DEVELOPMENT OF A FIELD TESTED CAREER DECISION WORKBOOK FOR BIBLE COLLEGE FRESHMEN

by

William Donald Bartlett, Jr.

Dissertation submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

in

Counselor Education

APPROVED:

Carl O. McDaniels, Chairman

Clifton D. Bryant

Jim C. Fortune

Martin Gerstein

David E. Hutchins

May, 1992

Blacksburg, Virginia

DEVELOPMENT OF A FIELD TESTED CAREER DECISION WORKBOOK FOR BIBLE COLLEGE FRESHMEN

by

William Donald Bartlett, Jr.

(ABSTRACT)

Bible college personnel face a unique challenge in providing career counseling to their students. Bible college students hold a deeply religious world view which can bear directly upon their career decision-making. The purpose of this study was to develop a career decision-making workbook for Bible college freshmen. The development of such a workbook required the identification of relevant spiritual determinants, appropriate career development resources, and the integration of career decision-making theory with a theology of work and leisure.

Research and development methods used in the study included (1) initial document design, incorporating the use of instructional design principles; (2) review of content, readability, and usability by a panel of experts; (3) preliminary field testing with students; and, (4) main field testing with students.

The field tests were conducted as two-day workshops, involving a total of 38 subjects. The subjects were Bible college freshmen who volunteered to participate. The preliminary field test was conducted at a Bible college in southern West Viginia. The main field test involved three Bible colleges in the southeastern United States. Student interviews and a pretest-posttest design were utilized to obtain data on the workbook's effectiveness.

Field test results indicated that the workbook helped subjects to (1) crystallize their current career thinking, (2) increase their appreciation for a spiritual-rational model, (3) understand the importance of leisure as part of the concept of career, and (4) seriously think about the future consequences of decisions. Subjects performed poorly on the terminal objective, i.e., the making of a tentative career decision. However, low scores were thought to be an indicator of the limited nature of the workshop format rather than a reflection of the effectiveness of the workbook.

Major conclusions were that (1) the workbook has the potential to encourage improved career decision-making skills for students and, (2) the workbook is adaptable to a variety of Bible college settings. Recommendations for

document revision, operational field testing, and summative evaluation are presented.

ACKNOWLEDGEMENTS

Many people have helped, either directly or indirectly, to make this book a reality. Foremost are each of my professors, who led me to an understanding of counseling theory and research. Each professor supported my various attempts at integrating counseling theory with my theological perspective. Without their support, this project would have remained only an idea.

A special word of thanks goes to Dr. Carl McDaniels. His leadership in my doctoral program has been invaluable. Among his contributions to this study were the excellent plan of studies he advised, the resources he directed me to as useful to the research, and his patience with my job changes in the midst of the dissertation process.

This study could not have been completed without the support of the staff and students at Appalachian Bible College, Johnson Bible College, and Kentucky Christian College. Each of the participants were patient and understanding in the administration and testing of the material. A hearty thanks to each of them.

Finally, to those who gave the most I owe the most. Mom and Dad have sacrificed financially since my undergraduate days to help keep me going when I could not afford tuition on my own. Angela, Derek, Brandon, and my

loving wife, Gloria, made it possible to give undivided attention to the study when it became necessary to do so. Few persons will ever know the sacrifice that these family members have made for the sake of this project. I hope that I can contribute to their success in obtaining personal goals as they have contributed to mine.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF GRAPHS

Chapter 1

INTRODUCTION

Since humanity came into existence, the activities of daily living have necessitated decision-making. One of the world's oldest historical documents, the Bible, reports the early occurrence of a phenomenal number of decisions by the first man, Adam, in the naming of all animals living in the Garden of Eden. Regretably his decision-making strategy is not revealed.

Decision-making strategies are as numerous as the people who use them. Benjamin Franklin offered his own personal strategy for decision-making to British Scientist Joseph Priestly over two hundred years ago. In his letter, dated September 19, 1772, he explained:

> To get over this (indecision), my way is to divide half a sheet of paper by a line into two columns; writing over the one Pro, and over the other Con. Then, during three or four days consideration, I put down under the different heads short hints of the different motives, that at different times occur to me, for or against the measure. When I have thus got them all together in one view, I endeavor to estimate their respective weights; and where I find two, one on each side, that seems equal, I strike them both out. If I find a reason for pro equal to some two reasons con, I strike out the three. If I judge some two reasons con, equal to some three reasons pro, I strike out the five; and thus proceeding I find at length where the balance lies; and if, after a day or two of further consideration nothing new that is of importance occurs on either side, I come to a determination accordingly. (cited by Horan, 1979, p. 1).

While this particular strategy is still around, it may not be the most effective one for the information society in which we live today. Students in both high school and college, for example, are exposed to an ever-widening world of work and leisure opportunities. College students are faced with judgments about what career pattern will most effectively match their personalities, interests, and abilities. Their lives will be dynamically influenced by macrosociological, economic and political forces. At a more personal level, these students will enjoy an endowment of advice from friends and family.

Colleges and universities across the nation deserve recognition for providing both information and skill training through sophisticated career development programs. Interventions which rely on computers, workshops, courses, professional and peer counseling, and resource centers are altering the ways students obtain information and make career decisions.

There has been a rapid rise in career development interventions in liberal arts and technical institutions (Johnson & Figler, 1984). The same does not hold true for theological colleges and seminaries. The development of career development programs in these institutions has been slow and frustrating.

A number of factors may account for this phenomenon. From an historical perspective, career decision-making has been an intuitive process for students who consider professional ministry as a career option. The man on the street is likely to associate the concept of calling with ministerial career choices, but is unable to articulate how one is called.

Theological students are equally inarticulate. Larsen and Shopshire (1988) surveyed seminary students and found that 75% believed that they had experienced a call to ministry. Of these, 31% were primarily motivated by some form of altruism and 54% were looking for self-fulfillment. Another observer has noted that "An over-active imagination, hormonal imbalance, pride -- anything can masquerade as an impression from God" (Packer, 1986, p. 36). Career decisions made without an understanding of what constitutes a call has proven disastrous for many would-be Christian workers.

In addition to the question of calling, theological students may confront a variety of myths related to ministry. White and White (1988) say that these myths may include:

1. Ministry work is easy.
2. There is less pressure to produce.
3. The work environment is more spiritual.

4. Ministry work involves less conflict.

5. One will have adequate time for devotional and personal study.

6. Ministry work selection is a major sacrifice.

7. Spiritual "gifts" will be used more fully in vocational ministry.

Numerous authors have recently provided myth-demolishing insights on the subject (Bernbaum & Steer, 1986; Hardy, 1990; Mattson & Miller, 1982; Sherman & Hendricks, 1987; White & White, 1988). Their theologies of work and leisure are useful to career counselors in theological settings. The authors offer a framework for the development of guidance materials for students seeking to understand career paths which allow for ministry activity as work or as leisure. Bernbaum and Steer (1986), whose view on work is particularly illustrative from among recent writers, succinctly states:

> A summary of biblical teaching on work would be this: we work to serve God and bring glory to his name, to fulfill our distinctiveness as humans by being stewards and co-creators with God in the world, to provide for our needs and those of our families because that is what God intended, and to help others who are in need. Work, therefore, is service, not primarily for ourselves, but for God and for others (p. 87).

Their view of leisure is also poignant for ministry students:

> ...our employment is only a part of our larger calling in the same way that our worship and leisure activities are. If we belong to Christ, we must

> serve him in every area of our lives, including our work, our worship, and our recreation. (Bernbaum & Steer, 1986, p. 83)

The issues involved in ministry career decision-making are meaningful for those who are contemplating theological education. This would include students currently enrolled in Bible colleges. It is a moot point that many of these students decided to attend Bible college to prepare for professional ministry work. Yet those facing the decision to enroll could do so with tangential goals in mind, i.e., to fulfill parents' wishes or to get away from home.

It is safe to say that a significant number of Bible college students will not end up in a full-time, paid Christian ministry (Bosma & O'Rear, 1981; Christianity Today, 1982). These students will not practice a profession for which they have received specialized training. In order to enjoy the maximum benefits of their education, students and graduates alike may need targeted intervention from Bible college counselors.

At the least, the intervention begins at the time students are recruited by the Bible college. Institutionally, and at a personnel level, Bible colleges have an obligation to display integrity in guiding students. Admissions counselors, advisors, and other personnel should assume the responsibility to inform

students honestly about what a Bible college education can (and cannot) prepare them for relative to work and leisure options.

One survey of Bible college graduates has shown that the majority of those who enrolled with high motivation toward the ministry, did so without very clear vocational goals (Bosma & O'Rear, 1981). Bible college graduates who were pastoral majors and Bible majors are the most satisfied with their education (63% and 62% respectively), but missions majors are less satisfied and would now say that they desire a change in their major (13%) or a transfer (17%). Women were also more likely than men (16% and 9% respectively) to say that they would transfer if they had their education to do over again.

The goal of the effective college counselor is to assist students in understanding career decision-making within the context of their religious orientation and values (Manese & Sedlacek, 1986). The Bible college must be willing to allow students to become autonomous, exercising good decision-making skills. More specifically, how ethical is it to persuade a student to remain for a second, third, or fourth year in Bible college if the student's goals demand a preprofessional program not available at the college in question? (Christianity Today, 1982, p. 16)

Bible college personnel have the potential of directing students into both full-time and part-time ministries and preparing them for immensely effective service for human society. While it is true that many Bible college graduates will not end up in full-time, paid ministry, "Almost all of those not in full-time ministry are in part-time or volunteer ministry" (Bosma & O'Rear, 1981, p. 92). Effective counselors will show current students the various configurations of work and leisure in which Bible college graduates have found themselves. It is reasonable to assume that these graduates view these configurations as resulting from personal choice, or from divine intervention, or from a combination of both. An awareness of the spiritual beliefs and practices as they relate to career decision-making is at the threshold of career development for Bible college students.

In spite of the fact that Bible colleges regard spirituality as an integral part of the curriculum, they may not offer strategies that address this integration in a systematic way. Students are left to speculation about critical spiritual issues. "Opportunities in the college years for students to address their spiritual selves are not only appropriate, but in some respects, obligatory" (Collins, Hurst, & Jacobson, 1987, p. 275).

Further, "The desire to profoundly understand the character of the Ultimate and to find one's vocation within it stands at the heart of the spiritual quest; it is central to what it means to be a spiritual being" (Parks, 1982, p. 103). Without an accurate understanding of the spiritual self, career decisions by Bible college students are likely to result in unwise choices and could lead to a failure identity.

The time has come for Bible college personnel to take the lead in guiding students through the process of ministry career decision-making. This role will require the integration of career development theory with theologies of work and leisure. The research and development of materials for use by Bible college counselors and students is critical to the task. If wisely constructed, this contribution to the Bible college will surely assume increasing significance for the future.

Statement of the Problem

Bible college personnel face a unique challenge in providing career counseling and advisement to their students. Bible college students hold a world view, based upon religious beliefs, which bears directly upon the decisions they will make in reference to their career

and life planning. The problem is that there is a void in materials which integrate religious world view with career development.

The Purpose

The general purpose of this study is to design and field test career decision-making workshop materials for Bible college students. In order to accomplish this purpose, this study will address the following enabling objectives:

1. Synthesize the literature regarding career development theory, decision-making theory and interventions, Bible college students, and document design.
2. Identify the spiritual determinants relevant to career decision-making for Bible college students.
3. Identify the resources currently available to Bible college students for developing career decision-making skills.
4. Design and field test a student workbook for a career decision-making workshop for Bible college settings. Effectiveness of the career decision-making materials will be assessed by structured interviews of Bible college students, criterion-referenced testing, and evaluations by a critical review panel.

5. Integrate a proven model of career decision-making with a theology of work and leisure suited to the Bible college student.

Assumptions

1. Workshop materials are more effective when developed for self use by means of instructional design principles.
2. Bible college students need career development interventions for the same reasons that the general population of college students need assistance.

Research Questions

1. What is the essential domain of career development theory which will be judged useful by Bible college students?
2. What are the essential ideas of the religious world view as held by the Bible college student and how do these integrate with career development theory?
3. Will workshop materials developed for self study be judged effective by pilot sample?
4. Will the workshop materials as proposed be effective to preministerial freshmen?
5. How will selected evidences of product performance in the pilot study attest to the desired quality of the materials?

Design of this Study

The Borg and Gall (1985) Research and Development model will be the guiding research design, as aptly illustrated by Malmberg's (1984) dissertation. The R & D model is a non-statistical process for the design, development and validation of educational products. The typical R & D process continues through operational field testing. However, this study will conclude at the main field test stage (see figure 1) and will become the basis for future empirical research activities.

Limitations

The first limitation of this study is that there is no random sample. The institutions which will participate in this study will do so as a result of convenience and willingness to do so. For that reason, the conclusions of this study should be considered valid for the institutions under study and not to populations in other institutions.

