campbell, D.T., and J.C. Stanley. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally Company, 1963.
- Carney, C.G., and A. Barak. "A Survey of Student Needs and Student Personnel Services." Journal of College Student Personnel, 1976, 17, 280-284.
- Chapman, Elwood. Career Search. Palo Alto: Science Research Associates, 1976.
- Chronicle Guidance. Chronicle Occupational Library. Moravia, New York: Chronicle Guidance Publications, Inc., 1980.
- Cochran, D.C., and K.H. Strand, "Career Choice Class: Caviar or Caveat." Journal of College Student Personnel, 1980.
- Dansart, B.R. "Existentialism in the Thoughts of David Tiedeman." Character Potential (A Record of Research), 1974, 7 (1), 1-36.
- Devlin, T.C. "Career Development Courses: An Important Part of the Counselor's Repertoire." Journal of College Placement, 1974, 34 (4), 63-68.
- Evans, J.R., and A.P. Rector. "Evaluation of a College Course in Career Decision-Making." Journal of College Student Personnel, 1978, 19, 163-168.
- Ferguson, G. Statistical Analysis in Psychology and Education. New York: McGraw-Hill, 1976.
- Figler, Howard E. Path: A Career Workbook for Liberal Arts Students. Cranston, Rhode Island: The Carroll Press, 1979.
- Forrester, T.D. "A Description and Evaluation of a Life Planning Training Program Based on the Self-Improvement Construct: An Explanatory Study." Unpublished doctoral dissertation, University of Oregon, 1977.
- Gallagher, R.P., and S.B. Scheuring. "Students Say "Yes" to Career Development." Journal of College Placement, 1979, 39, 17-18.
- Garrett, H.E. Statistics in Psychology and Education. New York: David McKay Company, Inc., 1966.

- Haney, T., and P.A. Howland. "Career Courses for Credit: Necessity or Luxury?" Journal of College Placement, 1978, 38 (2), 75-79.
- Harren, V.A. "A Model of Career Decision-Making for College Students." Journal of Vocational Behavior, 1979, 14, 119-133.
- _____. "A Study of the Vocational Decision-Making Process Among College Males." Unpublished doctoral dissertation, University of Texas, 1964.
- _____. "An Overview of Tiedeman's Theory of Career Decision-Making and Summary of Related Research." Unpublished paper, undated.
- _____. Assessment of Career Decision-Making (ACDM) Counselor/Instructor Guide. Carbondale, Illinois: Southern Illinois University, Department of Psychology, undated.
- _____. Assessment of Career Decision-Making - Form B - Technical Report #3. Carbondale, Illinois: Southern Illinois University, Department of Psychology, 1976.
- _____. Assessment of Career Decision-Making Instrument - Form C. Carbondale, Illinois: Southern Illinois University, Department of Psychology, 1978.
- _____. Assessment of Career Decision-Making - Progress Report. Carbondale, Illinois: Southern Illinois University, Department of Psychology, 1976.
- _____. Assessment of Career Decision-Making (ACDM); Student Guide to Scoring and Interpreting ACDM. Carbondale, Illinois: Southern Illinois University, Department of Psychology, undated.
- Harren, V.A., R.A. Kass, H.E.A. Tinsley, and J.R. Moreland. "Influence of Sex Role Attitudes and Cognitive Styles on Career Decision-Making." Journal of Counseling Psychology, 1978, 25 (5), 390-398.
- Harren, V.A. "The Vocational Decision-Making Process Among College Males." Journal of Counseling Psychology, 1966, 13 (3), 271-277.
- Healy, C.C. "Evaluations of a Replicable Group Career Counseling Procedure." The Vocational Guidance Quarterly, 1974, 23 (11), 34-40.
- Herr, E.L. and S.H. Cramer, Vocational Guidance and Career Development in the Schools: Toward a System Approach. New York: Houghton Mifflin, 1972.

- Hinkle, D.E., W. Wiersma, and S.G. Jurs. Applied Statistics for the Behavioral Sciences. Chicago: Rand McNally, 1979.
- Holland, J.L. Making Vocational Choices. Englewood Cliffs: Prentice Hall, 1973.
- Hoyt, K.B., R.N. Evans, E.F. Mackin, and G.L. Mangum. Career Education: What It Is and How To Do It. Salt Lake City: Olympus, 1974.
- Huck, S.W., W.H. Cormier, and W.G. Bounds. Reading Statistics and Research. New York: Harper & Row, 1974.
- Kerlinger, F.N. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1973.
- Krupta, L., and A. Vener. "Career Education and the University: A Faculty Perspective." Personnel and Guidance Journal, 1978, 57, (2), 112-114.
- Koehn, S. "Who's Doing What? - An Update Survey of Career Planning Program." Journal of College Student Personnel, 1978, 19 (6), 523-526.
- Lipsett, L. "Social Factors in Vocational Development." Personnel and Guidance Journal, 1962, 40, 432-437.
- Malacos, J. "Comparison of Three Techniques to Promote Career Decision-Making in Community College Students." In summaries, Abstracts, and Research Reports. American Personnel and Guidance Association. Washington: The Association, 1975.
- Marland, S.P. Career Education: A Proposal for Reform. New York: McGraw Hill, 1974.
- Maverick, L.A. The Vocational Guidance of College Students. Cambridge: Harvard University Press, 1926.
- Menning, A. "How Career Services Can Assist Undeclared Majors." Journal of College Placement, 1981, 41, 44-47.
- Moynihan, D.P. "Morality of Work and Immorality of Opportunity." Vocational Guidance Quarterly, 1964, 12, 229-236.
- Nie, N.H., C.H. Hull, J.G. Jenkins, K. Steinbrenner, and D.H. Dent. Statistical Package for the Social Sciences. New York: McGraw Hill Book Company, 1975.
- O'Hara, R.P., and D.V. Tiedeman. "Vocational Self-Concept in Adolescence." Journal of Counseling Psychology, 1959, 6, (4), 292-301.

- Osipow, S.H. Theories of Career Development. New York: Appleton-Century-Crofts, 1973.
- Pietrofesa, J., and H. Splete. Career Development: Theory and Research. New York: Grune & Stratton, 1975.
- Prediger, D.J., J.D. Roth, and R.J. Noeth. "Career Development of Youth: A Nationwide Study." Personnel and Guidance Journal, 1974, 53 (2), 97-104.
- Roe, A. "Early Determinants of Vocational Choice." Journal of Counseling Psychology, 1957, 4 (3), 212-217.
- _____. The Psychology of Occupation. New York: John Wiley and Sons, Inc., 1956.
- Rotter, J.B. "General Expectancy For Internal Versus External Control of Reinforcement." Psychology Monograph, 1966, 80 (1 Whole No. 609).
- Rubinton, N. "Instruction in Career Decision-Making and Decision-Making Styles." Journal of Counseling Psychology, 1980, 27, 581-588.
- Severinsen, K. Career Guidance: An Individual Developmental Approach. Columbus: Charles E. Merrill, 1973.
- Sidman, M. Tactics of Scientific Research. New York: Basic Books, 1960.
- Super, D.E. "Vocational Development in Adolescence and Early Adulthood: Tasks and Behaviors in D.E. Super, R. Starishensky, N. Matlin, and J.P. Jordaan (Eds)." Career Development: Self Concept Theory. New York College Entrance Examination Board Research Monograph No. 4, 1963.
- Super, D.E., et. al. Measuring Vocational Maturity for Counseling and Evaluation. Washington, D.C.: National Vocational Guidance Association Monograph, 1974.
- Super, D.E., and J.P. Jordan. "Career Development Theory." British Journal of Guidance and Counseling, 1973, 1 (1), 3-16.
- Tiedeman, D.V., and R.P. O'Hara. Career Development: Choice and Adjustment. New York: College Entrance Examination Board, 1963.
- Tillar, T.C., and D.E. Hutchins. "The Effectiveness of the Components of a Model Program of Career Exploration for College Freshmen." Journal of College Student Personnel, 1979, 20 (6) 538-544.

- Titley, R.W., and B.S. Titley. "Initial Choice of College Major - Are Only the "Undecided" "Undecided?" Journal of College Student Personnel, 1980, 21, 4, 293-298.
- Tolbert, E.L. Counseling for Career Development. Atlanta: Houghton Mifflin, 1981.
- U.S. Department of Labor, Employment and Training Administration. Dictionary of Occupational Titles, Fourth Edition, 1977. Washington, D.C.: U.S. Government Printing Office, 1977.
- _____. Guide for Occupational Exploration. Washington, D.C.: U.S. Government Printing Office, 1979.
- U.S. Department of Labor, Bureau of Labor Statistics. Occupational Outlook Handbook, 1980-81 Edition. Washington, D.C.: U.S. Government Printing Office, 1980.
- Vener, A.M. "College Education and Vocational Career." In W. Brookover et. al., The College Student. New York: The Center for Applied Research in Education, 1965.
- Walz, G.R., and L. Benjamin. The Life/Career Development System. Ann Arbor: Human Development Services, 1975.
- Williamson, V.N. "The Impact of the Career Planning and Decision-Making Course on Selected Aspects of Career Planning Behavior." Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, 1979.