A second limitation is present due to the subjective nature of spiritual determinants in decision-making for Bible college students. Some variance in beliefs of Bible college students is expected due to the denominational affiliation variable. Spiritual beliefs, such as the belief of divine calling, can strongly influence one's view of work and leisure. These beliefs are

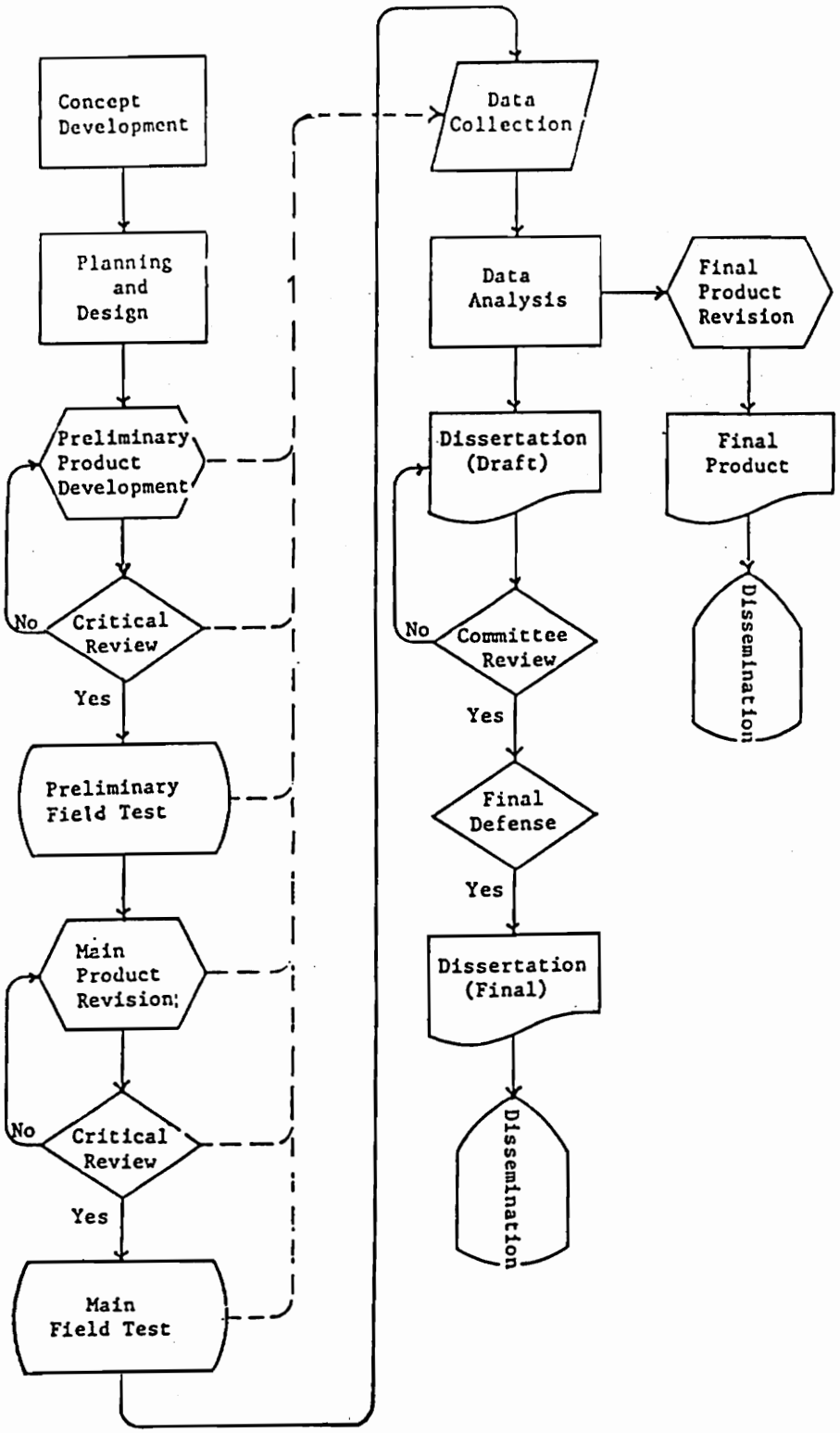


Figure 1. Research and Development Process for Dissertations (Malmberg, 1984).

expected to uniquely influence the career decision-making process for each individual. The career decision workbook proposed in this study may offer material not consistent with the personal beliefs of some students. Students most likely to benefit from the workbook are those whose beliefs are congruent with a theistic world view as defined by Smith (1980).

Definitions

Bible College Education. "Bible college education is education of college level whose distinctive function is to prepare students for Christian ministries or church vocations through a program of biblical, general, and professional studies" (AABC Manual, 1984, p. 3).

Calling. It is a puritan idea to distinguish between a 'general' call and a 'particular' call.

> The general calling is the call to be a Christian, that is, to take on the virtues appropriate to followers of Christ, whatever one's station in life....
>
> The particular calling, on the other hand, is the call to a specific occupation -- an occupation to which not all Christians are called. With respect to occupations within the church, St. Paul refers to such particular callings as the gifts of the Spirit... (Hardy, 1990, pp. 80-81).

Career Counseling. Dr. Donald Super's definition of career counseling will serve as the definition for this study.

Career counseling is:

> The process of helping a person to develop and accept an integrated and adequate picture of himself and of his role in the world of work [and leisure], to test this concept against reality, and to convert it into a reality, with satisfaction to him and benefit to society. (cited in Herr & Cramer, 1987, pp. 6-7)

Career Development. Career development is:

> The total constellation of psychological, sociological, educational, physical, economic, and chance factors that combine to shape the career of any given individual over the life span. (Sears, 1982, p. 139)

> Career Development is a part of human development. As a person develops from stage to stage, the awareness, exploration, motivation, and preparation for particular careers are a major part of total life development. (Virginia Tech Counselor Education Department, 1988)

Counseling. The process of counseling is defined as:

> ...assisting client(s) through the counseling relationship, using a combination of mental health and human development principles, methods and techniques, to achieve mental, emotional, physical, social, moral, educational, spiritual and/or career development and adjustment through the lifespan. (Bloom, Gerstein, Tarvydas, Conaster, Davis, Kater, Sherrard, & Esposito, 1990, p. 513)

Counselor. As used in this study, a counselor is one whose appointment specifically includes at least a portion of time allocated to helping students with career development concerns.

Spiritual Gift. The definition most useful for this study is provided by Kenneth Gangel:

> It would seem that every Christian has at least one gift, and some have more. Perhaps multi-gifted persons are placed...into positions of leadership as pastors, evangelists, or teachers, and in other roles where such clusters of gifts are necessary.
>
> The gift is probably not a ready-made ability to perform, but rather a capacity for service that must be developed. For example, a Christian with the gift of teaching should apply himself to training, reading, and practice to enable the Holy Spirit to produce competence in exercising his gift. (Gangel, 1983, p. 9)

Need for the Study

Training programs for college student personnel, career counselors, and counselor educators have continued to flourish in recent years. Congruent with that growth has been the increase in research related to college career development programs. The research has focused upon Catholic colleges, Protestant colleges, independent private colleges, state colleges, and community colleges. However, there has been little research directed at career development programs in Bible colleges. Due to small enrollments and a narrow disciplinary focus, these colleges have not been popular domains among those who have performed such studies.

The Bible college movement has grown significantly over the last three decades. Bible colleges are a vital force in the preparation of vocational church-related workers. For example, research shows that the majority of evangelical missionaries currently moving to foreign

countries are graduates of Bible colleges, as contrasted with graduates from Christian liberal arts colleges and seminaries. Christian organizations are taking advantage of the pool of Bible college graduates, but many graduates are not aware of their options upon graduation. As one author noted, "The employment needs of Christian agencies and missions are becoming widely varied, and greater vocational counseling is needed in schools" (Sweeting, 1984, p. 102).

The relative paucity of data on career development programs in Bible colleges is incongruent with the role these institutions play in ministry preparation in North America. Further, the mission of the Bible college is essentially person-centered, majoring on both the intellectual and spiritual development of the student. This mission should foster a strong counseling program, inclusive of appropriate career counseling materials, since the Bible college acknowledges that its objectives include the overall development of it's students.

Decision-making skills are a part of that development. Bible college students, like most other college students, need counseling to assist them in their development of career decision-making skills. As Gelatt (1989) said, "The main purpose of counseling has always been to help people make up their minds" (p. 255). More

specific to career decisions, Dunphy (1969) says that "The essential element in the career process is the decision" (p. 14). If these authors are correct, then career decision-making instruction ought to be at the heart of Bible college counseling programs.

The research is plentiful on the effectiveness of career courses, seminars, and workshops for enhancing college student decision-making (Krumboltz, Kinnier, Rude, Scherba, & Hamel, 1986; Lent, Larkin, and Hasegawa, 1986; Pickering & Vacc, 1984; Savickas, 1990). Savickas (1990) has shown the value of conducting a career decision-making course to tenth graders. The experimental group in his study significantly experienced a greater decrease in career indecision and a significant increase in future time perspective. Lent, Larkin, and Hasegawa (1986) found additional support for earlier studies (Carver & Smart, 1985; Lent, Schmidt, & Larkin, 1985; Remer, O'Neill, & Gohs, 1984) on the effectiveness of career courses for college student development. It would thus seem that career decision-making interventions are helpful to college students.

The time is ripe for the development of career decision-making materials tailored to the Bible college population. And, the use of such materials is expected to improve students' abilities in career decision-making.

Organization of the Study

This study will include five chapters. The initial chapter will contain the proposal for the study. Chapter one also will consist of an introduction, a background, assumptions, a problem statement, purpose statements, research questions, limitations, definitions, need for the study, and an organization of the study.

Chapter two will contain a review of the literature on the constructs: (a) career development, including career counseling interventions and the work/leisure connection, (b) career decision-making, (c) Bible college students, and (d) document design considerations.

Chapter three will report on the research methods used in this study. Chapter three will include sections on the research design, sample, instrumentation, and prototype review and revision.

The presentation and analysis of the preliminary and main field tests will be included in chapter four. The results will be based upon the data obtained in the study. This chapter will also include discussion on product revision and implementation recommendations.

Chapter five will present discussion and conclusions of the study from the field test results. Any recommendations for further study will be included in this chapter as well.

Chapter 2

CONCEPT DEVELOPMENT

This chapter presents (1) a review of the research available on Donald Super's career and life development theory, (2) a review of the research available on Carl McDaniels' theory of leisure development, (3) a review of the research and practice relative to H. B. Gelatt's career decision-making theory and interventions, (4) a review of the literature on Bible college students, (5) a review of instructional design issues, and (6) a description of product design specifications necessary to the completion of this study.

Career Development Theory

It is not an overstatement to say that the career development theory that has received the most continuous attention over the past 40 years is that of Donald E. Super's. His contributions to career development theory has generated a goldmine of research, much of it stemming from the Career Pattern Study (Super, Crites, Hummel, Mosser, Overstreet, & Warnath, 1957; Super, 1969; Jordan & Heyde, 1979).

A clear distinction can be drawn between the work of theorists who have focused on a singular occupational choice (Bordin, Nachmann, & Segal, 1963; Holland, 1973; Roe, 1956) and Super, who has focused on career decision

making as a developmental process (1957, 1963, 1990). The former model, often referred to as the matching model of career guidance, had its origins in the work of Frank Parsons (1909) and studies performed by the U. S. Army in World War I. According to Super (1983), the major shortcoming of this model is its underlying assumption that persons assessed "are all sufficiently mature vocationally to have mature and stable traits" (p. 557). An assumption of career development theory, which has good objective evidence (Super & Overstreet, 1960; Jordaan & Heyde, 1979), is that the variance in individual differences in vocational maturity is great.

Due to the prolific abilities of Super, a critical analysis of all his theory development and research would prove to be a gargantuan task. There are certain concepts which represent the essence of the theory. The theory was born with a set of 10 propositions but has since been expanded to 14 (Super, 1990). This review will focus on Super's view of self-concept, life-span and life-space, decision making and career maturity, and work and leisure.

The Contribution of Self-Concept Theory

Donald Super considers his approach to be eclectic, having made "use of various types of theory as they fitted the facts or seemed to make a priori sense"

(Super, 1981, p.28). His theory has drawn from differential psychology, developmental psychology, occupational sociology, and personality theory. Self-concept theory (or self-construct theory) is the unifying element in this blend and is the central theme of his classic contribution to the field, The Psychology of Careers (1957). Super (1981) explains his rationale in its selection in the following manner:

> A great deal of research was inspired by self-concept theory: its theoretical simplicity, its easily used methodology, and its intrinsic appeal in a society in which self-actualization is a widely accepted objective made it something of a fad in the 1960's.... Self-concept theory appeals to the Zeitgeist, and its use in counseling is simple, so that its influence on practice has been considerable. (p.32)

To state this primary assumption simply, a person develops a self-concept and seeks to implement that appropriately through role playing. Super's own words articulate the concept:

> In expressing a vocational preference, a person puts into occupational terminology his idea of the kind of person he is; that in entering an occupation, he seeks to implement a concept of himself; that in getting established in an occupation he achieves self-actualization. The occupation thus makes possible the playing of a role appropriate to the self-concept. (Super et al, 1963, p. 1)

It is a common misconception that a person has one self concept. Super speaks of constellations of self-concepts. Self-concepts, in the phenomenological

sense, accrue meaning as each concept of the self is played in some role (Super et al, 1963). This fact led Super in an attempt to make the language of phenomenology less mystical and more precise and operational. A taxonomy resulted which provides a distinction between dimensions of self-concepts and metadimensions of self-concepts. The former refers to personality components or attributes like gregariousness or dogmatism. The latter refers to characteristics of the dimensions like clarity, stability, and self-esteem (Super, 1990).

Another distinction which Super (1980) makes in his taxonomy is between self-concepts and self-concept systems. Self-concepts are qualities of single traits while self-concept systems denote constellations of traits. He explains the differences as:

> The metadimension of 'clarity,' for example, can apply to any one trait, for a person may see himself or herself very clearly as gregarious or may have only a vague idea of that dimension of the self. The metadimension of 'structure' can apply, however, only to a constellation of dimensions or traits, for one or more of these must be significantly higher than others for the profile of dimensions to be clearly structured. (Super, 1980, 210-211)

Self-Concept as a Gender Concern

Self-concept theory has also been a part of career development research as it relates to gender concerns. It appears that both sexes appear to make decisions on the basis of their self-concepts and their understanding

of the life circumstances. Super (1990) has cited a variety of support for this, finding slight sex differences in studies using the Career Development Inventory (CDI) and similarities among both sexes in career patterns. It seems that differences are differences of degree, not of kind.

A Life-Span, Life-Space Approach

According to a distinction which Super (1981) makes between matching theories and developmental theories, the focus of a developmental theory is on life stages. Some theorists study the processes of identification and differentiation, others focus on personal constructs (perception of self, of others, and of situations). Super has attempted to synthesize matching theory, developmental theory, and decision-making theory into a comprehensive framework. The result of his work is what he calls the Life-Span, Life-Space approach to career development.

Understanding the Importance of Roles

It is Super's (1980) contention that people play a variety of roles as they age. At any given stage (see proposition five [Super, 1990]), a person may play one role or multiple roles. The number of roles a person can play is inestimable, but generally nine major roles can be played including that of 1) child, 2) student,

3) leisurite, 4) citizen, 5) worker, 6) spouse, 7) homemaker, 8) parent, and 9) pensioner.

These roles, along with four principal theaters, are used to describe the life space of the general population during the course of a lifetime. Again, a multitude of theaters could be discussed, but Super (1980) selects 1) the home, 2) the community, 3) the school, and 4) the workplace. One theater can typically be ascribed with one role, but it is possible for one role to be played in more than one theater. For example, "the role of worker may be played in the theater of the home, as well as in that of the workplace, when the worker takes work home at night or over the weekend" (Super, 1980, p. 284).

Roles are defined both in terms of expectations of self and others and performance. Performance refers to the satisfactoriness of the role played and the redefining of that role in light of expectations. Super's (1980) expanded view of roles can be summarized in the following ways. First, a role can change and be defined differently at different ages. "That of a child, for example, is defined quite differently at ages 1, 9, and 17, and even more differently when the son or daughter is the 50-year-old child of an 80-year-old parent" (Super, 1980, p. 285).

Secondly, a specific position which defines the role may change, resulting in a role change. "Thus the worker role changes when the individual changes jobs, and especially when the individual changes occupations, as may be done more than once in the course of a lifetime" (Super, 1980, p. 285). Changes of this nature are obvious in workers who experience what Super (1980) calls multi-occupational careers (p. 285), like the seasonal worker, unskilled transient, and moonlighter.

The simultaneous combination of life roles, characterized by the number, types, stability of width and depth of these roles, gives definition to one's life-style. The life cycle is the sequential combination of roles which structures the life space. The total structure is the career pattern, Super (1957) defines a career as a sequence of positions occupied by a person during the course of a lifetime. The sequence of role initiation and abandonment differ for each person but certain major roles may occur in a typical sequential pattern. "The constellation of interacting, varying roles constitutes the career" (Super, 1980, p. 284).

The importance that a person places upon a role through time expenditure refers to temporal importance. Super (1980) says, "The first full-time job may not make demands on free time until the worker develops the

occupational motivation that sometimes comes with increased age, family responsibilities, and recognition of the fact that taking work home or taking part-time courses can be rewarding materially and, in some fields, psychologically" (p. 289). Emotional involvement on the other hand, suggests that one can experience a personal involvement psychologically with a role with or without devoting more time to it. For example, a newly retired person may enjoy the leisurite role immensely initially, but begin to resent it after a few years of boredom.

The Role Salience Inventory (Super & Neville, 1985a) is designed to measure the degree of psychological involvement of the individual in the role. The measure of such involvement looks at the degrees of commitment, participation, and value or importance attributed to the role. Amatea, Cross, Clark, & Bobby (1986) see limitations in the Role Salience Inventory because it groups all family-oriented roles in one category. "Since present-day couples show a remarkable variability in the styles in which they involve themselves in marital, parental, and homecare roles, the expectations regarding performance in these three roles require separate attention" (Amatea et al, 1986, p. 832). While the criticism may be accurate, one must realize that all theories and all assessments have limitations. These

limits, however, do not invalidate nor devalue the intended use of such tools.

To explain the life-span, life-space approach to career counseling, Super (1980) prepared a Life-Career Rainbow heuristic which can be used both by the counselor and a client/student. He suggests that the Rainbow serves two purposes, namely:

1. Teaching the concept of Life-Career, including the notions of life stages, life space, and life-style, helping students and adults to see the interactive nature of the variety of roles constituting a career, and showing how self-actualization can be achieved in varying combinations of life roles;

2. A counseling aid with older adolescents and with adults, to help them to (a) Analyze their own careers to date; and to (b) Project them into the future, both as they have been developing and as they might, with planning, develop. (Super, 1980, p. 296)

The Rainbow is a helpful tool in understanding and explaining the role playing of individuals. It can illustrate the past lifestyle and provide a guide for planning the future. It also shows that Super has an understanding that the role of worker does not necessarily have to be the central life role as Brown's (1981) criticism would suggest. Most importantly, the Rainbow illuminates at a glance the life-span, life-space approach.

Decision Making and Career Maturity

According to Super (1983), readiness for career decision-making requires 1) a sense of autonomy, time or future perspective, and self-esteem, 2) a commitment to work or to a self-actualizing career (work salience), 3) career maturity, and 4) the search for a good match of developing interests, values, and aptitudes with those characterizing a field of work and other life career roles. Decision-making is a major component of career maturity, which consists of both knowledge (Gelatt, 1962) and commitment to decision-making, ability to apply these (Super, 1983), and decision-making styles (Osipow, Carney, & Barak, 1976). Super (1955) introduced the concept of vocational maturity to describe the degree of development in a person extending from early fantasy choices in childhood to decisions about retirement from work as an older adult. One is considered vocationally mature to the extent that he or she successfully meets the developmental tasks of a life stage. These vocational developmental tasks are:

1. crystallizing a vocational preference,
2. specifying the preference,
3. implementing the choice,
4. stabilizing in the chosen vocation, and

5. consolidating one's status, and advancing the occupation. (Super, 1969a, p. 4)

Certain traits develop in childhood and are strengthened or weakened in adolescence. As part of the basic personality, these traits are not necessarily considered components of career maturity, but they are viewed as determinants. These traits include internal locus of control, self-esteem, and time perspective. Tango & Dziuban (1984) have provided support for the view that career indecision may in some cases be related to personality issues.

Decisions are considered to occur at various points throughout the life cycle. They are found at the start or ending of a role or at the time a person makes changes in an existing role. Decisions are made to enter school, how to spend leisure time, when to retire, or to work full time. Decisions like marriage or moving can affect one or more roles with or without a time lapse. The individual's decisions related to vocation come late in the development process as the person begins to realize what kind of person he or she is becoming and what kind of occupation he or she wants to enter. "Thus, Super concludes that the individual is more or less conscious of his vocational decision making, depending upon the stage of his development" (Crites, 1969, p. 121).

The growth stage may bring a person to the awareness that a career decision is impending. The decision-making process as it is experienced in the following stages is described by Super (1980) as:

> ...he or she formulates the question, reviews premises, identifies facts needed to round out an understanding of the situation, seeks these data, evaluates and weighs the old and new data, identifies alternative lines of action, and considers their various possible outcomes and their respective probabilities (exploration); he or she then weighs the alternatives in terms of values and objectives, selects the preferred plan of action, stores the alternatives for possible future reference, and pursues the plan on either an exploratory basis or with a more definite but still tentative commitment (establishment). In either case there ensues more data collection through the evaluation of outcomes, with modifications of plans, maintenance, decline, with recycling. (p. 293)

Decisions are made under the influence of personal determinants like genetics, family, and community. Situational determinants like geography, history, social and economic conditions also influence the decision making process throughout the lifespan. These determinants affect the preferences, choices, and entry into the role of worker and also bring change to that role. Vocational development is a special aspect of general development. Further, the factors which affect vocational development change and interact with each other and are acted upon by vocational behavior changes. "In other words, vocational development is a dynamic

process which parallels, influences, and is modified by emotional, intellectual, and social development" (Crites, 1969). As a consequence, Super makes the assumption that vocational development follows the same principles and patterns as other developmental processes:

> Biological, psychological, economic, and sociological factors combine to affect the individual's career pattern. Now one aspect of behavior, then another, is preeminent throughout the span of development. (Super & Bachrach, 1957)

The studies of life span and life space indicate that occupational choice is not something that happens once in a lifetime as matching theories might suggest. Super (1981), in typical developmentalist fashion, holds that "...people and situations develop and that a career decision tends to be a series of minidecisions of varying degrees of importance" (p. 38). These minidecisions all contribute to a series of occupational choices, each one having the appearance of a maxidecision.

While Super's Career Development theory would not primarily be characterized as a <u>matching</u> approach, it certainly recognizes that congruence must exist between the person and the environment in role playing. The person is seen as encountering a series of developmental tasks throughout the life course and attempting to adapt in a manner which is becoming to the kind of person he or she wants to be. The matching process is never really

completed since the self and the environment continue to change. Matching occurs when major career decisions are made with inevitable minor decisions following (Super, 1990).

A major contribution from the Super's study of career development has been the Career Development Inventory (CDI). The CDI followed the research which Super and his colleagues began after recognizing the lack of readiness for career decisions in the 9th grade and later documented (Super & Overstreet, 1960). A school form is available for use in grades 8 through 12 and a college and university form for that population. The CDI consists of eight scales: career planning, career exploration, decision-making, world-of-work information, knowledge of preferred occupational group, career development attitudes, career development knowledge and skills, and career orientation total. "Field trials and research have shown the value of the CDI in individual counseling, group assessment, and program evaluation and planning" (Thompson, Lindeman, Super, Jordaan, & Meyers, 1981, p. 3).

The usefulness of the CDI to the counselor should also be noted since it can help the counselor accomplish three critical tasks: (1) to determine where the student is in his or her vocational development; (2) to identify

how ready the student is to select among the available curricular and occupational choices; and (3) to decide how the unprepared student can be helped (Thompson et al., 1981).

Work and Leisure

Several major concepts are summarized in Super's (1976) definition of work. His definitions of work and leisure are psychological in nature. They appropriately place perceptions and motivations relative to work within a person's behavior. Super defines work as:

> The systematic pursuit of an objective valued by oneself (even if only for survival) and desired by others; directed and consecutive, it requires the expenditure of effort. It may be compensated (paid work) or uncompensated (volunteer work or an avocation). The objective may be intrinsic enjoyment of the work itself, the structure given to life by the work role, the economic support which work makes possible, or the type of leisure which it facilitates. (1976, p. 20)

According to this view, work can be nonpaid and can include those who are outside the formal job structure (occupational structure), like homemakers.

Assessing Career Development

The central position that work takes in Super's career and life development theory is highlighted in the Work Importance Study (WIS). The WIS was an international project which began in 1978 involving 14 countries. The WIS project identified commitment, participation, and knowledge as basic components of work

and other roles.

The research resulted in three instruments: The Time Scale, The Values Scale, and The Salience Inventory. The Time Scale has never been used in the U. S. but has been in Spain and Canada. The Values Scale (Super and Nevill, 1985b) is a typical measure of values and The Salience Inventory (Super and Nevill, 1985a) yields scores for both commitment and participation. The Salience Inventory also measures the degree to which each of the five major life roles contributes to realizing life values, and for the relative importance of each of the values in a person's life-space (Super, 1982).

Career development is primarily concerned with vocational choice and adjustment and to the choice and function of individuals in other major life roles. Among adults, career development focuses upon "career adaptability upon entering, training for, and working in an occupation, as well as progress and setbacks in the work world, adaptability to changing working conditions, and the handling of career development tasks that culminate in withdrawal from the work force and eventual retirement" (Super, Thompson, & Lindeman, 1988, p. 2). In light of this, and that vocational maturity applies to adolescents and not to adults, Super et al. (1988) developed the Adult Career Concerns Inventory (ACCI).

The ACCI is intended for use with adults and older adolescents in the work world who are considering changes in their own careers. The instrument reflects the mind of Super in his focus upon the work role relative to other life roles.

While Super has not given equal attention to the leisure role, relative to the work role, he has duly noted the importance of leisure in one's career. He cites Sears' (1982) definition of leisure upon which he reiterates his early (1940) work on this topic. It is his view that leisure can be experienced as extensions of one's occupations, compensation for occupations, or unrelated to occupations. Leisure activities can conflict with occupations by taking too much of the worker's time and energy. Or, leisure pursuits may be neutral in which one participates only when other demands do not need attention.