APPENDICES

APPENDIX A
Letters to Students

rappahannock community college

south campus: glenns, virginia 23149 · north campus: warsaw, virginia 22572

South Campus
(804) 758-5324

October 15, 1980

Dear Student:

I would like to offer you the opportunity to enroll in a course on career planning and decision-making. The purpose of the course is to assist you in increasing your understanding of yourself and of the world of work which will serve as a basis for your career planning and decision-making.

Perhaps you are wondering if such a course would be helpful to you. A number of you indicated on the decisional status student survey that you were not certain about your career plans. I feel such a course could be worthwhile and rewarding to you.

Please read the enclosed brochure, but for additional information, you may contact me at the Office of Student Special Services, room 154. Please complete the bottom portion of this letter and return to the office just indicated.

Sincerely,

Dorothy C. Cooke, Director/Counselor
Student Special ServicesDCC/mg
Enclosure-----
Name _____ Social Security No. _____ I would like to enroll in this course during Winter Quarter. I do not wish to enroll in this course.

rappahannock community college

south campus: glenns, virginia 23149 · north campus: warsaw, virginia 22572

South Campus
(804) 758-5324

November 21, 1980

Dear

Thank you for your interest in enrolling in the course, Career Planning and Decision-Making. I am pleased to inform you that 45 students expressed an interest in enrolling in the course. On the other hand, I regret to inform you that we are not able to accommodate the total group this quarter and plan to make the offering available in the Spring to those of you whom we could not assign to take the course during the Winter Quarter.

I would like to request your help in collecting some information which will help us to evaluate the effectiveness of this course. If you are willing to participate, please fill out and return the form below. If you decide to participate, I will contact you regarding the data collection schedule well in advance of the time we propose to do so.

Again, thank you for your interest and I look forward to working with you.

Sincerely,

Dorothy C. Cooke, Director/Counselor
Student Special Services

DCC/mg

Name _____ Social Security No. _____

- () I am willing to assist you in collecting information which will serve as a basis for determining the effectiveness of the Career Planning and Decision-Making Course.
- () I am not willing to participate.

APPENDIX B

Flyer Announcing Course

ATTENTION: ALL FRESHMEN TRANSFER STUDENTS
 UNDECIDED ABOUT YOUR CAREER?

Consider taking a course in

CAREER PLANNING
 and DECISION-MAKING, to
 be offered WINTER QUARTER.

In this course you will:

1. EXPLORE SELF-identify your interests, values, and goals.
2. EXPLORE the WORLD of WORK-examine career options, learn of job outlook, and identify your occupational preference.
3. BUILD a PERSONAL PROFILE-integrate knowledge of self and world of work to make a personally meaningful career choice.

| <u>COURSE TITLE</u> | <u>DAY</u> | <u>TIME</u> |
|--|------------|-------------|
| Career Education (GENL 108 - 3 credits) | TTh | 1:30 - 3:00 |

FOR FURTHER INFORMATION CONTACT:

Dorothy Cooke
 Office of Special Services

APPENDIX C

Career Planning and Decision-Making Student
Pretest Survey - Control Group Form

CAREER PLANNING AND DECISION-MAKING STUDENT SURVEY

Social Security Number _____

Age _____ Sex _____

1. Would you enroll in a career planning and decision-making course if one were offered? (Check one) Yes _____ No _____
2. What has been your work experience to this point?
 - _____ I have been a student and not worked.
 - _____ I have held part-time or summer jobs while attending school.
 - _____ I have been employed full time (name occupation) _____
 - _____ Other (describe) _____

This survey is being administered to obtain information about "where you are now" in your career planning and decision-making process.

PART I

The following section deals with general questions about your status in college and your knowledge of career. There are no right or wrong answers. Respond to each question in the best way you can.

Items in Parts I and II compared with Parts I and II Student Posttest Survey Experimental Group Form (Appendix E):

1. Numbers 3 - 18 are identical to the "A" subitems 3 - 18.
2. Item 19 is identical to Items 19A and 19B combined.
3. Items 20 - 28 are identical.

APPENDIX D

Career Planning and Decision-Making

Student Pretest Survey - Experimental Group Form

CAREER PLANNING AND DECISION-MAKING STUDENT SURVEY

Social Security Number _____

Age _____ Sex _____

1. Why did you enroll in this course?

2. What has been your work experience to this point?

_____ I have been a student and not worked.

_____ I have held part-time or summer jobs while attending school.

_____ I have been employed full time (name occupation) _____

_____ Other (describe) _____

This survey is being administered to obtain information about "where you are now" in your career planning and decision-making process.

PART I

The following section deals with general questions about your status in college and your knowledge or career. There are no right or wrong answers. Respond to each question in the best way you can.

Items in Parts I and II are identical to Parts I and II of the Student Pretest Survey Control Group Form (Appendix C).

APPENDIX E

Career Planning and Decision-Making

Student Posttest Survey - Experimental Group Form

Name _____ Date _____

CAREER PLANNING AND DECISION-MAKING
STUDENT SURVEY

1. How prepared are you to make career plans?

- very poorly prepared
 poorly prepared
 adequately prepared
 well prepared
 very well prepared

2. Having completed the AEL Career Planning and Decision-Making course, how much better prepared are you to make career decisions?

- no better
 a little better
 quite a bit better
 a great deal better

This survey is being administered to obtain information for evaluating the Career Planning and Decision-Making Course you have just completed:

PART I

The following section deals with your current status in college, your knowledge of careers, and how much understanding you think you have gained from completing this course. There are no right or wrong answers. Respond to each question in the best way you can.

3. Knowledge About College Majors

A. HOW MUCH DO YOU KNOW ABOUT THE COLLEGE MAJORS OFFERED AT YOUR SCHOOL? This includes the area of study, course requirements, and eventual employment opportunities. Check the response below that shown how much you know.

- nothing
 very little
 some
 a moderate amount
 a great deal

B. Having completed this course, how much understanding have you gained about the college majors offered at your school?

- none
 very little
 some
 a moderate amount
 a great deal

4. Knowledge About Occupations

- A. HOW MUCH DO YOU KNOW ABOUT THE OCCUPATIONS AND OPPORTUNITIES FOR EMPLOYMENT THAT RELATE TO COLLEGE MAJORS? Do you know what occupations you could enter? Check the response below that shows how much you know.

nothing
 very little
 some
 a moderate amount
 a great deal

- B. Having completed this course, how much understanding have you gained about the occupations and opportunities for employment that relate to college majors?

none
 very little
 some
 a moderate amount
 a great deal

Items 5 through 9 have two parts, A and B. Check the response in Part A that shows how much you know about occupations that interest you. Then check the response in Part B that shows how much understanding you have gained from completing this course.

5. A. How much do you know about the qualifications for employment in occupations that interest you?

nothing
 very little
 some
 a moderate amount
 a great deal

- B. Having completed this course, how much understanding have you gained about the qualifications for employment in occupations that interest you?

none
 very little
 some
 a moderate amount
 a great deal

6. A. How much do you know about the salary and benefits of occupations that interest you?
- nothing
 - very little
 - some
 - a moderate amount
 - a great deal
- B. Having completed this course, how much understanding have you gained about the salary and benefits of occupations that interest you?
- none
 - very little
 - some
 - a moderate amount
 - a great deal
7. A. How much do you know about future job openings in the occupations that interest you?
- nothing
 - very little
 - some
 - a moderate amount
 - a great deal
- B. Having completed this course, how much understanding have you gained about future job openings in the occupations that interest you?
- none
 - very little
 - some
 - a moderate amount
 - a great deal
8. A. How much do you know about occupational advancement in the occupations that interest you?
- nothing
 - very little
 - some
 - a moderate amount
 - a great deal
- B. Having completed this course, how much understanding have you gained about occupational advancement in the occupations that interest you?
- none
 - very little
 - some
 - a moderate amount
 - a great deal

9. A. How much do you know about college preparation for employment in the occupations that interest you?

nothing
 very little
 some
 a moderate amount
 a great deal

- B. Having completed this course, how much understanding have you gained about college preparation for employment in the occupations that interest you?

none
 very little
 some
 a moderate amount
 a great deal

10. A. How much have you thought about selection of a college major?

none
 very little
 some
 a moderate amount
 a great deal

- B. During this class term, how much more have you thought about selection of a college major?

no more
 very little
 some
 a moderate amount
 a great deal

11. At what point are you in deciding upon a college major?

I have no idea about what my college major will be.
 I have very little idea about what my college major will be.
 I have some idea about what my college major will be, but have not completely decided. I am currently considering

I have decided upon a college major. It is _____.

12. Have you changed your choice of major during this term?

Yes No

If yes, state your reason for changing.

Items 13 through 18 also have two parts. Check the response that shows how well you understand yourself in relation to work (Part A). Then check the response that shows how much understanding you have gained from completing this course (Part B).