Super suggests that leisure can also be viewed through the lens of the Protestant Work Ethic. The result of such a view is that leisure is approached as preparation for work. Leisure engagements can serve as exploratory experiences in which persons can try themselves out in an occupationally-related activity or develop personal and work skills which may have transferability.

Leisure as a supplement for work is useful to those who have repetitive, mechanized, or fragmented work. He writes,

> Some consider it essential to the self-fulfillment and happiness of these workers, and to their mental health, that they have opportunities in their leisure to use their abilities, to express their interests, to see the results of their efforts in meaningful form, and thus to have a sense of individuality and of worth. (Super, 1984, p. 75)

Summary

Donald Super has delivered a theory of career development that is processual, continuous, and generally irreversible. He has shown that career development is a process of compromise and synthesis in which the self-concept operates. He gives prominence to individuals' mastery of increasingly complex tasks at different stages of career development, allowing for internal and external factors which influence career decision-making.

Super and his colleagues have carried on the Career Pattern Study to attempt to validate and refine his theory. Implications for career counseling and career education have also resulted from his efforts. The Career Pattern Study has provided insights into life stages and has led to a refinement of the attending developmental tasks. He has provided numerous assessment tools for the counselor. His Life-Career Rainbow has provided the counselor and client a useful tool for

understanding how roles emerge and interact across the life-span. His work has illuminated the nature of career decision-making as rational, prescriptive, developmental, and emergent.

Leisure Development Theory

The potential for work and leisure providing a convergence of life satisfaction and fulfillment is beginning to receive more attention. Probably no person has given more impetus to this movement than Carl McDaniels at Virginia Tech. McDaniels has recently written a landmark work entitled The Changing Workplace (1989), which provides scenarios for what workers can expect to find in the workplace of the future. It is the culmination of years of research which focuses upon the work/leisure connection (McDaniels, 1965, 1977, 1982, 1984a, 1984b, 1989). It is a book designed for those in the helping professions, counselors in particular, who are challenged with practical guidelines to help clients move toward self-actualization by the integration of work and leisure roles throughout the lifespan.

Leisure Concepts

McDaniels (1989) adapted his definitions of work leisure, and career from a report by Sears (1982). Those definitions are as follows:

Work. A conscious effort (one that does not have either coping or relaxation as its primary purpose) aimed at producing benefits for oneself and/or for oneself and others.

Leisure. Relatively self-determined activities and experiences that are available due to having discretionary income, time, and social behaviors; the activity may be physical, social, intellectual, volunteer, creative, or some combination of all five.

Career. The totality of work that one does in a lifetime.

The word leisure does not appear in Sear's definition of career, but McDaniels' concept of career (Career = Work + Leisure, or C = W + L) would certainly include leisure. The importance of focusing upon the leisure role as a part of the career pattern is given additional support by the work of Super (1984), who distinguishes the role of leisurite from the other eight roles of child, student, worker, citizen, spouse, parent, homemaker, and pensioner.

While there may be a critic or two of the C + W + L formula, other formulas do not appear to be more helpful. Edwards (1984), for example, has suggested LP = W + L (Life Planning = Work + Leisure), which she says is "commensurate with the spirit of C = W + L but needs less defining" (p. 97). Her concern is over the use of Sears' (1982) definition of career. While she is entitled to her opinion, it should be noted that a cursory reading of career development literature reveals that a number of

authors have adopted the definition and have found it satisfactory when used in combination with the leisure definition.

Stages of Leisure Development

Work and leisure is a theme that has pervaded McDaniels' writing since his first article nearly twenty five years ago (1965). In that article he addressed the search for meaning in vocational activity as a human trait. He challenged the narrow view of vocation as something which related only to work and called for a recognition of leisure as a contribution to an enriched meaning of vocation. The emergence of the leisurite role as a potential equal with the worker role was a revolutionary thought, impacting current career development thinking. This perspective broadened the concept of man's totality of life and highlighted the importance of meaning in work and leisure. McDaniels (1965) states,

> To have real meaning in vocation, both work and leisure for man must have a new, underlying force within the total context of the purpose of life. This suggests that counselors have the responsibility to assist young people and adults to develop a total style and way of life and with the idea of life patterns rather than in the somewhat limited area of educational objectives or occupational role. (p. 34)

It was with regard to this notion that McDaniels formulated the Career = Work + Leisure (C = W + L) formula, designed to provide a holistic framework

(McDaniels, 1989). The work of developmentalists like Erik Erikson, Robert Havighurst, and Daniel Levison provide the basis for McDaniels' (1982, 1989) stages of leisure development.

The first stage is generally during that of childhood, from birth to 13 years of age. The Awareness Stage, as it's name suggests, is a time of development in which the child develops physically, psychologically, intellectually, and socially. During this period the child becomes aware of leisure activities with embryonic formation of his or her own preferences. The modeling of significant others at this stage strongly influences initial work and leisure values.

The second stage, the Exploration Years, occurs roughly between ages 13 and 18. The degree of maturity found in the physical, social, economic, intellectual, and emotional traits of a young person will act as determinants in the leisure participation process. Junior- and senior-high schools and colleges can provide opportunities for leisure exploration with curricular and extracurricular activities. McDaniels (1989) says that this is a time for exploring both work and leisure possibilities and that counselors and teachers should help them see the connection between the two. The family, which is "the single most significant influence

on the leisure exploration of the adolescent" (McDaniels, 1989, p. 218), should cooperate with the school to assure that this occurs.

Persons between ages of 18 and 24 experience the Preparation Stage. It is during this period that preparations will be made for a lifetime of leisure and work activities. Or, dissatisfied workers in this age group, may seek and find a satisfaction in new work or new leisure experiences. These young adults may experience risk taking and exploration to a degree not experienced before, simply because they have greater personal and financial freedom to choose. For example, educational experiences are a matter of choice, for the first time in their life. McDaniels (1989) makes the following observation about the benefits of college experiences for identifying work from leisure activities:

> For young college students, occupational choices can emerge from leisure interests in areas such as student government; music, art, and drama organizations; social groups; and intercollegiate athletics. Popular leisure programs have been reported by the Leisure Exploration Services (LES) at Southern Illinois University, the Leisure Resource Room at Texas Woman's University, and the Leisure Fair at the University of Oregon. (p. 220)

McDaniels (1982, 1989) views adulthood (ages 24 to 40) as the Implementation Stage. During this stage, leisure may complement work or become more important than work. For those with families, leisure may come with

family vacations, outings, or hobbies. Volunteer activity may also become more significant for some in this age group. Employment can provide leisure activities for some executives who conduct business while engaged in golf or some other sport, or the worker who plays on a company sponsored ball team. The amount of time required by the worker role may regulate the amount of time available for leisure pursuits.

The Involvement and Reassessment Stage follows for those between the ages of 40 and 60, or midlife. Expertise in leisure and work may have occurred by this point in the person's development to the extent that they take on the role of consultant. With children leaving home, income peaking, and financial responsibilities decreasing, the midlifer has more resources available than ever before for leisure pursuits. Preparations are made during this time for the transition into retirement. "Development of leisure interests that can be continued during retirement will provide continuity from a full-time work life to a full-time leisure life" (McDaniels, 1989, p. 221), possibly with the added benefit of a second source of income.

The last stage occurs at age 60 and extends to the end of life -- the Reawareness and Reexploration Stage. For this group, time availability may increase while

discretionary income may decrease. This condition has the potential of eliciting change in kind or degree of involvement in leisure activities. The community is also a determinant, since some communities offer a variety of opportunities for this group while other communities may have little resources to offer. Volunteer work is one way in which retirees may continue to find satisfaction, even though such activity is by definition a form of leisure rather than work.

Leisure Counseling

There is ample evidence supporting the legitimacy of McDaniels' emphasis on the importance of leisure exploration and planning as a process in career and life counseling. Changes in our society over the last 25 years have continued to transform attitudes toward work and leisure (McDaniels, 1965; 1977, 1989). Rimmer and Kahnweiler (1981) found this to be true in their study of 150 undergraduate students at a university in the midwest. The results suggest "that people tend to perceive work, leisure, education, the future, and self as interrelated components of their lives" (p. 115).

The increased psychological importance of work and leisure over the life span is evident (Sweeney, Navin, & Myers, 1984), and more research is available on the topic than ever before. Loesch (1981a), for example, has noted

the importance of leisure activities in facilitating developmental task accomplishment. Leclaire (1982), writing to school counselors, has emphasized the need for counselors to engage in leisure counseling to promote growth for persons in all age groups. Counselors have also be alerted to the benefits of leisure counseling among special population clients (Loesch, 1981b). Due to the increased concern in leisure counseling, Sweeney et al. (1984) and Edwards (1984) have called for self-study in counselor education programs to assure that counselor education graduates are competent to perform leisure counseling. Various leisure counseling models are available, four of which are summarized by Peevy (1981, 1984). Edwards (1984) provides a helpful history of leisure counseling since the 1950's and a discussion on her own leisure counseling process, including helpful case illustrations.

McDaniels (1989) uses a life-cycle definition of leisure counseling by Peevy (1981). It is "that approach through which a person professionally prepared in leisure aspects of counseling attempts to help a counselee to accomplish the developmental tasks of each life stage through the selection and use of appropriate leisure activities" (Peevy, 1981, p. 134). He builds the definition into his earlier conception, C = W + L,

suggesting that leisure counseling might be understood by a related formula: Career Counseling = Leisure Counseling + Work Counseling (CC = LC + WC) (McDaniels, 1989, p. 182).

Ideas for action by McDaniels (1989) might serve as guidelines for counselors for their own exploration into leisure possibilities for persons at various age levels. He has encouraged the proliferation of leisure opportunities by 1) parents in the home 2) youth personnel in schools and youth groups 3) employers in the workplace, and 4) volunteer coordinators in community agencies. It is important for the counselor to help people see leisure in the broadest possible way. Leisure has creative dimensions (as found in the arts), physical dimensions (as found in sports), intellectual dimensions (as found in domestics), social dimensions (as found in all social interactions). McDaniels (1989) points out that skills can be developed in any of these dimensions through courses, clubs, or community programs.

McDaniels encourages the counselor to attend to clients who desire to put their leisure to work:

> So the counselor's role becomes clear: Encourage people of all ages to become knowledgeable about their leisure strengths and interests and to translate them into life satisfactions -- part-time or full time work, whatever seems to suit the person and the situation best. (McDaniels, 1989, p. 200)

Those who choose to turn their leisure into work will either produce a product or provide a service. He cites many case studies to illustrate these options for the counselor.

Sociological Perspectives on Leisure

One cannot study the work/leisure connection without taking society at large into view. The sociological literature itself appears to emphasize certain themes more than others in relation to work and leisure, but does force one to look at the connections more broadly. Work is viewed as a means to gaining a contributing place in society; and, work is a part of the social fabric and is normative (Vander Zanden, 1988). Leisure is often studied in relation to the changing economy and its consequences on spending patterns, national sports, and vacation patterns (Vander Zanden, 1988). The leisure industry is a point of interest, exploiting the performance drive in persons by selling the necessary equipment.

Some sociologists do not recognize extremely regimented activities as genuine leisure since they are not performed for the sake of pure enjoyment (Solomon, 1986; Robinson, 1987), but a few like Kelly (1981) suggest that any activity can be leisure, depending on how it is defined. The sociologist is not likely to

categorize any activity as leisure without examining the broader social circumstances (White, 1982).

The work/leisure connection is one that has undergone radical changes as society shifted from a nonindustrial society to an industrial one. In the latter, work (earning a living) is not easily distinguishable from other social activities (Dubin, 1976). Stinchcombe (1983) says that our industrialized society is different, due to 1) the physical segregation of the home and workplace, 2) the temporal separation between working time and leisure time, and 3) the control of specialized organizational structures over work activities.

Industrialization and the modern technological revolution as social movements have provided sociological lenses through which the researcher tends to look at work and leisure. A central question for sociologists is, "What makes a job satisfying or not satisfying?" Tausky (1984) found that a large majority of workers express favorable opinions about their jobs, even if they gripe about them. Work can offer several things, including these: the sense that one is supporting self and family; the pleasure of developing or exercising skills; and enjoyment of coworkers. But workers who do not find these in their work, may feel alienated from their

environment, or even from society as a whole. The following quote represents an unpalatable view of work:

> Because workers are not involved in the overall decision making process, because work is not organized in a meaningful way, it becomes increasingly common for workers to treat their jobs as only a necessary evil, as the price they must pay for leisure time and pleasurable activities outside of work. This is one of the reasons that the demands of workers, especially through trade unions, have focused so heavily on pay and other aspects of material security...Workers continue to fight largely for more money because, like management, they are convinced that they cannot find work itself pleasurable, and so must seek all satisfactions in leisure time activities. (Calhoun, 1981, p. 288)

McDaniels (1989) reported on the status of work within our society from a review of several authors (Nollen, 1982; O'Toole, 1981; Rosow, 1980; Yankelovich & Lefkowitz, 1982a, 1982b), finding that workers and the workplace are changing. He summarizes societal changes as follows:

1. More changes can be expected in both workers and the workplace in the next decade.
2. More and more people are seeking a balance of work and leisure in their careers.
3. More varied patterns of work will permit larger amounts of leisure.
4. More people are seeking life satisfaction through self-employment.
5. Extended periods of leisure are desired by many employees, often at the cost of pay increases. (McDaniels, 1989, pp. 172-173)

In the same vein, he has cited the reports from U.S. News and Word Report ("Our Endless Pursuit of Happiness, 1981), A United Media Enterprises Report on Leisure in America ("Where Does the Time Go?, 1982), and The Miller Lite Report on American Attitudes Toward Sports (1983). His summary of the review is helpful:

1. Leisure is a major American enterprise, growing rapidly every year in magnitude and importance.
2. The family is a major focus of leisure activities.
3. Television viewing, spectator sports, and participant sports take up a great deal of Americans' time.
4. The American public is seriously involved in volunteer activities.
5. American workers view leisure as a necessity, not a luxury. They want more of it. (McDaniels, 1989, p. 176)

It is apparent from these reviews and earlier references that the work/leisure connection cannot be fully understood without looking at the sociological influences on both. These conclusions also suggest trends for the future of work and leisure, and ought to capture the attention of the career counselor as an area for continuing education and further research.

Summary

The career development practitioner will undoubtedly find McDaniels' (1989) definition of leisure most helpful

as a convenient and manageable way to study the work/leisure connection. His model of leisure development enriches the understanding of human development and suggests a significant counterpart to Super's (1984) worker role. It lends support to the view that occupational choices are emergent from a variety of experiences including leisure experiences.

College counselors who consider the importance of leisure development for students will primarily focus upon the preparation stage (ages 18 to 24) and the implementation stage (ages 24 to 40) as the majority of students fall within these stages. Students will need career development interventions which highlight the salience of the work and leisure roles throughout the adult lifecycle. Counselors who follow the McDaniels (1989) formula of career counseling (Career Counseling = Work Counseling + Leisure Counseling) will encourage students to see leisure in the broadest possible way and at the same time explore the world of work from a new perspective.

Students willing to explore work/leisure possibilities in this way will find greater fulfillment in the creative, physical, intellectual, and social dimensions of the self. This is consistent with the trends in American society.

Decision-Making Theory

Decision-making is a lifelong process and a vital component of human development. Effective decisions can result in the actualization of one's full human potential. Some theorists like Crites (1981), Gelatt (1962), and Osipow (1973) have advocated a developmental approach to decision-making as a means of learning more about the self and one's environment.

Learning decision-making skills can result specifically in the development of initiative, independence, and responsibility (Remer & O'Neill, 1980). McLaughlin (1987) studied the effect of training on paraprofessionals' problem-solving competence in counselor interactions. She outlined decision-making as one stage of the larger rubric of problem-solving. Her literature review highlighted the prerequisite need of counselors to understand problem-solving skills before attempting to educate others (i.e., client, students, etc.) in those skills.

The following discussion will provide a basis upon which the counselor can build understanding of the decision-making process. Following Gelatt's (1962) model, the following discussion will outline a series of steps for decision-making, and providing instruction in the utilization of the process.

Gelatt's Decision-Making Theory

In 1962, H. B. Gelatt published a rational decision-making model to provide a theoretical framework for secondary guidance services. It was Gelatt's (1962) desire that students receive decision-making counseling. "Through 'decision-making counseling' students are required to learn about themselves and their environment as this information is related to the decision, and by participating in the decision-making process they can learn to make decisions more independently and accept the proper responsibility" (Gelatt, 1962, p. 241). The criteria which he set for himself in developing the framework required that "it must be objective, it must give direction to procedures, methods, and techniques to be used, and it must provide for the derivation of testable hypotheses which serve as a base for evaluation" (Gelatt, 1962, p. 240).

Drawing upon the work of Cronbach and Gleser (1957) and Bross (1953) he began with the supposition that all decisions have essentially the same characteristics: 1) a person faces a decision 2) the choice involves two or more courses of action, and 3) the choice is to be made on the basis of available information. Gelatt (1962) was inclined to agree that decisions could be terminal, meaning final, or investigatory (decisions requiring

further information). These concepts were arranged in his model in such a way that investigatory decisions could be seen cycling through the decision-making sequence until final decisions were derived. And, "a decision can be final only in the sense that an immediate goal is reached" (Gelatt, 1962, pp. 242-243).

The components of Gelatt's (1962) model are easily understood. The decision-making sequence begins as the client recognizes the need to decide between two or more possible courses of action. The client then collects data and surveys possible courses of action. The data is utilized to determine possible courses of action, outcomes, and probability of outcomes. In the next phase of the process, the client will estimate the desirability of outcomes by means of value clarification. The client concludes the sequence by evaluating and selecting a terminal decision or begins the sequence again upon arriving at an investigative decision.

The main components in Gelatt's (1962) strategy include the prediction system, the value system, and the criterion. A more thorough investigation of the three main components of Gelatt's (1962) strategy and an evaluation of the model for research and practice follow.

The Prediction System

The process of deciding requires a predictive system

(Gelatt, 1962). A predictive system is one in which assessment is made of information relevant to the decision to be made. Gelatt, Varenhorst, & Carey (1972) suggest that information can be divided into four parts: possible alternative actions, possible outcomes (consequences of various actions), probability of outcomes (relationships between actions and outcomes), and desirability of outcomes (personal preferences). To ensure understanding of the terminology, Gelatt et al. (1973) are careful to make the distinction between a decision and an outcome:

> A <u>decision</u> is the act of a person in choosing, selecting and deciding among several possibilities based on his judgments.
>
> An <u>outcome</u> is the result, consequence, or aftermath of that person's act or decision. (Gelatt et al., 1973, p. 9)

The assessment step is critical in that knowledge of the possible alternatives is integral to the decision-making process. The theory contends that people will make different decisions because they have <u>different values.</u> But they also make different decisions because they possess different information. Both are important in determining risk.

> After you have collected information and evaluated it, you are in a better position to judge the degree of risk involved in various decisions you might make. You can predict more accurately the likelihood that you will achieve an outcome you desire -- and you can decide how much of a risk you want to

take to try to get that outcome. (Gelatt et al., 1973, p. 23).

Mistakes which are often made by persons in the gathering and usage of information include:

Type A. Not choosing an action because he does not know it is a possibility.

Type B. Choosing an action even though he does not know the possible outcome.

Type C. Underestimating or overestimating the importance of certain information.

Type D. Collecting information that cannot be used or is not necessary. (Gelatt et al., 1973, p. 23)

A basic assumption of the prediction system is that choices increase if information creates new alternatives. But having the right kind of information is prerequisite for creating new information. The decider may not know what kind of information is needed, cannot find the information wanted, or finds the information currently in hand to be useless. In some instances, seeking more information may prove dysfunctional to effective decision-making. Such behavior could indicate procrastination or resistance in decision-making. In such instances, deadlines may need to be determined. "Deadlines either imposed by others or by oneself are necessary to focus on the point at which the search ends and the decision is made" (Gelatt et al, 1973, p. 8).

A second assumption is that information influences the decision itself. The information may directly influence the evaluation of possible outcomes and result in the elimination of some alternatives. The following illustration is given:

> For example, a boy talks to his father about whether he should go out for baseball or track at school in the spring. His father gives him the information that the boy will not be able to keep his car unless he gets a job after school to support the car. The boy now faces a new decision, that of getting a job or going out for sports. (Gelatt, Varenhorst, & Carey, 1972, p. 7)

Since the information affects the decision itself, the decider must consider the source of the information, interpretation of the information, objectivity of the information, and the relevance of the information.

The Value System

A value is defined as "something a person prizes, cherishes, esteems -- something he expresses consistently in his behavior" (Gelatt, Varenhorst, & Carey, 1972, p. 5). Values are foundational in the Gelatt (1962) model and provide an integrating framework of the complete decision-making process. Both the available data and the strategy used to achieve an objective are influenced by personal values.

The values clarification process in Gelatt's model is not one which encourages a counselor to impose his or her values on the client, but rather one that esteems

client free choice. Gelatt (1962) explains,

> To many people this proposed framework for school guidance involving collecting data, prediction, probability, and evaluation will suggest excessive intervention and control. But guidance does not want to control. Nor does this framework tell us what the content of an individual's choice should be; rather, it indicates a process of choosing. Using this proposed process, a student's 'freedom of choice' is actually increased. (p. 243)

Workshop leaders using Deciding: A Leader's Guide (Gelatt, Varenhorst, & Carey, 1972) will find a caution against the indoctrination of students with the leaders' own values. According to the authors, leaders who are less likely to indoctrinate are those who follow the three rules provided in the guide:

1. There are no right or wrong values.
2. Values are learned.
3. A person who has only one set of values that are applied automatically, without being examined, functions more like a machine than a human being (Gelatt, Varenhorst, & Carey, 1972, pp. 5-6)

Values clarification can be a difficult task. This is partly due to the fact that values are sometimes private, values change, and values conflict (Gelatt et al., 1973). But this should not discourage the education of students about this matter. Students who study values are likely to benefit from the process, leading them to "know more about themselves; identify clearly their personal values; give greater commitment to those values;

experience the satisfaction of achieving what is valued; [and] become more effective decision-makers" (Gelatt, Varenhorst, & Carey, 1972, p. 5).

The Criterion

Some concerns for the career counselor are inherent in the decision-making sequence. Individual readiness, self-knowledge, and knowledge of life and career opportunities are certainly the most basic of these concerns. One concern which stands out among the rest is, How does a person decide how to decide? The actions taken to decide are referred to as a strategy. "A strategy is a plan for converting values, objectives, information, and risk into a decision" (Gelatt, Varenhorst, & Carey, 1972, p. 9). Gelatt et al. (1973) explain that most decision-making strategies are concerned with risk. Strategies cited by Gelatt, Varenhorst, & Carey (1972) include the wish strategy, the safe strategy, the escape strategy, and the combination strategy.

1. The wish strategy. Ignore risk; choose the action that could lead to the most desirable outcome, regardless of task.

2. The escape strategy. Avoid risking the worst; choose the action that will most likely eliminate the worst possible outcome.

3. The safe strategy. Take the best odds; choose the action that is most likely to bring success and has highest probability.

4. The combination strategy. Get the best combination of low-risk and desirable outcome; choose the action that has both high probability and high desirability. (Gelatt et al., 1973; Gelatt, Varenhorst, & Carey, 1972)

The unifying element in integrating values and information is risk estimation. The risk must be calculated for each considered alternative. The four conditions under which all decisions are made are:

Certainty. Each choice leads to one outcome known to be certain.

Risk. Each choice leads to several possible outcomes with known probabilities.

Uncertainty. Each choice leads to several possible outcomes with unknown probabilities.

Combination. Combination of risk and uncertainty.

Evaluation

The concepts of terminal and exploratory decisions has been tested by Phillips (1982) using 92 adult males. The purpose of the study was twofold: (1) to examine the extent to which exploration occurs and is followed by terminal decisions, and (2) to examine the extent to which the exploratory and terminal career decision behaviors are independent.

Phillips (1982) found that 80% of the subjects could be classified as exploring by age 21, 50% by age 25, and 37% by age 36. Accordingly, the following recommendations were made:

1. During the stage of development in which the task is to specify vocational preferences, exploratory decisions may be more appropriate than terminal ones;

2. Exploration may be expected for about half of the individuals for whom the task is to implement those preferences;

3. Although terminal decisions may be more appropriate when the task is to stabilize within an occupation, exploratory decisions may be expected for more than one-third of the individuals at that developmental stage. (Phillips, 1982, p. 138)

Phillip's (1982) lends support to the appropriateness of the terminal and exploratory components in Gelatt's (1962) model. Gelatt's (1962) decision-making theory is compatible with the career and life development theory of Super (1984) and the leisure theory of McDaniels (1989). Gelatt (1962) has stated that when educational and vocational decision-making is seen as a developmental process rather than an act occurring at a point in time, its significance as a framework for counseling is enhanced.

Gelatt (1962) also holds the view that the self-concept is dynamic, and that it's development results in better decision-making, views also held by Super (1984) and McDaniels (1989). Counselors are encouraged to consider the self-concept as attention is given to immediate, intermediate, and future decisions. "That is, counseling will attempt to help the student utilize the

more immediate decisions facing him [or her] for the purpose of reality testing and modifying his [or her] developing self-concept and thus influence his [or her] decisions about more ultimate goals" (Gelatt, 1962, p. 244).

Other reasons that Gelatt's (1962) model has been selected for this study include:

1. The model illustrates the cyclical nature of decision-making.
2. The model provides a framework from which methods and techniques can be derived to be used as guidelines in career counseling programs.
3. Value systems are regarded as a significant part of the decision-making process.
4. This model proposes the concept of a series of decisions (immediate, intermediate, and future), pointing out that decision-making is a continuous process. (Zunker, 1981, p. 19)

Gelatt (1989) recently expressed his concern with the use of his sequential decision-making model in our modern, changing society. However, Gelatt et al. (1973) never left students doubtful of the need to make decisions in the face of a changing society. Students were exhorted nearly two decades ago about the risk of change.

> One of the most difficult things about decision-making is its uncertainty. If the outcomes of people's choices could be predicted before they acted, deciding would be easier. It would still not be simple or automatic, but easier.