13. A. How well do you understand your occupational interests?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

B. Having completed this course, how much understanding have you gained about your occupational interests?

- none
- very little
- some
- a moderate amount
- a great deal

14. A. How well do you understand your work values?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

B. Having completed this course, how much understanding have you gained about your work values?

- none
- very little
- some
- a moderate amount
- a great deal

15. A. How well do you understand your career goals?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

B. Having completed this course, how much understanding have you gained about your career goals?

- none
- very little
- some
- a moderate amount
- a great deal

16. A. How well do you understand your aptitudes?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

B. Having completed this course, how much understanding have you gained about your aptitudes?

- none
- very little
- some
- a moderate amount
- a great deal

17. A. How well do you understand your work competencies?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

B. Having completed this course, how much understanding have you gained about your work competencies?

- none
- very little
- some
- a moderate amount
- a great deal

18. A. How well do you understand your work skills?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

B. Having completed this course, how much understanding have you gained about your work skills?

- none
- very little
- some
- a moderate amount
- a great deal

19A. Frequently you must make career decisions. These decisions may relate to your college work or part-time or summer employment. How do you go about making an important decision? What steps do you follow? Describe briefly what you would do to reach an important decision.

B. By checking the appropriate response, rate the effectiveness of your way of making decisions.

- very poor
- poor
- adequate
- good
- excellent

C. Rate the effectiveness of your current way of making decisions COMPARED WITH YOUR WAY PRIOR TO THE COURSE.

- much less effective
- less effective
- as effective
- more effective
- much more effective

20. Write a definition for the term work. What does it include?

21. Write a definition for the term career. What does it include?

Assume you need information about an occupation. Read the following situations. In the space to the right of each situation, write the source you would go to for the information. If you do not know a source, place a (✓) mark in the right column.

| | Source | Don't know a source |
|---|--------|------------------------|
| 22. I want to get an idea of what the job market will be like for oceanographers by the mid-1980's. | _____ | _____ |
| 23. I want to know what college majors I can pursue to become an oceanographer. | _____ | _____ |
| 24. My favorite high school subject was biology. I want to know what groups of occupations are directly related to biology. | _____ | _____ |
| 25. I want to know what occupations would involve creative thinking. | _____ | _____ |
| 26. Where can I go to find occupations which do not require high mathematical abilities? | _____ | _____ |

27. Occupational information can sometimes appear to be confusing and contradictory. In fact, the more information you have, the more confusing it may be. When this problem occurs, what criteria would you use to evaluate information?

28. Read the definitions listed in the left column. Match each definition with the term it defines in the right column. In the space to the left of each definition, write the letter of the term it best defines.

- | | |
|---|-----------------------------------|
| ___ activity intended to produce something of benefit to the individual or the society | A. career development |
| ___ all of the tasks performed by a worker | B. career theme |
| ___ continuous integration of values in relation to the milieu through work | C. deciding |
| ___ use of knowledge of self to learn more about the world of work and use of knowledge of the world of work to learn more about self | D. occupational group arrangement |
| ___ quickness or ease with which people can learn or develop understanding and skills | E. job |
| ___ occupations which involve similar worker characteristics | F. worker trait group |
| ___ things people learn and the skills they develop | G. occupation |
| ___ achievement of self-integration in relation to the milieu through knowledge of self and milieu | H. occupational exploratio |
| ___ activity undertaken for personal pleasure | I. aptitudes |
| ___ overriding principle that gives structure and meaning to the sequence of one's work, education, and training experiences | J. leisure |
| | K. work |
| | L. career exploration |
| | M. competencies |
| | N. career goals |
| | O. abilities |

APPENDIX F

Career Planning and Decision-Making Student

Posttest Survey - Control Group Form

CAREER PLANNING AND DECISION-MAKING STUDENT SURVEY

Social Security Number _____

Age _____ Sex _____

1. During this term, have you talked with anyone enrolled in a career planning/decision-making course? Yes _____ No _____
2. During this term, have you been exposed to any career planning and decision-making materials? If yes, which materials?

This survey is being administered to obtain information about "where you are now" in your career planning and decision-making process.

PART I

The following section deals with general questions about your status in college and your knowledge of career. There are no right or wrong answers. Respond to each question in the best way you can.

Parts I and II are identical to Parts I and II Pretest Survey Control Group Form (Appendix C).

APPENDIX G

Scoring Instructions - Career Planning and Decision-Making

Student Surveys

Scoring Instructions - Career Planning and Decision-Making
Student Surveys

(Modified)*

The survey includes items that obtain general information about student experiences, self estimates, and knowledge (Items 1, 2, and 12). No scores are derived from these general information items.

The self estimates made by students are obtained from Items 3-11 and 13-19. Results of these items should be tabulated using the assigned values in the "Worksheet for Comparing Pretest and Posttest Assessment Data."

The knowledge items in the Pretest include items 19-28. Scores can be derived from these items. There is a total of 50 points possible. The following are the scoring instructions for items 19-28:

19.A Frequently you must make career decisions. These decisions may relate to your college work or part-time or summer employment. How do you go about making an important decision? What steps do you follow? Describe briefly what you would do to reach an important decision.

(8 points)

Item 19 is the most difficult item in the instrument to score because the quality of each response must be determined by the scorer. There is a total of eight points possible for this item. For the categories of Self, Milieu, and Decide, two points are possible for each category. Only one point is possible for the category, Goal. Category credit is given only if the response states the comprehensive concept. Expression of a limited aspect of the concept receives one point. A description of each category and the criteria for assigning points are listed on the following page.

*Minor modifications of AEL's instructions were completed by the researcher to relate more appropriately to current study.

Goals - The overriding principle that gives structure and meaning to a person's career consists of his/her values organized into a pattern and projected into the future as his/her goal. Goals are descriptions of what a person intends to accomplish and become. Once defined and positioned in time, goals give direction and purpose to one's current activities and help plan one's future activities.

Knowledge of self in relation to the decision situation - the more a person knows about his/her self in relation to the decision situation, the more likely s/he is to make a satisfying decision. One's preferences, dislikes, abilities, strengths, and weaknesses form one's values. The values a person projects into the future are expressed by his/her goals. The greater awareness and comprehension achieved by examining one's values and goals in relation to the decision situation make up the personal and internal dimension of that situation.

Knowledge of one's milieu (social and physical environment) in relation to the decision situation - What opportunities does a person's milieu have to offer in relation to the decision situation? What are the limitations? What are the objective facts about the situation? The greater awareness and comprehension achieved by gathering information about the milieu in regard to the decision situation are expressed by the alternatives a person derives.

Deciding - As soon as one thinks of an alternative, s/he cannot refrain from weighing and judging it and thereby sharpening his/her values and goals. There is a constant mental process of comparing and evaluating which alternatives can help a person best reach as well

as refine his/her goals. One can select from all the alternatives s/he has found. When one does decide, s/he commits him/herself to the action most likely to meet his/her goals. Deciding includes selecting and acting. This serves to integrate the self in relation to the milieu.

| <u>Category</u> | <u>Points</u> | <u>Criteria</u> |
|-----------------|---------------|---|
| Goals | 1 | goals, future outcomes, themes |
| Self | 2 | <u>Comprehensive Concept</u> self knowledge, know all about self |
| | 1 | <u>Limited Aspect</u> values, interests, aptitudes |
| Milieu | 2 | <u>Comprehensive Concept</u> milieu, environment, all the information about the decision |
| | 1 | <u>Limited Aspect</u> options, alternatives, salary, credentials, ask others, etc. |
| Decide | 2 | <u>Comprehensive Concept</u> analyze, compare, <u>and</u> decide (includes all 3) |
| | 1 | <u>Limited Aspect</u> decide, analyze, compare, <u>or</u> act on, etc. |

Credit for any category is only given once, i.e., "I try to learn ^{2-self} all I
can about my self. I look at my ^{0-self} interests and ^{0-self} abilities..." would receive two points for the category self.

In addition to the points prescribed above, one point should be given for sequence if the student includes in his/her response at least three of the above categories in proper sequence:

| | | |
|--------|----|--------|
| goal | | goal |
| milieu | or | self |
| self | | milieu |
| decide | | decide |

The following examples are provided to assist you in determining the assignment of points:

| Response | Points |
|--|--------|
| <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> 1-self 1-milieu </div> I think about what <u>I want</u> to do, then I ask <u>my parents</u> | 4 |
| 1-decide and then <u>decide</u> . +1 for sequence (self, milieu, decide) | |
| <div style="text-align: center; margin-bottom: 5px;"> 1-goal 1-self </div> I think about what will <u>benefit me</u> most. I find out | 6 |
| <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> 2-milieu 0-milieu </div> all I can about the situation. I ask <u>my parents</u> , and I | |
| 1-decide <u>decide</u> . +1 sequence (goal, self, milieu, decide) | |
| ----- I think about it over a long period of time and then | 1 |
| 1-decide <u>decide</u> . | |

(3 points) 20. Write a definition for the term work. What does it include?

Three points are possible for correctly defining work. The definition of work is an activity intended to produce something of benefit to self or others. Students do not need to state the definition verbatim.

However, to receive credit, the definition must refer to the purposeful aspect of work. No partial credit. Examples of creditable and noncreditable responses are:

Creditable

purposeful activity
 any activity done to accomplish something
 doing something productive
 activities undertaken to meet goals

Noncreditable

what one does for a living
 a job you want to do for the rest of your life
 activities you do to make money/service
 paid job/occupation

(3 points) 21. Write a definition for the term career. What does it include?