> If you knew for certain the outcomes of possible actions, you would still need to decide your preference for each outcome, but you would not have to worry about risks.
>
> Unfortunately, the environment itself is uncertain. It is also complex, dynamic, and sometimes competitive,. In order to deal with this environment, the decision-maker must develop all the resources he can. Some people deal with the uncertainties, the risks, and the probabilities by ignoring them. However, you can develop some skills to help you make the best decisions for you in the face of this complex, competitive, and uncertain environment. uncertain environment.
>
> Because it is rarely possible to have complete control over the environment, people usually cannot guarantee favorable outcomes to their decisions. But a skilled decision-maker can at least increase the probability of a favorable outcome. (Gelatt et al, 1973, p. 32)

Gelatt (1989) again raises concerns over his model in that it fails to take one's own phenomenological view of the world into consideration. And yet, Gelatt et al. (1973) did encourage students to consider subjective elements of the self.

> An individual's feeling about his own situation and the application of his intuition to a decision is what makes each choice unique. Some personal combination of reason and intuition can be applied to each of life's decisions, large or small. (p. 39)

It would appear from this statement that Gelatt's (1962) model is a rational one which allows for an interface with subjective information.

Summary

Gelatt (1962) has developed a rational decision-making model designed to help students make decisions

more independently. It can be characterized as objective and developmental. The model offers direction in procedures, methods, and techniques, and lends itself to testable hypotheses. The Gelatt (1962) model includes three main components: the prediction system, the values sytems, and the criterion. The prediction system requires an assessment of information that lends itself to creating alternatives relevant to the decision to be made. The value system encourages clients to clarify one's own values, recognizing that values can change and/or conflict. The criterion involves the selection of a strategy for converting values, objectives, information, and risk into a decision. Risk estimation is the unifying element in integrating values and information for strategic use and can involve certainty, risk, uncertainty, or a combination of risk and uncertainty.

There is research evidence to support the Gelatt (1962) model. Additionally, it is compatible with the career development theories of Super (1984), McDaniels (1989), and others. The support for this model makes it useful for further research despite the fact that society is characteristically more dynamic than ever. Deciders, including college students, can increase favorable outcomes with the model but cautions regarding the uncertainty of outcomes and the environment itself, must

be acknowledged. Counselors must inform students about the uniqueness of each person's situation and the possibilities of combining reason and intuition in both large and small decisions.

Career Decision-Making Interventions

Research and development in decision-making theory and practice in the last decade has resulted in a wealth of decision aids and support systems (Pitz & Sachs, 1984). Never before have people been given such opportunity to participate in decision-making counseling programs to help them improve their decision-making skills. Decision-making interventions have been developed for Hispanic parents for making health decisions (Kaufman, Marin, & Stoker, 1982), for procrastinators (Burka & Yuen, 1982), for career women deciding whether to have children or not (Daniluk and Herman, 1983), and for undifferentiated groups of persons who face a variety of problems related to decision-making (Mann, Beswick, Allouache, & Ivey, 1989). Among the various interventions for special client populations are those designed for the undecided college student. It may even be said that most college students are involved in the critical task of decision making as it relates to some aspect of their career development.

Super (1957) has indicated that late adolescence and early adulthood is characterized by the task of decision-making. There is little objection to the view that "The essential element in the career process is decision" (Dunphy, 1969, p. 14). The research is rich with articles which have been written attempting to synthesize the information on correlates and problem areas of career decision-making (Arnold, 1989; Downing & Dowd, 1988; Heer, 1986; O'Neil, Ohlde, Tollefson, Barke, Piggott, & Watts, 1980; Tango & Dziuban, 1984), types and subtypes of decision-makers (Jones & Chenery, 1980; Krumboltz, Kinnier, Rude, Scherba, & Hamel, 1986; Phillips & Strohmer, 1982; Reynolds, 1988; Reynolds & Gerstein, 1991; Rubinton, 1980; Vondracek & Hostetler, 1990), and interventions to assist in the decision-making process (Carver & Smart, 1985; Cooke, 1982; Egner & Jackson, 1978; Grossman, 1979; McLaughlin, 1987; Mitchell & Krumboltz, 1987; Pickering & Vacc, 1984; Rayman, Bernard, Holland, & Barnett, 1983; Remer, O'Neill, & Gohs, 1984; Schroer & Dorn, 1986; Stonewater & Daniels, 1983; Williamson, 1979). The primary concern of this study is the use of career courses, seminars, and workshops.

Career Courses, Seminars, and Workshops

Numerous counselors and educators have suggested the importance of education in decision-making skills

(Blevins, 1984; Cooke, 1982; Krumboltz et al., 1986; McAuliffe & Fredrickson, 1990; Pickering & Vacc, 1984; Rayman et al. 1983; Williamson, 1979). It is estimated that nearly 90% of the career centers on larger campuses offer career workshops and seminars, covering a wide range of topics (Rakes & Parkhurst, 1986). Career courses and workshops, credit and non-credit, are innovative means currently utilized in career development programming.

Pickering and Vacc (1984) reviewed the literature on career development interventions for college students as it appeared between 1975 and 1984. They looked only at those articles from refereed journals which included empirical methods for evaluating career interventions. The two factors which emerged in the first analysis were (a) length of treatment (i.e., short term was most five sessions and long term six or more sessions; and (b) involvement with the counselor (existence of self-help vs. counselor guidance). Of the 47 investigations reviewed, 34 articles researched the interaction between client attributes and the career intervention. Career-related attributes, which were most frequently investigated dependent variables, most frequently addressed career maturity (N = 13) and decision-making skills (N = 11). The results of the review suggested that self-help

interventions were less effective than counselor involved interventions. Additionally, long-term interventions were more successful than short-term interventions. However, short-term treatments were more popular, seemed more methodologically rigorous, and were advantageous in reaching students who had limited time for the process of career development. The authors concluded, "Short-term interventions, designed to facilitate career maturity and the development of decision-making skills through a behavioral orientation, have been most widely used, and their effectiveness has been supported" (p. 156).

Williamson (1979) studied the effect of the Career Planning and Decision-Making course (Appalachian Educational Laboratory, 1979) on freshmen, sophomores, and transfer university students who were enrolled as pre-education majors. Using an analysis of variance to measure differences on Harren's Assessment of Career Decision-Making Scale (ACDM) and the Rotter Internal-External Scale (I-E Scale), the analysis revealed mixed results. First, there was no difference at the .05 level on the ACDM pretest or the Rotter I-E Scale scores. Secondly, there was no difference at the .05 level on either the career decision to attend college or the choice of a major. However, there was a significant difference ($p < .001$) in decision-making styles and

choice of occupation. On the basis of these results and structured interviews with the participants, the authors concluded that students gave evidence of themselves as more effective decision makers and as having made progress in choosing a major and an occupation as the result of the course.

Cooke (1982) replicated Williamson's (1979) study with freshmen from a smalll rural commmunity college. In this case, there were no significant differences on progress made in implementing a decision to attend college, to select a major, or to select an occupation. Significant differences were found between CPDM and non-CPDM students on the Rational style of decision-making, as measured by the ACDM. Also, significant differences were found between CPDM and non-CPDM students on achievement of course objectives as measured by student surveys. The authors also concluded that the course had assisted students in developing decision-making skills and enhancing decision-making behavior.

Rubinton (1980) conducted an experiment involving 120 students at an urban community college who had been identified as occupationally undecided students by means of the Vocational Survey Questionnaire (VSQ). They were administered the ACDM and the Attitude Scale (AS) of the Career Maturity Inventory (CMI). The former measures

rational, intuitive, and dependent decision-making style and the latter measures vocational maturity. Once the initial assessments were made, the students were divided into four training groups: (1) an expermimental 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.

Analysis of variance and chi-square procedures revealed no significant pretest differences among the groups on the AS or the VSQ or in the proportions of each type of decision style within the groups. The posttest, using the same instruments, for both experimental groups revealed significant increases in occupational certainty and vocational maturity. Rational and intuitive decision -makers revealed significant increases in all groups except the no-treatment control group. Dependent decision-makers experienced decreases on both measures regardless of the group. The greatest gains were found in students in the experimental groups who matched their decision-making style. There was no evidence of significant interaction between style and treatment.

Krumboltz et al. (1986) utilized a career decision-making workshop to determine which type of student would benefit most from a rational career decision-making

instructional model. The Decision-Making Questionnaire (DMQ) was administered to 255 community college students to assess which decision-making styles each participant had used predominantly in the three previous career-related decisions (recent job, college, and class choices). The seven-step DECIDES model (Krumboltz, Hamel, & Scherba, 1977) was used as the curriculum due to it's systematic and logical approach to decision-making. The 90-minute curriculum included didactic presentations, demonstrations of how to apply the model, guided practice, and independent performance. A control group participated in a workshop with a similar format but with instruction related to job-interviewing skills.

Several weeks later, separate planned comparisons were computed between treatment groups for subjects who scored above the median on each style-by-situation combination previously established by the DMQ. The subjects who had been fatalistic, dependent, or impulsive in choosing elective classes scored significantly higher than subjects who did not receive the decision-making instruction. Subjects who had been dependent in past job choices scored significantly higher on the dependent measure in the experiment, the Career Decision-Making Skills Assessment Exercise (CDMSAE), than the control subjects. The authors concluded that a brief 90-minute

rational training intervention may worthwhile for clients who have in the past relied heavily upon others or felt little personal control in relatively minor decisions. "The rational curriculum may offer these individuals an escape from inordinate dependency or submission to fate or impulse by providing them with a hitherto unknown decision-making strategy" (Krumboltz et al., 1986, p. 5).

Reynolds (1988; also Reynolds & Gerstein, 1991) studied the decision-making style and learning style characteristics of 144 adult community college students enrolled in a career/life planning course. The students were tested and classified as rational, intuitive, dependent, combination, or unclassified decision-makers. Using the raw scores of the Productivity Environmental Preference Survey (PEPS), a one-way ANOVA was used to analyze the data. The analysis revealed that four elements (Sound, Motivation, Persistent, and Responsible) were signficatntly lower for the Dependent decision-making group. Reynolds (1988) recommended that these four elements should be considered strategically when designing learning strategies for Dependent decision-makers.

Lent, Larkin, and Hasegawa (1986) found additional support for earlier studies (Lent, Schmidt, & Larkin, 1985; Carver & Smart, 1985; Remer, O'Neill, & Gohs, 1984)

on the effectiveness of career courses for college student development. The Lent, Larnkin, and Hasegawa (1986) study was based upon Holland's (1973) suggestion that students with similar vocational interests are likely to share a common base of experiences, values, and personality orientations.

A course was designed for the 54 technical college or pre-engineering undergraduates in the study with content consisting of: (a) a general orientation to career planning and development; (b) vocational self-assessment activities (interests, abilities, and values clarification); (c) educational and career information; and (d) a decision-making skills component. The researchers concluded that this career development intervention seems "to hold particular promise for college settings with large groups of students interested in specific fields" (Lent, Schmidt, & Larkin, 1985, p. 157).

There may be some value in putting a face lift on the courses or workshops such those outlined above for current use. Gerken, Reardon, and Bash (1988) suggested that existing career courses might be successfully redesigned to help students become more aware of changes in work and family life. Using the Catalyst Campus Resource (Catalyst, 1984), ten student exercises were

infused into the redesigned course. The course was built around three systems: individual, career, and family. Pretest, posttest data was collected from 196 undergraduate students enrolled in the course. The results indicated slight changes in student attitudes and expectations of spouse/partner roles in career planning and implementation. Students showed more recognition of dual career issues in career planning and more awareness of family responsiblities in future work roles.

Summary

While decision-making is required of everyone, it is a critical task for college students as a special population. Research has focused upoon correlates and problem areas of career decision-making, types and subtypes of decision-makers, and personal and group interventions. Career courses, workshops, and seminars are becoming more commonplace in college and unversity career development programs as a result of the effectiveness of such interventions.

College Student Career Development

Chickering and Havinghurst (1981) have written about developmental tasks which are typical of late adolescence and early adulthood. One of those which they suggest as critical to this period is that of choosing and preparing for a career, likely the most challenging developmental

task of all. The significance of the task is noted by Higgerson (1985), who explains that one probable explanation for college student's voluntary withdrawal from college is that "they had unclear career objectives and educational goals" (p. 17). This stands in contrast to the number of persistent students, male and female, who graduate and who report satisfaction with their situations, jobs, and college education they received (Martinez, Sedlacek, & Bachhuber, 1985).

College student career development is vitally linked to the total development of the student. It is important for counselors and other college student personnel to understand the needs associated with career development and assist students with career decision-making.

College Student Concerns

The concerns which students bring to a college counseling center can be multitudinous. Johnson and Hoese (1988) administered the Career Pattern Study (CPS) to assess the concerns of 300 students who had used the services of a university counseling center. They found that there were major differences between underclass and upperclass students, as would be expected. Freshmen and sophomores indicated concerns about exploring or choosing a major. Juniors and seniors were more concerned about how they would implement their major. Upperclassmen were

also more distracted about personal matters than were underclass students. This may be due to the degree of commitment to the major by this time and also due to greater awareness of unresolved personal problems (Tiedeman & Miller-Tiedeman, 1990).

Swanson & Tokar (1991) examined types of career related barriers perceived by college students. They also attempted to find a connection between the types of barriers identified and gender differences. Using a free-response, thought-listing method to collect data, they found among their 48 undergraduate subjects that the types of barriers varied across six topics. The greatest perceived impediments to choice of a major or career included not being informed, not being capable, current and future financial concerns, and significant others' influence. No significant gender differences were found in the types of barriers identified.

Tryon (1980) reviewed the literature on students' preferences and perceptions of counseling center services. They found that students expressed more likelihood of using counseling center services for educational/vocational problems than personal/social problems. Weissberg, Berentsen, Cote, Cravey, and Heath (1982) studied 1625 students at the University of Georgia. They found that more students expressed needs

related to career development than to academic or personal concerns. Over 80 percent of the students desired job exploration and experience related to their majors; 77 percent wanted to improve job-seeking skills; and 72 percent wanted to learn about career preparation.

Other researchers have also attempted to determine students' needs for counseling services (see Carney & Savitz, 1980). Carney, Savitz, & Weiskott (1979) found that career planning was the greatest need for college students. In a study of 184 colleges of less than 5,000 students, Richardson, Seim, Eddy, and Brindley (1985) found career and life planning as highly important in the perceptions of students. Of course not all students who recognize these needs will seek services from the counseling center (Tracy, Sherry, Bauer, Robbins, Todarao, & Briggs, 1984), but the need remains. In addition, the counseling center may not be prepared to handle all of the needs of all students, as in the case of counseling for the religious needs of students (Manese & Sedlacek, 1986).

Leisure counseling has only recently become a serious component in career development (McDaniels, 1989). Bloland (1984) has suggested that the incorporation of leisure counseling and consultation into the college career planning program is an essential

improvement which needs to be made. The work of Rimmer and Kahnweiler (1981) supports Blolands' (1984) assessment in reporting that undergraduate students tend to view education, the future, work, leisure, and the self as interrelated.

Leisure seems to have two relevant roles to campus career development:

1. to help students explore and evaluate leisure pursuits, both for on campus participation and for eventual use after graduation, and

2. to help students enhance or facilitate work-related skills and understandings, including self-knowledge. (Bloland, 1984, p. 123)

College students may also have needs related to work during their college experience. Super (1957) holds that career development skills aid achievement by helping students secure better exploratory experiences, such as higher level college jobs. These are jobs which students occupy during the academic year or during summer vacations. The high-level jobs are more likely than are low level ones to strengthen assets such as communication ability, self-discipline, self-esteem, and motivation, which can promote academic and career achievement. This has been further supported by the work of Healy and Mourton (1987). As a result of their findings, they recommended that more attention be given to students' jobs. Low-level jobs reportedly negate advantages of

reading ability and career development skills and high-level jobs could offset the negative effects of anxiety and compensate for deficits in reading.

Minority Students

The career development program of a college or university must be prepared to handle the special needs of minority and international students. Noble, Preston, and Reyna (1983) distinguish minority students as "members of the nonwhite segment of American society" (p. 192). These traditionally include black Americans, Native Americans, Hispanic and Asian Americans. Other groups which have received more attention recently are women, ethnic whites, handicapped, and gays. Researchers who have focused on the needs of minorities include Haviland, Horswill, O'Connell, & Dynneson, (1983), Sue & Kirk (1975), and Tate & Barker (1978). Noble, Preston, & Reyna (1983) discuss the problems which minority students may face with career development including: lack of information on career choices and options; lack of knowledge of implications about their career choices; insecurity about job seeking; and issues related to minorities in nontraditional fields. Analysis of responses in a "special concerns for women" category on a free-response instrument (Swanson & Tokar, 1991) revealed that undergraduate women have concerns related to career

development barriers. They indicated that pressure from multiple role obligations, discrimination, pregnancy and children were peceived as the greatest obstacles.

Several authors have written about the special needs of nontraditional or returning students (i.e. either students entering college for the first time who are past the traditional age of college students or students returning to college) (Griff, 1987; Brock & Davis, 1987; Swift, Colvin, & Mills, 1987). Some have focused specifically on the needs of women including Slaney (1986) and Martinez, Sedlacek, & Bachhuber (1985).

Martinez, Sedlacek, & Bachhuber (1985) found that female college graduates report a concern over their choice of major while in college. Women were more likely than men to wish that they had taken a more practical, job-oriented major. This may be one reason why the female subjects in this study were more likely to desire career assistance than men. Even after graduation, these women needed more help than men in identifying interests and skills and exploring career options. It may be the social impact of these women which partly accounts for the increased vocational emphasis of women in college (Mason-Sowell & Sedlacek, 1984) and the increase in numbers of women pursuing nontraditional careers (Boulle-Lauria, Sedlacek, & Waldo, 1985).

College Counseling Services

Counseling is necessarily a part of the services provided to students by a variety of student personnel staff. These services often cover the concerns related to career planning and placement, financial aid, veterans' affairs, housing, health services, and international student life. A holistic, global approach to counseling services though a psychological counseling center is recommended by Demos and Mead (1983), since "dealing with students as whole persons facilitates students' experiencing themselves in a more integrated manner" (p. 1).

Lander (1981) suggests that therapy, with its illness orientation, and developmental counseling, with its problem-solving orientation, may not be appropriate to the educational setting. Saunders & Decker's (1973) model, which limits educational counseling to advising and guidance, offers one solution to the criticism. Counselors often find that their time is consumed by administrative duties or by clients with problems related to drug abuse, human relations, sexuality, crisis intervention, and outreach programs. All of this may leave little time for career counseling. Burck (1984) has called for the reinstatement of career counseling and programs into the counselor's work priorities. He says,

> All too often, vocational clients are referred to beginning practica students and interns and other junior staff members in order that senior staff may work with the so-called 'real' counseling cases. Professionals constantly attempt to clearly separate vocational concerns from personal-emotional ones, although this is impossible to do. (Burck, 1984, p. 9)

Some institutions have begun to recognize the need for prioritizing counseling services. Recently the delivery of systematic and integrated career guidance services in higher education has become visible. A number of authors (Johnson & Figler, 1984; Burck & Reardon, 1984; Powell & Kirts, 1980) have provided examples of career development programs which continue to expand in services offered to college students.

According to Hale (1974) institutions should offer a complete range of services including career advising, career counseling, and career planning. Career advising suggests assistance by a faculty member in the relating of career choices and opportunities to educational goals, programs, and curricula. Academic advising can support career advising and, in some colleges, can include career counseling (Gerlach, 1983). Gerlach (1983) warns that student success or failure in their academic career may be influenced by various advising processes. These processes include entry and reentry, academic program development, academic consultation, career choice and

development, access to general information, identifying aspects which may be interfering with the student's academic progress; and identification of possible academic failures. Career counseling involves aiding students in self-evaluation of abilities and interests through psychological means. Career planning is a process of using self-evaluation outcomes to the world of work. Babbush (1983) adds placement to that range of services.

Krannich (1983) would modify the concept of career planning to include recareering skills. His view is that traditional career planning has involved a singular focus in job selection and has not proven effective in the midst of turbulent labor markets. He suggests that counselors should emphasize three components: 1) acquiring new marketable skills through retraining on a regular basis, 2) changing careers several times during a lifetime, and 3) using more effective communications networks for finding employment.

Johnson and Figler (1984) have said that career centers can help students by showing ways to combine the merits of general education with ways of garnering vocational skills. A synthesis of the literature (Babbush, 1983; Burck & Reardon, 1984; Johnson & Figler, 1984; Powell & Kirts, 1980) reveals appropriate goals

which might be found in a complete career development program. The following goals might be adopted:

1. Assistance in the selection of a major field of study
2. Assistance in self-assessment and self-analysis
3. Assistance in understanding the world of work
4. Assistance in decision making
5. Assistance in placement
6. Assistance in meeting the unique needs of various subpopulations

Courses, workshops and seminars offer structured group experiences in career planning. Group counseling activities are generally less structured and emphasize broader, more affective aspects of human and career development. Individual counseling opportunities accentuate diverse theoretical orientations to career concerns. Placement programs culminate the career planning and decision-making process. But, whatever modes are incorporated, career development officers have reported that career development programs are dominated by individual counseling, on-campus recruiting, placement activities, internships programs, and use of alumni mentors (Richardson, Seim, Eddy, & Brindley, 1985).

All of these programs and methods can be directed and supported by a career resource center. Resources, information, and space for workshops and telephone career

counseling (Roach, Reardon, Alexander, & Cloudman, 1983) are provided by the career resource center. Minor (1984) has given a complete discussion of goals, establishment, operation, staffing, and evaluation of such a center. Often the center is a multimedia library consisting of written and audiovisual career planning information. More recent advances in technology have resulted in the use of computer-assisted career guidance in centers. The computer offers students a wealth of current information and sophisticated interaction which assists them in career decision making (Babbush, 1983).

Summary

While some college students may graduate and find satisfaction with their education and their jobs, others may withdraw from college because of the inability to make good decisions or to set personal career goals. While in college, freshmen and sophomores are concerned about exploring or choosing a major. Juniors and seniors are concerned about putting their education to work. Studies which focus upon college counseling centers provide insight into the needs of students. These may include educational, vocational, personal, and social problems. But most studies reveal that students are more concerned about career development needs than academic or personal concerns. Counseling programs are most helpful

to students when they include leisure counseling. Exploration and evaluation of leisure pursuits enable the student to understand the importance of on-campus participation and eventual involvement after graduation. It can also help facilitate students' work-related skills and self knowledge.

Minority students deserve special attention in that they not only lack information on career choices and options as well as information on social issues related to minorities in the world of work. Much of the research on minority college students has focused on Black Americans, Native Americans, Hispanics, Asian Americans, and Women. Counselors may need to help students consider the future implications of certain nontraditional job choices.

College personnel must be careful that counseling services which seek to address the needs of the whole person do not diminish the need for career counseling services. Counselors may be overwhelmed by problems related to drug abuse, human relations, sexuality, crisis intervention, and outreach programs. However, clear goals for counseling services will keep career counseling a high priority. These services should include career advising, career counseling, and career planning. Various methods are used to accomplish this task

including individual counseling, on-campus recruiting, placement activities, internship progams, use of alumni mentors, and much more, all supported by career resource centers.

Bible Colleges

The history of higher education in America reveals a tradition of learning which is both rich in tradition and varied in it's forms. But, since the middle of the nineteenth century, the American college and university has become increasingly secular, focused on graduate study, and scientifically oriented in its method for arriving at truth. "Bible colleges are the virtual antithesis to the secular liberal arts multiversity which now dominates the higher education scene in the United States because they are primarily 1) spiritually oriented; 2) limited in curricular options; and 3) primarily undergraduate in emphasis" (Brown, 1983, p. 6).

Bible College admission standards may be expected to be more concerned with evidence of genuine religious conviction and service in welfare and religious activities, and less with specific credits and competitive achievement in high school (Ringenberg, 1984). A Bible college, for example, may indicate that "Applicants must confirm that they have accepted Jesus Christ as their personal savior and be in essential agreement with the

doctrinal statement of the College" (Lancaster Bible College, 1990, p. 22).

Today there are over 500 Bible colleges and institutes in North America (Carpenter & Shipps, 1987). They are represented in the higher education arena by the American Association of Bible Colleges (AABC), an accrediting body located in Fayetteville, Arkansas. Ninety-four of the estimated 500 Bible colleges are fully accredited by the AABC. The enrollments of the accredited colleges are as follows: 46 colleges enroll 0-199; 25 enroll 200-399; 13 enroll 400-599; 10 enroll 600 or more (AABC, 1990). Most programs of study in Bible colleges are four years in length and lead to a bachelors degree.

The Bible college is "an educational institution whose principal purpose is to prepare students for church vocation or Christian ministries through a program of biblical and practical education" (Witmer, 1955). They are similar to Christian liberal arts colleges in that they promote a Christian world view, require classes in Bible and Christian ministry, and provide an atmosphere of spiritual concern on campus. However, Bible colleges differ from Christian liberal arts colleges in "having a more focused interest in training students for vocational Christian ministry" (Gangel, 1980). AABC President

Randall Bell describes a Bible college as one bearing five attributes:

1. It must assist students in developing a biblical world view;
2. It must give high priority to student spiritual development;
3. It must strive to develop within students an attitude of servanthood;
4. It must actively involve students in ministry;
5. It must provide students with sound knowledge of biblical content. (AABC, 1984, p.2).

Objectives established by the AABC for all students taking Bible college programs are an expansion of these attributes:

1. To cultivate Christian life and experience.
2. To inculcate a comprehensive knowledge of the Bible and an understanding of Christian doctrine.
3. To broaden and deepen the general education of students for effective living as Christian citizens and Christian workers.
4. To instill vital missionary vision and dedication to world-wide service.
5. In terminal programs, to prepare students to serve with competence in one or more spheres of Christian service; in preparatory programs, to provide readiness for related graduate studies.
6. To foster Christian culture in terms of refinement, appreciation, social attitudes and skills.
7. To educate students in relation to health and Christian regard for the body.