Three points are possible for correctly defining career. The definition of career is the totality of work experiences. Students do not need to state the definition verbatim. However, to receive credit, the definition must refer to career as including all of one's work experiences. No partial credit. Referring to career as a job or occupation is not creditable.

Examples of creditable and noncreditable responses are:

Creditable

all of the work activities one is involved in
 lifelong work activities
 the past, present, and future activities
 all the work I have done or will do

Noncreditable

what you plan to do for the rest of your life
 occupation you plan to spend your life in
 lifelong job
 what I'm training for
 work you will do after college

For items 22-26, two points are possible for each item answered correctly.

There is more than one correct answer for each item. Only one correct response is needed to receive two points. Correct responses for each item are listed below.

| | | <u>Correct Source</u> |
|------------|---|--|
| (2 points) | 22. I want to get an idea of what the job market will be like for oceanographers by the mid-1980's. | Occupational Outlook Handbook or Encyclopedia of Careers |
| (2 points) | 23. I want to know what college majors I can pursue to become an oceanographer. | Field of Study-Worker Trait Group Chart or College Major-Occupation Index |
| (2 points) | 24. My favorite high school subject was biology. I want to know what groups of occupations are directly related to biology. | School Subject-Worker Trait Group Chart or School Subject-Occupation Index |
| (2 points) | 25. I want to know what occupations would involve creative thinking. | Worker Trait Group Guide or OOH or CIS Guide |
| (2 points) | 26. Where can I go to find occupations which do not require high mathematical abilities? | Worker Trait Group Guide or Field of Study-Worker Trait Group Chart or College Major-Occupation Index or CIS Guide |

Some responses may receive credit even though the complete title of a source is not given. A title must be specific enough to identify the source desired. Examples of acceptable and unacceptable titles are listed below.

Acceptable

Worker Trait Group Book
College Major Index
Occupational Outlook Handbook

Unacceptable

Worker Trait
College Index
College Major Handbook

- (6 points) 27. Occupational information can sometimes appear to be confusing and contradictory. In fact, the more information you have, the more confusing it may be. When this problem occurs, what criteria would you use to evaluate information.

A total of six points is possible. One point is given for each of the criteria listed below:

- 1 point - source, who wrote it, where it came from, etc.
- 1 point - completeness, tells about all aspects
- 1 point - generalizability
- 1 point - bias, tells good and bad points
- 1 point - recency, when it was written
- 1 point - stereotyping

(20 points) 28. A total of 20 points is possible. Two points are given for each definition and term correctly matched.

- | | |
|--|-----------------------------------|
| <u>K</u> activity intended to produce something of benefit to the individual or the society | A. career development |
| <u>E</u> all of the tasks performed by a worker | B. career theme |
| <u>A</u> continuous integration of values in relation to the milieu through work | C. deciding |
| <u>L</u> use of knowledge of self to learn more about the world of work and use of knowledge of the world of work to learn more about self | D. occupational group arrangement |
| <u>I</u> quickness or ease with which people can learn or develop understanding and skills | E. job |
| <u>F</u> occupations which involve similar worker characteristics | F. worker trait group |
| <u>M</u> things people learn and the skills they develop | G. occupation |
| <u>C</u> achievement of self-integration in relation to the milieu through knowledge of self and milieu | H. occupational exploration |
| <u>J</u> activity undertaken for personal pleasure | I. aptitudes |
| <u>B</u> overriding principle that gives structure and meaning to the sequence of one's work, education, and training experiences | J. leisure |
| | K. work |
| | L. career exploration |
| | M. competencies |
| | N. career goals |
| | O. abilities |

Worksheet for Comparing Pretest
and Posttest Assessment Data

The following worksheet has been developed to help the instructor examine and compare results from the Pretest and Posttest. This comparison of data collected at the beginning and at the end of the course can give feedback information to the instructor as well as provide data to achieve accountability purposes.

The instructor should identify those students who have taken both the Pretest and Posttest. The pretest results will be analyzed in one group and the posttest data will be in a second group. Each scorable cognitive item tally is to be made on each item indicating how many students obtained each of the possible score points. Also, a similar tally is to be made of student responses to the self-estimate items (items 3-18). This tallying will produce a frequency distribution (group item analysis) for each item. In addition to the tallying, a total raw score should be derived on each test for each student by adding the points assigned to the scorable items (items 3-28, except 12).

Item 3 below will be used as an example to illustrate how the worksheet can be used. Spaces have been provided for recording separately the pretest and posttest results on item 3A (as numbered in the posttest). Column (a) identifies the response options for the item. Column (b) provides spaces to record the number of students who chose each response. Column (c) assigns a numerical value to each response so that an average response can be computed. An assumption has been made that the response intervals are equal in value. The products of columns (b) and (c) are recorded in column (d). The products in column (d) are added to obtain a total. The average response for the item is computed by dividing the total by the number of students who have responded to the item. The average response on the same item can be derived in the same way for the posttest group. The average change is obtained by subtracting the pretest average from the posttest average.

Pretest (Assessment I)

Posttest (Assessment IV)

3A. How much do you know about the college majors offered at your school?

| (a) | (b) | (c) | (d) |
|-------------------|-----|---------------|-----|
| nothing | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| | | Total | ___ |
| | | Avg. Response | ___ |

| (b) | (c) | (d) |
|-----|---------------|-----|
| ___ | x 0 = | ___ |
| ___ | x 1 = | ___ |
| ___ | x 2 = | ___ |
| ___ | x 3 = | ___ |
| ___ | x 4 = | ___ |
| | Total | ___ |
| | Avg. Response | ___ |
| | Avg. Change | ___ |

Pretest

Posttest

3B. Having completed this course, how much understanding have you gained about the college majors offered at your school?

| | | | |
|-------------------|-----|-------|-----|
| none | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | ___ |
| Avg. Response | | | ___ |

4A. How much do you know about the occupations and opportunities for employment that relate to college majors?

| | | | |
|-------------------|-----|-------|-----|
| nothing | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | ___ |
| Avg. Response | | | ___ |

| | | |
|---------------|-------|-----|
| ___ | x 0 = | ___ |
| ___ | x 1 = | ___ |
| ___ | x 2 = | ___ |
| ___ | x 3 = | ___ |
| ___ | x 4 = | ___ |
| Total | | ___ |
| Avg. Response | | ___ |
| Avg. Change | | ___ |

4B. Having completed this course, how much understanding have you gained about the occupations and opportunities for employment that relate to college majors?

| | | | |
|-------------------|-----|-------|-----|
| none | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | ___ |
| Avg. Response | | | ___ |

5A. How much do you know about the qualifications for employment in occupations that interest you?

| | | | |
|-------------------|-----|-------|-----|
| nothing | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | ___ |
| Avg. Response | | | ___ |

| | | |
|---------------|-------|-----|
| ___ | x 0 = | ___ |
| ___ | x 1 = | ___ |
| ___ | x 2 = | ___ |
| ___ | x 3 = | ___ |
| ___ | x 4 = | ___ |
| Total | | ___ |
| Avg. Response | | ___ |
| Avg. Change | | ___ |

Pretest

Posttest

5B. Having completed this course, how much understanding have you gained about the qualifications for employment in occupations that interest you?

| | | | |
|-------------------|-----|-------|-----|
| none | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | |
| Avg. Response | | | |

6A. How much do you know about the salary and benefits of occupations that interest you?

| | | | |
|-------------------|-----|-------|-----|
| nothing | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | |
| Avg. Response | | | |

| | | |
|---------------|-------|-----|
| ___ | x 0 = | ___ |
| ___ | x 1 = | ___ |
| ___ | x 2 = | ___ |
| ___ | x 3 = | ___ |
| ___ | x 4 = | ___ |
| Total | | |
| Avg. Response | | |
| Avg. Change | | |

6B. Having completed this course, how much understanding have you gained about the salary and benefits of occupations that interest you?

| | | | |
|-------------------|-----|-------|-----|
| none | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | |
| Avg. Response | | | |

7A. How much do you know about future job openings in the occupations that interest you?

| | | | |
|-------------------|-----|-------|-----|
| nothing | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | |
| Avg. Response | | | |

| | | |
|---------------|-------|-----|
| ___ | x 0 = | ___ |
| ___ | x 1 = | ___ |
| ___ | x 2 = | ___ |
| ___ | x 3 = | ___ |
| ___ | x 4 = | ___ |
| Total | | |
| Avg. Response | | |
| Avg. Change | | |

Pretest

Posttest

7B. Having completed this course, how much understanding have you gained about future job openings in the occupations that interest you?

| | | | |
|-------------------|-----|-------|-----|
| none | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | ___ |
| Avg. Response | | | ___ |

8A. How much do you know about occupational advancement in the occupations that interest you?

| | | | |
|-------------------|-----|-------|-----|
| nothing | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | ___ |
| Avg. Response | | | ___ |

| | | |
|---------------|-------|-----|
| ___ | x 0 = | ___ |
| ___ | x 1 = | ___ |
| ___ | x 2 = | ___ |
| ___ | x 3 = | ___ |
| ___ | x 4 = | ___ |
| Total | | ___ |
| Avg. Response | | ___ |
| Avg. Change | | ___ |

8B. Having completed this course, how much understanding have you gained about occupational advancement in the occupations that interest you?

| | | | |
|-------------------|-----|-------|-----|
| none | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | ___ |
| Avg. Response | | | ___ |

9A. How much do you know about college preparation for employment in the occupations that interest you?

| | | | |
|-------------------|-----|-------|-----|
| nothing | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | ___ |
| Avg. Response | | | ___ |

| | | |
|---------------|-------|-----|
| ___ | x 0 = | ___ |
| ___ | x 1 = | ___ |
| ___ | x 2 = | ___ |
| ___ | x 3 = | ___ |
| ___ | x 4 = | ___ |
| Total | | ___ |
| Avg. Response | | ___ |
| Avg. Change | | ___ |

Pretest

Posttest

9B. Having completed this course, how much understanding have you gained about college preparation for employment in the occupations that interest you?

| | | | |
|-------------------|-----|-------|-----|
| none | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | ___ |
| Avg. Response | | | ___ |

10A. How much have you thought about selection of a college major?

| | | | | | | | |
|-------------------|-----|-------|-----|--|---------------|-----|-----|
| none | ___ | x 0 = | ___ | | x 0 = | ___ | |
| very little | ___ | x 1 = | ___ | | x 1 = | ___ | |
| some | ___ | x 2 = | ___ | | x 2 = | ___ | |
| a moderate amount | ___ | x 3 = | ___ | | x 3 = | ___ | |
| a great deal | ___ | x 4 = | ___ | | x 4 = | ___ | |
| Total | | | ___ | | Total | | ___ |
| Avg. Response | | | ___ | | Avg. Response | | ___ |
| | | | | | Avg. Change | | ___ |

10B. During this class term, how much more have you thought about selection of a college major?

| | | | |
|-------------------|-----|-------|-----|
| no more | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | ___ |
| Avg. Response | | | ___ |

11. At what point are you in deciding upon a college major?

| | | | | | | | |
|------------------|-----|-------|-----|--|---------------|-----|-----|
| no idea | ___ | x 0 = | ___ | | x 0 = | ___ | |
| very little idea | ___ | x 1 = | ___ | | x 1 = | ___ | |
| some idea | ___ | x 2 = | ___ | | x 2 = | ___ | |
| have decided | ___ | x 3 = | ___ | | x 3 = | ___ | |
| Total | | | ___ | | Total | | ___ |
| Avg. Response | | | ___ | | Avg. Response | | ___ |
| | | | | | Avg. Change | | ___ |

PretestPosttest

12. Have you changed your choice of major during this term?

yes ___
no ___

13A. How well do you understand your occupational interests?

not at all ___ x 0 = ___
a little ___ x 1 = ___
fairly well ___ x 2 = ___
well ___ x 3 = ___
extremely well ___ x 4 = ___
not understand ___ x 0 = ___
item
Total ___
Avg. Response ___

___ x 0 = ___
___ x 1 = ___
___ x 2 = ___
___ x 3 = ___
___ x 4 = ___
___ x 0 = ___
Total ___
Avg. Response ___
Avg. Change ___

13B. Having completed this course, how much understanding have you gained about your occupational interests?

none ___ x 0 = ___
very little ___ x 1 = ___
some ___ x 2 = ___
a moderate amount ___ x 3 = ___
a great deal ___ x 4 = ___

Total ___
Avg. Response ___

14A. How well do you understand your work values?

not at all ___ x 0 = ___
a little ___ x 1 = ___
fairly well ___ x 2 = ___
well ___ x 3 = ___
extremely well ___ x 4 = ___
not understand ___ x 0 = ___
item
Total ___
Avg. Response ___

___ x 0 = ___
___ x 1 = ___
___ x 2 = ___
___ x 3 = ___
___ x 4 = ___
___ x 0 = ___
Total ___
Avg. Response ___
Avg. Change ___

Pretest

Posttest

14B. Having completed this course, how much understanding have you gained about your work values?

| | | | |
|-------------------|-----|-------|-----|
| none | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | |
| Avg. Response | | | |

15A. How well do you understand your career goals?

| | | | |
|---------------------|-----|-------|-----|
| not at all | ___ | x 0 = | ___ |
| a little | ___ | x 1 = | ___ |
| fairly well | ___ | x 2 = | ___ |
| well | ___ | x 3 = | ___ |
| extremely well | ___ | x 4 = | ___ |
| not understand item | ___ | x 0 = | ___ |
| Total | | | |
| Avg. Response | | | |

| | | |
|---------------|-------|-----|
| ___ | x 0 = | ___ |
| ___ | x 1 = | ___ |
| ___ | x 2 = | ___ |
| ___ | x 3 = | ___ |
| ___ | x 4 = | ___ |
| ___ | x 0 = | ___ |
| Total | | |
| Avg. Response | | |
| Avg. Change | | |

15B. Having completed this course, how much understanding have you gained about your career goals?

| | | | |
|-------------------|-----|-------|-----|
| none | ___ | x 0 = | ___ |
| very little | ___ | x 1 = | ___ |
| some | ___ | x 2 = | ___ |
| a moderate amount | ___ | x 3 = | ___ |
| a great deal | ___ | x 4 = | ___ |
| Total | | | |
| Avg. Response | | | |

16A. How well do you understand your aptitudes?

| | | | |
|---------------------|-----|-------|-----|
| not at all | ___ | x 0 = | ___ |
| a little | ___ | x 1 = | ___ |
| fairly well | ___ | x 2 = | ___ |
| well | ___ | x 3 = | ___ |
| extremely well | ___ | x 4 = | ___ |
| not understand item | ___ | x 0 = | ___ |
| Total | | | |
| Avg. Response | | | |

| | | |
|---------------|-------|-----|
| ___ | x 0 = | ___ |
| ___ | x 1 = | ___ |
| ___ | x 2 = | ___ |
| ___ | x 3 = | ___ |
| ___ | x 4 = | ___ |
| ___ | x 0 = | ___ |
| Total | | |
| Avg. Response | | |
| Avg. Change | | |

| <u>Pretest</u> | | <u>Posttest</u> |
|---|--|--|
| 16B. Having completed this course, how much understanding have you gained about your aptitudes? | | |
| none very little some a moderate amount a great deal | ___ x 0 = ___ ___ x 1 = ___ ___ x 2 = ___ ___ x 3 = ___ ___ x 4 = ___ | ___ x 0 = ___ ___ x 1 = ___ ___ x 2 = ___ ___ x 3 = ___ ___ x 4 = ___ |
| | | Total ___ Avg. Response ___ |
| 17A. How well do you understand your work competencies? | | |
| not at all a little fairly well well extremely well not understand item | ___ x 0 = ___ ___ x 1 = ___ ___ x 2 = ___ ___ x 3 = ___ ___ x 4 = ___ ___ x 0 = ___ | ___ x 0 = ___ ___ x 1 = ___ ___ x 2 = ___ ___ x 3 = ___ ___ x 4 = ___ ___ x 0 = ___ |
| | | Total ___ Avg. Response ___ Avg. Change ___ |
| 17B. Having completed this course, how much understanding have you gained about your work competencies? | | |
| none very little some a moderate amount a great deal | ___ x 0 = ___ ___ x 1 = ___ ___ x 2 = ___ ___ x 3 = ___ ___ x 4 = ___ | ___ x 0 = ___ ___ x 1 = ___ ___ x 2 = ___ ___ x 3 = ___ ___ x 4 = ___ |
| | | Total ___ Avg. Response ___ |
| 18A. How well do you understand your work skills? | | |
| not at all a little fairly well well extremely well not understand item | ___ x 0 = ___ ___ x 1 = ___ ___ x 2 = ___ ___ x 3 = ___ ___ x 4 = ___ ___ x 0 = ___ | ___ x 0 = ___ ___ x 1 = ___ ___ x 2 = ___ ___ x 3 = ___ ___ x 4 = ___ ___ x 0 = ___ |
| | | Total ___ Avg. Response ___ Avg. Change ___ |

Pretest

Posttest

18B. Having completed this course, how much understanding have you gained about your work skills?

| | |
|-------------------|-------------------|
| none | ___ x 0 = ___ |
| very little | ___ x 1 = ___ |
| some | ___ x 2 = ___ |
| a moderate amount | ___ x 3 = ___ |
| a great deal | ___ x 4 = ___ |
| | Total ___ |
| | Avg. Response ___ |

19A. How do you go about making an important decision?

Points

| | |
|---|---------------|
| 0 | ___ x 0 = ___ |
| 1 | ___ x 1 = ___ |
| 2 | ___ x 2 = ___ |
| 3 | ___ x 3 = ___ |
| 4 | ___ x 4 = ___ |
| 5 | ___ x 5 = ___ |
| 6 | ___ x 6 = ___ |
| 7 | ___ x 7 = ___ |
| 8 | ___ x 8 = ___ |

Total ___
Avg. Points ___

| |
|---------------|
| ___ x 0 = ___ |
| ___ x 1 = ___ |
| ___ x 2 = ___ |
| ___ x 3 = ___ |
| ___ x 4 = ___ |
| ___ x 5 = ___ |
| ___ x 6 = ___ |
| ___ x 7 = ___ |
| ___ x 8 = ___ |

Total ___
Avg. Points ___
Avg. Change ___

B. Effectiveness of your way of making decisions

| | |
|-----------|---------------|
| very poor | ___ x 0 = ___ |
| poor | ___ x 1 = ___ |
| adequate | ___ x 2 = ___ |
| good | ___ x 3 = ___ |
| excellent | ___ x 4 = ___ |

Total ___
Avg. Response ___

| |
|---------------|
| ___ x 0 = ___ |
| ___ x 1 = ___ |
| ___ x 2 = ___ |
| ___ x 3 = ___ |
| ___ x 4 = ___ |

Total ___
Avg. Response ___
Avg. Change ___

C. Rate the effectiveness of your current way of making decisions compared with your way prior to the course.

| | |
|--------------|-------------------|
| much less | ___ x 0 = ___ |
| less | ___ x 1 = ___ |
| as effective | ___ x 2 = ___ |
| more | ___ x 3 = ___ |
| much more | ___ x 4 = ___ |
| | Total ___ |
| | Avg. Response ___ |

20. Define work.

| | |
|---------------|-------------------|
| <u>Points</u> | |
| 0 | ___ x 0 = ___ |
| 3 | ___ x 3 = ___ |
| | Total ___ |
| | Avg. Response ___ |

| | |
|--|-------------------|
| | ___ x 0 = ___ |
| | ___ x 3 = ___ |
| | Total ___ |
| | Avg. Response ___ |
| | Avg. Change ___ |

21. Define career.

| | |
|---------------|-------------------|
| <u>Points</u> | |
| 0 | ___ x 0 = ___ |
| 3 | ___ x 3 = ___ |
| | Total ___ |
| | Avg. Response ___ |

| | |
|--|-------------------|
| | ___ x 0 = ___ |
| | ___ x 3 = ___ |
| | Total ___ |
| | Avg. Response ___ |
| | Avg. Change ___ |

22-26. Sources of occupational information

Correct

| | |
|-----|--------------------|
| 22. | ___ x 2 = ___ |
| 23. | ___ x 2 = ___ |
| 24. | ___ x 2 = ___ |
| 25. | ___ x 2 = ___ |
| 26. | ___ x 2 = ___ |
| | Total • ___ |
| | Avg. Correct = ___ |
| | Total + 5 ___ |

| | |
|--|--------------------|
| | ___ x 2 = ___ |
| | ___ x 2 = ___ |
| | ___ x 2 = ___ |
| | ___ x 2 = ___ |
| | ___ x 2 = ___ |
| | Total ___ |
| | Avg. Correct = ___ |
| | Total + 5 ___ |

Pretest

Posttest

27. What criteria is to be used to evaluate occupational information?

Points

0 ___ x 0 = ___
 1 ___ x 1 = ___
 2 ___ x 2 = ___
 3 ___ x 3 = ___
 4 ___ x 4 = ___
 5 ___ x 5 = ___
 6 ___ x 6 = ___

 Total ___
 Avg. Points ___

 ___ x 0 = ___
 ___ x 1 = ___
 ___ x 2 = ___
 ___ x 3 = ___
 ___ x 4 = ___
 ___ x 5 = ___
 ___ x 6 = ___

 Total ___
 Avg. Points ___
 Avg. Change ___

28. Definition of terms

Points

0 ___ x 0 = ___
 2 ___ x 1 = ___
 4 ___ x 2 = ___
 6 ___ x 3 = ___
 8 ___ x 4 = ___
 10 ___ x 5 = ___
 12 ___ x 6 = ___
 14 ___ x 7 = ___
 16 ___ x 8 = ___
 18 ___ x 9 = ___
 20 ___ x 10 = ___

 Total ___
 Avg. Points ___

 ___ x 0 = ___
 ___ x 2 = ___
 ___ x 4 = ___
 ___ x 6 = ___
 ___ x 8 = ___
 ___ x 10 = ___
 ___ x 12 = ___
 ___ x 14 = ___
 ___ x 16 = ___
 ___ x 18 = ___
 ___ x 20 = ___

 Total ___
 Avg. Points ___
 Avg. Change ___

APPENDIX H

Assessment of Career Decision-Making (Form C)

ASSESSMENT OF CAREER DECISION MAKING

by

Vincent A. Harren, Ph.D.

PART I: HOW I MAKE DECISIONS

The first section of this questionnaire is designed to find out how you go about making important decisions in your life. Some of these decisions, for example, might be: to go to college or not; to decide on a career; or to take job X vs. Y. We believe that regardless of what the decision is about, each person has his or her own unique way of going about making decisions. We also believe that there is no one best way for everybody, and that you have probably learned to rely on a way which works best for you, based on your past experiences.

Before filling out this section, think about how you have made these important decisions in the past, or about how you are handling decisions with which you are currently confronted. Try to get a picture of how you typically or characteristically make decisions. Then go ahead and respond to the statements below in terms of how you feel. Remember, we don't think there is a single best way for everybody, so there are no "right" or "wrong" answers.

On your answer sheet, circle "A" if you Agree with the statement, or "D" if you disagree with it. For a statement to be true of you, it doesn't always have to be the case, but more often than not. If you really can't make up your mind, then leave the item blank, but try not to leave more than a few of them blank, or the scores from the questionnaire will not be valid.

1. I am very systematic when I go about making an important decision.
2. I often make a decision which is right for me without knowing why I made the decision.
3. When I make a decision it is important to me what my friends think about it.
4. I rarely make an important decision without gathering all the information I can find.
5. Even on important decisions I make up my mind pretty quickly.
6. I like to have someone to steer me in the right direction when I am faced with an important decision.
7. When I make a decision I consider its consequences in relation to decisions I will have to make later on.

8. When I make a decision I just trust my inner feelings and reactions.
9. I really have a hard time making important decisions without help.
10. When I need to make a decision I take my time and think it through carefully.
11. I often decide on something without checking it out and getting the facts.
12. I often make decisions based on what other people think, rather than on what I would really like to do.
13. When an important decision is coming up, I look far enough ahead so I'll have enough time to plan and think it through before I have to act.
14. I don't really think about the decision; it's in the back of my mind for a while, then suddenly it will hit me and I know what I will do.
15. I rarely make a decision without talking to a close friend first.
16. I double-check my information sources to be sure I have the right facts before deciding.
17. In coming to a decision about something I usually use my imagination or fantasies to see how I would feel if I did it.
18. I put off making many decisions because thinking about them makes me uneasy.
19. Before I do anything important, I have a carefully worked out plan.
20. I don't have to have a rational reason for most decisions I make.
21. I seem to need a lot of encouragement and support from others when I make a decision.
22. I don't make decisions hastily because I want to be sure I make the right decisions.
23. I make decisions pretty creatively, following my own inner instincts.
24. There's not much sense in making a decision that is going to make me unpopular.
25. Often I see each of my decisions as stages in my progress toward a definite goal.
26. I usually make my decisions based on how things are for me right now rather than how they'll be in the future.
27. I don't have much confidence in my ability to make good decisions, so I usually rely on other's opinions.

28. I like to learn as much as I can about the possible consequences of a decision before I make it.
29. A decision is right for me if it is emotionally satisfying.
30. I usually don't have a lot of confidence in my decisions unless my friends give me support on them.

PART II: HOW I FEEL ABOUT BEING IN COLLEGE

For the rest of this questionnaire, all of the statements refer to your present feelings. Mark the statement "Agree" only if you feel this way right now. You may have felt this way in the past, or you could conceivably feel this way in the future, but if you aren't concerned about this right now, or if this is not relevant to you right now, mark it "Disagree".

31. I don't know what the instructors in my courses expect.
32. People are starting to listen to some of my ideas around here.
33. I believe I've been pretty successful in adjusting to college.
34. I'm trying to find out what the people I live with want of me.
35. I've been talking some of my friends back home into going to college.
36. People here seem to respect me and value my ideas.
37. I'm just beginning to feel a part of things around here.
38. Some of my instructors seem open to suggestions for improving their course.
39. I feel like we are all helping each other to accomplish our goals.
40. It's hard to know how to act at this school.
41. I'm trying to get other students involved in things, instead of just sitting around.
42. This college seems to be meeting my expectations and needs pretty well.
43. I don't feel that I really belong here yet.
44. I often talk to my instructors outside of class.
45. The encouragement and support I've gotten has helped me to try harder to do well.
46. Most of the students here seem to have attitudes and values like mine.
47. I'm not afraid to speak up in class when I don't agree with the instructor.

48. I've been getting a lot of positive feedback from my instructors.
49. I've had to change in some ways in order to get along with people here.
50. I like to hang around on campus during my free hours.
51. Some of my instructors have helped me to get a more objective picture of myself.
52. I wonder if further education is worthwhile for me.
53. I'm learning to be more assertive to get what I want.
54. I'm pretty satisfied with the way things are working out for me here.
55. Some of the instructors here are pretty hard to satisfy.
56. I really enjoy getting involved in group projects with other students.
57. I feel a sense of working together or team effort here.
58. I've been asking other students how they like it here.
59. I've been telling my friends at other colleges what a great place this is.
60. Some of the advanced students have helped me become more realistic.

PART III: WHAT I WANT TO STUDY

61. I have a wide range of course interests.
62. If I choose the wrong major, it could slow me down in getting through college.
63. I'm pretty certain about my choice of major.
64. I like most of the teachers and students in my major.
65. I need to take a lot of different courses to see what I like.
66. I need to consider my interests in choosing a major.
67. It would take a lot to make me change my mind about my major.
68. I realize my major limits the kinds of future goals I can set for myself.
69. I don't know how to go about choosing a major.
70. My past experiences in school should help me decide on a major.

71. There just isn't anything else that I'd rather major in.
72. Some of the advanced courses in my major look pretty hard.
73. The more I think about a major, the more confused I get.
74. I've changed my mind about my major because of some of the courses I've taken.
75. It's a relief to have decided on my major.
76. I wonder how I will fit in with other students in my major.
77. I need to decide on a major.
78. I know what major I want, but I don't know what I could do with it after I graduate.
79. I enjoy telling people what I'm majoring in.
80. Most of my friends are either in my major or a closely related one.
81. I haven't definitely decided against any major.
82. I don't know if I'm capable enough for the majors I'm considering.
83. I've decided what I will major in.
84. My interests and attitudes are like most of the students in my major.
85. I wish I knew what I wanted to study.
86. I need to choose my courses more wisely than I have in the past.
87. My major gives me a sense of purpose and direction.
88. When people know what you major in, they expect you to act in a certain way.
89. I don't know what courses to take next semester.
90. I see some disadvantages to the major I am considering.
91. I get pretty wrapped up in discussions about things in my major.
92. I need several electives that can't be in my major.
93. There are just so many different kinds of courses I would like to take.
94. There are a number of majors which I have decided against.
95. I'm looking forward to getting into the advanced courses in my major.
96. I need to see an advisor in my major to plan the rest of my program.

97. I've looked into several programs, but I don't know what I'm really looking for.
98. I need a program that is broad and flexible.
99. I really get involved in courses in my major.
100. Since choosing a major, my personality seems to be changing.

PART IV: WHERE I AM HEADING AFTER COLLEGE

101. Almost any career seems appealing to me.
102. What I used to think I wanted to become doesn't seem practical anymore.
103. I think I'll be happy with the career I have chosen.
104. I wonder what kind of job I'll be able to get in my field.
105. My plans for the future are too indefinite.
106. I'm trying to decide between two or three possible careers.
107. I'm pretty certain about the occupation I will enter.
108. My attitudes and outlook are becoming more like the people I know in my field.
109. I want to know what field of work I'm best suited for.
110. There are several careers which I have already decided against.
111. I'm a lot happier now that my future career is clear to me.
112. The occupation I have chosen will affect the kinds of friends I will have in the future.
113. I don't know what I really want out of life.
114. I've become more realistic in my thinking about possible careers.
115. I won't let anything get in the way to my reaching my goal.
116. I don't have enough experience for a job in my field.
117. I need information about occupations.
118. I've changed my mind about what I wanted to become, now that I've learned more about the field.
119. The more I learn about things in my field, the more involved I become.
120. I need to find out what jobs are available in my field.
121. I'm interested in too many fields.

122. I'm more certain of the fields I don't want than what I do want.
123. I've decided on the field I am going into.
124. I hope the people in my field will accept me.
125. I need to decide on an occupation.
126. I know what's important to me, but I don't know what kind of career would meet most of my needs.
127. The career I have chosen fits in with my personality.
128. I need to start thinking about job interviews.
129. It's hard to know what to look for in a career.
130. I need to know more about the training required for some of the occupations I am considering.
131. I feel I can overcome any obstacles in the way of my goal.
132. I will probably have to move away from here to get a job in my field.
133. I can't decide on a career because my interests keep changing.
134. I don't know if I have the right kind of personality for the work I'm considering.
135. It's unlikely that I will change my mind about my career plans.
136. The people in my field have certain expectations of me.
137. I don't know how to go about deciding on a career.
138. There are not many job opportunities in the field that I really like.
139. I'm looking forward to getting out of school and getting started in my career.
140. I think I'm ready to choose a specialty within my chosen field.

APPENDIX I

Unit Evaluation Form and Instructions

UNIT EVALUATION

How helpful do you think the following components were in this unit of the course? Enter one check in the column you feel appropriate for each of the components listed below.

| | Very Helpful 1. | Somewhat Helpful 2. | Neutral 3. | Not Very Helpful 4. | Hinder/ Disturbing 5. | Can't Recall 6. |
|---|--------------------|------------------------|---------------|------------------------|-----------------------------|--------------------|
| 1. Filmstrips | — | — | — | — | — | — |
| 2. Lecture/ Presentations | — | — | — | — | — | — |
| 3. Instructor Contact | — | — | — | — | — | — |
| 4. Amount of Time Spent on Unit | — | — | — | — | — | — |
| 5. Reading Text Career Planning and Decision- Making | — | — | — | — | — | — |
| 6. Supplementary Reading | — | — | — | — | — | — |
| 7. Support Group Discussions | — | — | — | — | — | — |
| 8. In-Class Writing Assignments | — | — | — | — | — | — |
| 9. Out-of-Class Work Assignments | — | — | — | — | — | — |

UNIT EVALUATION

Please consider the unit concept in completing the attached form. Indicate if the activities contained in this unit were compatible with the concept listed below.

Unit I

Concept 1 - Career and Career Themes

In the course of a lifetime, a person engages in many work activities, paid or unpaid. These activities may involve the home and family, education and occupations, and civic and community services. The total of a person's work activities constitutes a person's career. The types of activities a person chooses to do plus the values and goals these activities reflect, portray one's career theme.

Concept 2 - Decision-Making

The act of deciding requires that we have the freedom to consider, evaluate, and select a course of action. This freedom is gained through understanding. By understanding each decision situation we become more capable of action based upon reasoned commitment. Thus, understanding the decision situation, means that we need to know ourselves in relation to the situation: our values and goals. Also,

we need to know the milieu (social and physical environment) in relation to the situation so that we can identify possible action. Choice of action based upon such understanding enables us to act responsibly and gives us greater control over the direction of our lives.

Decision-making is an ongoing process. We rarely make separate choices. The decisions we make often grow out of previous decisions, and lead to future decisions. The values and goals upon which we base our decisions may develop and change through our interaction with the world around us.

UNIT EVALUATION

Please consider the unit concept in completing the attached form. Indicate if the activities contained in this unit were compatible with the concept listed below.

UNIT II

Unit Concept

The body of knowledge describing work processes, products, and worker characteristics comprises information about the world of work. By exploring this body of knowledge from the worker's perspective, you can clarify your interests and values in relation to work and identify your occupational preferences.

UNIT EVALUATION

Please consider the unit concept in completing the attached form. Indicate if the activities contained in this unit were compatible with the concept listed below.

Unit III

Unit Concept - Career Goals

Goals are descriptions of what a person intends to accomplish and become. By examining your current values you can identify your short-term, intermediate, and longer range goals. This can be done by projecting your values into the future and visualizing who you would like to become. This process helps you formulate and refine your goals and estimate the time and sequence in which to accomplish them. Your goals, once defined and positioned in time, give direction and purpose to your current activities and help you plan your future activities. Thus, knowing your goals gives you greater control and helps you move from where you are to where you would like to be. You can formulate your values into precise and clear statements to evaluate each of your career options. The option that will emerge as the most desirable from this evaluation is the framework upon which you can develop your career plan. Your career plan should outline, in chronological order, the course of actions you anticipate to take in order to reach your Career Goal.

UNIT EVALUATION

Please consider the unit concept in completing the attached form. Indicate if the activities contained in this unit were compatible with the concept listed below.

Unit IV

Concept 1 - Career Planning in College

A major vehicle for achieving your career goal is your present college experience. A thorough and deliberate planning of your college studies is essential in helping you reach your Career Goal. Your college degree--your credentials--will not be sufficient in securing a job. Employers will also consider the competencies--the skills and specific knowledge--you will have acquired through your college work. The following activities can help you identify the college majors and programs of studies which can most effectively prepare you for the occupations which interest you. Thus, you can acquire the competencies needed to secure employment in these occupations. By planning your college studies in this manner, you are more likely to reach your Career Goal.

Concept 2 - Developing A Career Plan

Which of the career options you have explored in the preceding activities can best help you reach your Career Goal? The selection of the most desirable option should be based on your values.

UNIT EVALUATION

Please consider the unit concept in completing the attached form. Indicate if the activities contained in this unit were compatible with the concept listed below.

Unit V

Unit Concept - Career Decision-Making and Acting

To help your career plan become a reality, you need to decide what action to take with respect to the first step outlined in your plan. This decision does not commit you to your entire plan for the next four years. Rather, you are only committed to the course of action decided upon with respect to the first step of your plan. As you implement your decision, you achieve self-integration in relation to this first step and to your milieu. Additional knowledge about yourself and the milieu will result from the action taken. This additional knowledge will help you clarify your values, reassess your criteria, and identify new courses of action available to you. Subsequent decisions based on the knowledge gained from previous actions taken, will, therefore, help you continuously refine your career plan at a more specific level. This process will increase the likelihood of reaching your Career Goal which will also become progressively more refined.

UNIT EVALUATION

Please consider the unit concept in completing the attached form. Indicate if the activities contained in this unit were compatible with the concept listed below.

UNIT VI

Unit Concept - The Planning and Deciding Cycle

Formulating goals, searching and generating options to reach them, establishing criteria for assessing these options, and deciding on a course of action are not separate events. All these elements of the planning and deciding process occur concurrently, interact, affect, and help form and develop one another in an ongoing, continuous way. Each action you take is the implementation of a choice which generates new knowledge and value. This new experience gives you additional information about your options, criteria, and goals, and helps you develop them further.

APPENDIX J
Interview Schedule

INTERVIEW SCHEDULE

Social Security Number _____

1. What is your major? _____

2. Have you changed your major since enrolling in the course, Career Planning and Decision-Making? _____ Yes ___ No

SKIP to #4 if answer to #2 is YES.

3. Do you feel more committed to your major since completing the course, Career Planning and Decision-Making? _____ Yes ___ No

Probe: a. What factors did you consider in establishing your commitment to your major?

b. What experiences in the course made you feel more committed to your major?

c. At what point in the course was this commitment made?

4. How has your knowledge about majors available at Rappahannock Community

College changed since you enrolled in the course, Career Planning and Decision-Making?

5. Are you closer to selecting an occupation than before you enrolled in the course, Career Planning and Decision-Making? Yes No

Probe: a. Had you thought about an occupation before enrolling in the course.

b. Did the course make you consider a different occupation?

6. Do you know what the term "values" means? Yes No

Probe: Can you give me two or more examples of values?

7. Do you know what the term "aptitudes" means? Yes No

Probe: Can you give me two or more examples of aptitudes?

8. Do you know what the term "interests" means? Yes No

Probe: Can you give me two or more examples of interests?

9. How did your Personal Profile help you in establishing your career plan?

10. Which resource helped you the most in learning about qualifications for employment in occupations that interest you?

Probe: How did it help you?

11. Which resource helped you the most in learning about future job openings in occupations that interest you?

Probe: How did it help you?

12. Which resource helped you the most in learning about the salary and benefits of occupations that interest you?

Probe: How did it help you?

13. Can you give me the three dimensions of a decision situation?

14. How has your decision-making style changed since enrolling in this course?

Probe: a. Do you think you are a more effective decision maker since enrolling in this course? Yes No

b. Can you tell me a little more about that?

15. In terms of career planning, describe where you would be if you had not enrolled in this course?

16. In terms of your career plan, how would you describe your status now?

17. What aspect of the course was most helpful to you in developing your career plan?

18. What aspect of the course was least helpful to you in developing your career plan?

19. What was the most difficult aspect of the course?

20. On a scale of 1 (Dissatisfied) to 5 (Extremely Pleased), how satisfied were you with the help you received from the course?

| | | | | | |
|--------------|---|---|---|---|-------------------|
| Dissatisfied | | | | | Extremely Pleased |
| 1 | 2 | 3 | 4 | 5 | |

21. Why did you enroll in this course?

22. What is a summary statement of what you received from the course?

23. Would you recommend this course be a permanent offering at RCC

- Yes ___ No

Probe: a. Why?

b. Should the course be offered at the: ___ Freshman
or ___ Sophomore Level?

c. Why?

APPENDIX K

Responses to Question One on the Student Survey
Pretest - Experimental Group
"Why did you enroll in this course?"

1. So I can get an idea of what type of career I would like to have.
2. I would like to look into different fields I could go into after college.
3. I am undecided about what I would like to do.
4. I enrolled in this course because I believed that it would help me to understand more about the planning of my career goals.
5. I am not sure about my career.
6. I enrolled in this course because I will one day be working and I would like to know all that I possibly can about the world of work.
7. Because I was not sure what I wanted to do with life after I finish at Rappahannock Community College.
8. Because it sounds interesting. By me not knowing what I really like to do, I feel this is a class to start decision-making.
9. I was interested in entering into the field of journalism, but not sure.
10. To find out what career I wanted to go into, since I want to work with people with different problems.
11. Undecided about my career.
12. I've enrolled because I am confused about what I really want and if I get it that I'm satisfied with it.
13. To find out what career I am best suited for.
14. Because there are a variety of careers I'm interested in and right now I'm a confused 27 year old female married with two kids who needs to spend time evaluating myself and goals and come to a decision.
15. I was undecided about what I wanted to do for the rest of my life.
16. I enrolled in this course because I don't really know what I would like to do. But I know I really like my part-time job.
17. Because I am undecided what I want to do or to be in the future. I thought maybe this course can be of some help.
18. I want to go into something that I could get something out of, and this course is the best way of doing that.

VITA

Dorothy Cosby Cooke is a native of Gloucester, Virginia where she received her elementary and secondary education. She was awarded a Bachelor of Science degree in 1963, with a major in Mathematics Education, from Virginia Union University in Richmond, Virginia. In 1970, she was awarded a Master of Arts degree in Mathematics Education from Hampton Institute, Hampton, Virginia. She was awarded a second Master of Arts degree in Guidance and Counseling in 1976 from Hampton Institute. Additional graduate studies were completed at The College of William and Mary in Williamsburg, Virginia; George Peabody College for Teachers in Nashville, Tennessee; and Virginia State University in Petersburg, Virginia. In the summer of 1981, she completed the requirements for the Certificate of Advanced Graduate Studies at Virginia Polytechnic Institute and State University (Virginia Tech) in Blacksburg, Virginia.

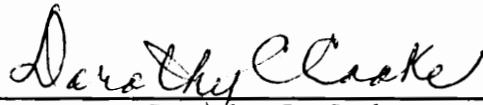
Following graduation from college, Mrs. Cooke was employed in the Williamsburg-James City Public School System as a Mathematics Teacher for six years. She was subsequently employed as a Mathematics Teacher in the Gloucester County School System for two years.

In 1971, Mrs. Cooke was appointed Mathematics Instructor at Rappahannock Community College (RCC), Glenss, Virginia. She later served in a dual role of Mathematics Instructor/Counselor and subsequently as Director/Counselor of Student Special Services.

Having been selected in 1979 to receive the "Graduate Assistance for Minority Virginians" Award sponsored by the State Council

of Higher Education, she pursued full-time doctoral studies at Virginia Tech. While matriculating at Virginia Tech she served as a Higher Education Administrative Intern in the Division of Student Affairs.

Mrs. Cooke resumed employment at RCC in September, 1980 where she holds the rank of Associate Professor of Mathematics and Counseling; and serves as Director/Counselor of Student Special Services. She holds membership in several professional organizations.


Dorothy C. Cooke

THE IMPACT OF A CAREER PLANNING AND DECISION-MAKING
COURSE ON FIRST YEAR COMMUNITY COLLEGE STUDENTS

by

Dorothy Cosby Cooke

(ABSTRACT)

The present study was focused on higher education settings and the implementation of career education programs to promote the career development of their students. The major purpose of this study was to determine if the course, Career Planning and Decision-Making (1980), which was developed by Appalachia Educational Laboratory, was effective in assisting Freshmen community college students in developing their career planning and decision-making skills and enhancing their career decision-making behavior. The secondary purpose of the study was to obtain the students' evaluations of the course. The Career Planning and Decision-Making Student Surveys, the Assessment of Career Decision-Making (ACDM), the end-of-unit evaluations, and a structured interview were used to gather data. Analysis of variance was utilized to determine the significance of the difference between the groups on the pretest scores at the .05 level of significance. The differences following treatment were determined by repeated measures analysis of variance using the .05 level of significance.

The course, Career Planning and Decision-Making (CPDM) was taught during the Winter Quarter, 1981, at a small rural community college in Virginia. The population consisted of forty five freshmen in transfer programs who volunteered to enroll in the course. From

this group assignment was made to the experimental group (N=18) and the control group (N=18).

Analysis of the results revealed: (1) significant differences between CPDM and non-CPDM students at the .05 level of significance on achievement of course objectives as measured by the Student Surveys and (2) significant differences at the .05 level of significance between CPDM and non-CPDM students on the Rational style of decision-making, as measured by the ACDM. There were no significant differences at the .05 level on (a) progress made with regard to implementation of the decision to go to college, (b) progress made with regard to selecting a major, and (c) progress made with regard to selecting an occupation to pursue after college completion, as measured by the ACDM. A review of the structured interview and end-of-unit responses indicated that the students felt they had been stimulated by the course, in a positive way, in their career planning. They recommended that the course become a permanent course offering at the freshmen level. Through a comprehensive analysis of the findings, the conclusion was reached that overall the course, Career Planning and Decision-Making was effective in assisting college students in developing their career planning and decision-making skills as well as enhancing their career decision-making behavior.