8. To stimulate a desire for continued growth in these areas subsequent to campus experiences. (AABC, 1984, p. 8)

In order to understand the unique objectives of the modern Bible college, it is most helpful for the reader to have a general understanding of the history and development of the Bible college movement (see Carpenter & Shipps, 1987). For a case study of the historical development of a Bible college, Winters' (1985) history of Appalachian Bible College is a classic.

Service to the community and God is the keystone of the Bible college. From the beginning the primary objective was to combine both formal and practical education. Students learned individually as apprentices and corporately as students in a formal classroom setting. This model was established in Chicago by a founder of the movement, pastor D. L. Moody. Moody, while not a professional educator, believed that practice was essential for developing ministry skills. His son, William, said about the arrangement at his father's Bible institute,

> The morning hours are spent in the classroom, and the afternoons and evenings are divided between study and practical work among the unconverted. Rescue mission work, house-to-house visitation, childrens meetings, jail work, inquiry-meeting work, church visitation -- every form of a great and wicked city is here supplied (Moody, 1900, p. 343).

The essence of this model was still in vogue when S. A. Witmer published his classic book, Education With Dimension, in 1962. It was his view that "Christian service is not merely training for the postgraduate future; it is an outlet for the impulse to share and to serve during student days." (Witmer, 1962, p. 138). For him, Christian Service completed the cycle of learning, i.e., communication, reception, assimilation, and expression. He believed that field work would stimulate interest in study, make theoretical study more meaningful, and help the student appreciate their need for thorough preparation.

Faculty served as models for Christian Service for students to emulate. They were likely to work simultaneously as pastors, evangelists, missionaries, writers, and administrators of Christian organizations. Early examples of this are found in A. E. Thompson, of the Nyack Missionary Training Institute, who came to the Bible college after serving many years in Palestine; and in his colleague, Robert Glover, who had also been a missionary to China before joining the faculty of the Institute (Brereton, 1987).

The Bible college has continued to grow since it's inception. Gangel reported in 1980 that the quality of Bible college faculties had steadily increased, and that

the average faculty members had studied an average of eight years beyond the secondary level. Library holdings reflected an average of about 36,000 volumes per institution. He does hint at the trend for some of these colleges to move in the directions of a liberal arts curriculum. He refers to the distinction between the traditional Bible college and the progressive Bible college. The former is exclusively committed to vocational Christian ministry, a curriculum of Bible and theology, an emphasis on terminal training, and complete distinction from secular education.

The progressive Bible college on the other hand does not restrict itself to professional ministerial programs. It defines ministry more broadly and offers a wide range of majors as preparatory for further education. Bell (1988) speaks of this issue in his elaboration of Bible college attributes:

> Actually, Bible colleges will likely always offer programs to prepare people for ministry. But in the days ahead, it may not be particularly constructive to limit the concept of ministry to the traditional categories of the last few decades. We may need to reach further back into our history and re-examine the original function of the Bible college -- preparation of people for lay ministry. (Bell, 1988, p. 2)

Bible College Career Counseling Services

The very nature of a Bible college carries with it some problems which relate to the incorporation of

vocational counseling strategies. Bible colleges generally offer a single major, have strong views on legitimate occupations for their graduates, tend to view work and leisure through the lens of theology, and seek to assist students in their identification of spiritual gifts and divine calling. No definite strategy for career development has yet been developed for Bible colleges, but recent outcomes assessments (Bosma & O'Rear, 1981; Winters, 1990) have indicated that the need exists for such strategies.

Winters (1990) provided a model for outcomes assessment for Bible colleges. The result was a matrix of six competencies, with six levels of competency for each. The suggested competencies are communication, research, social interaction, direction, character development, and integration. The levels of competency from lowest to highest are:

1. self-evaluation
2. structural proficiency
3. concrete application
4. alternative exploration
5. problem-solving
6. professional performance

The competency related to vocational guidance is direction. Winters (1990) defined direction as "the

ability to discern and pursue appropriate personal goals for life and vocation within the will of God for the individual, in a manner that results in positive self-image and satisfaction" (p. 32).

The Bible college recognizes the validity of vocational counseling, as indicated by an AABC policy statement:

> The counseling service should provide for all phases of a student's welfare; personal, spiritual, physical, social, vocational, and financial. The varied....heads of specialized training departments, supervisors of practical Christian service, teachers of training courses and counselors should coordinate their efforts with respect to the vocational problems of the students. (AABC, 1984, p. 34)

Financial constraints limit most Bible colleges in their ability to carry out the counseling task as described above, especially as it relates to career counseling. The need for trained career counselors is a current concern in most Bible colleges. The need for vocational assessment is a growing concern for the AABC Commission on Testing and Measurement, who state that "Little has been done to develop instruments that can be used in relation to 'church-related vocations'" (AABC Newsletter, 1990).

Bible colleges in the AABC have an average enrollment of 331 with 89% Full-Time Equivalency (AABC, 1990). The break even point for most of these colleges financially is around 220 FTE, and that is with a healthy

base of donor funding. For that reason the Bible College, especially for those with dwindling enrollments, operate with a skeletal faculty (average of 15 full-time faculty per college) and support staff. The average faculty load is approximately 12 instructional hours, leaving little time for counseling students or for research.

A computer search combined with a search of research available through the AABC Commission on Research has revealed that no recent study of Bible college counseling services exists. The research by Doyle (1963) and Spence (1968) represent earlier work to discover such services, but two decades have passed without an update.

A typical statement on counseling in Bible college catalogues is found in the Moody Bible Institute catalogue (1988-89): "Students are offered opportunity for securing counsel about their personal, spiritual and education problems. Counselors in the Student Development Department and members of the faculty are available for conferences to give friendly and understanding guidance" (p. 15). In an attempt to encourage an expansion on the counseling available in their institutions, the AABC Commission on Research has given a call for research which would produce a survey of vocational guidance programs in AABC schools (AABC Research

Commission Handout, "List of Research Topics that may be Suitable for a Ph.D. Dissertation Suggested by the AABC Research Commission").

A bulk of the counseling which occurs in the Bible college is performed by the Dean of Students and the Field Education Director (also referred to as Christian Service Director, Student Development Director, or Student Ministries Director). Typically these personnel come to the Bible college from church-related occupations and have little or no formal training in counseling, most notably no training in vocational counseling. While these personnel have opportunity to belong to their respective professional organizations, these organizations have only begun a serious campaign to encourage specialized training in counseling. For example, the Association of Christian Service Personnel (ACSP) sent out a call for Field Education Directors to improve their credentials in career counseling for the first time at their annual conference in 1987.

The resulting interest in career counseling has led to the inclusion of career development objectives into Christian Service Department objectives, such as the following:

> To provide vocational information and opportunities to aid students in planning for vocational careers. (Gerig & Baxter, 1983)

The standards of performance established for this particular objective were threefold:

1. Inform student of vocational information available in Christian Service Department during sophomore or junior interview.
2. Supply academic advisor with career cluster information.
3. Provide a vocational file with current information on opportunities and requirements.

While the Dean of Students does most personal counseling of students in the Bible college, most of the colleges offer some kind of advisee counseling network among the faculty. The counseling consists mainly of academic support with a measure of personal counseling. The Field Education Director is emerging as the one who is seen responsible to do most of the vocational counseling. This is due to the nature of the position. The director is responsible to place students in meaningful ministry internships in local churches and community service organizations. The directive of the AABC and the ACSP is to make these assignments compatible with students' academic and career goals so that the experiences may actually serve as practicum for their academic pursuits. Two other career development objectives related to these assignments is the "Discovery and development of spiritual gifts" and "Development of awareness of one's vocational calling" (Columbia Bible

College, 1989, p. 35).

Since no data exists on current career counseling services, research for the moment will have to infer needs from studies of Bible college graduates about career counseling services. Bosma and O'Rear (1981), for example, report that Bible college graduates had concerns about the limited nature of career guidance in their colleges. The report concluded:

> Improved vocational counseling with a broader view of Christian ministry was also stressed. They desire more, better, and more open counseling (i.e., openess to positions outside of traditional FTCS [Full-Time Christian Service], positions for women, and positions beyond the school's denominational affiliation. (Bosma & O'Rear, 1981, p. 50)

Other data from the Bosma and O'Rear (1981) study provides additional insight based upon responses related to occupation. For example, 52% reported that they were employed or self-employed in Christian ministry; the second largest group was those who were in secular employment. Those who were employed by a secular organization or self-employed in secular work are categorized according to their respective positions: primarily housewives/homemakers, 10%; students, 3%; retired, 5%; unemployed, 2%. About 40% of the housewives are married to full-time, Christian workers. Seventy-seven percent of housewives whose husbands are not in full-time Christian service are either in a part-time or lay

ministry. The majority (60%) of those in full-time Christian service are in direct church work; 17% are in home or foreign missions; 16% are in educational institutions.

The majority (56%) of those in secular work positions are in business or industry. The subcategories into which these persons fall are as follow: educational institutions, 19%; government and non-profit organizations, 9% each; military, 1%. Women are primarily in business/industry, education (K-12) and nonprofit organizations.

It is noteworthy that not all persons in the Bosma & O'Rear (1981) study who are classified as full-time Christian workers receive their entire income from their ministry. About two thirds rely totally upon their ministry, and another 18% receive most of their support from their ministry. Eleven percent of full-time Christian workers also work part-time secular jobs and 3% work full-time secular jobs. Those who are most likely to supplement their incomes accordingly are young, Christian school teachers (K-12).

It is obvious from this study that the vocational needs of Bible college students are varied. Students will need skills and information which only a career development program tailored to the Bible college can

provide.

Bible College Students

The Bible college student body can be characterized statistically in the following manner. The mean score on the ACT is 18.2 and 88 on the SAT. Nine percent of the students come from the 91st to 90th percentile in high school. Fifteen percent came from below the 25th percentile. The breakdown of students per class is: freshmen, 25%; other first-year students, 19%; second year students, 22%; third-year students, 17%; fourth-year students and beyond, 17%. Described in terms of sex and ethnicity: 56% are female, 56% are male; American Indian or Alaskan Native, 1%; Asian or Pacific Islander, 3%; Black, 6%; Hispanic, 3%; White, 87%. The average number of transfer students per student body is 40, and the percentage of students from a foreign country is 4% (AABC, 1990).

Three types of students typically attend Bible college (Christianity Today, 1982). First, there is the student who plans to become a pastor and who is thinking about seminary training. A second category of student is the one who is preparing for Christian work that does not require education beyond an undergraduate degree. This student may become a youth worker, Christian education director, minister of music, or a missionary in a

parachurch organization. The third kind of student is the one who is not preparing for full-time, paid ministry. This student wants to serve as a lay person in a church or parachurch organization.

Research on Bible college students has only trickled into professional journals. Shaver (1987) studied the moral development of Bible college students and compared that development with those from Christian liberal arts colleges. Several recent dissertation and thesis studies have focused upon outcomes assessments of curriculum and current practices (Easley, 1987; Enlow, 1987; Winters; 1990). Crymes (1987) studied Bible college freshmen and attempted to design a model for retention prediction. The need for such a model is highlighted by the fact that only 35% of Bible college freshmen remain at the institution to complete a degree program (AABC, 1990).

A number of concerns are likely to face the Bible college student needing career counseling interventions. In addition to the concerns common to college students, other concerns for Bible college student include that of a vocational call, spiritual gifts, and the integration of current career development practices with a theological world view.

The idea of a divine calling is often problematic to the Bible college student. While no study on Bible

college student perceptions of calling have been documented, Larsen and Shopshire (1988) surveyed seminary students and found that 75% had experienced a call to ministry. Of these, 31% were primarily motivated by some form of altruism and 54% were looking for self-fulfillment. Cardwell (1982) found that women graduates of a Indiana seminary were motivated by service to persons, leadership in the church, or by concern for social reform.

Helpful treatises on spiritual gifts are available (Gangel, 1983; Mattson & Miller, 1982; McRae, 1976) to Bible college students but there is no evidence that such material is used systematically in career counseling interventions. Spiritual gifts can include special capacities in administration, helps (service), preaching-teaching, exhortation (counseling), giving (distribution of resources), or several others. Bible colleges may disagree as to what gifts are relevant to the church today. Most would agree that knowledge of one's gifts is central to having a divine calling (Clark, 1981).

Leisure is another likely concern for the Bible college student. Ryken (1987) explains that many Christians have an unwholesome attitude toward leisure arising from a perverted understanding of the protestant work ethic. Sherman and Hendricks (1987) cite one

unwarrented assumption as saying that "God is more interested in the soul than in the body" (p. 46). Bible college students must recognize that "Our employment is only a part of our larger calling in the same way that our worship and leisure activities are (Bernbaum & Steer, 1986, p. 83). The counselor must be ready to assist students to determine what kind of leisure activities might be most appropriate for their professional status and to recognize it as "a melding of the sacred and the secular" (Wright, 1984, p. 202). A vital part of this process will involve a discussion on values clarification (see Lewis & Lewis, 1982; Worthington, 1988). Bible college students's religious values require careful attention in career counseling.

Summary

Bible colleges are distinctive in their educational practices for a number of reasons. The core curriculum of these institutions is Bible and Theology. Institutional concern for spiritual development equals concern for the academic and career needs of Bible college students. Bible colleges promote practical ministry along with academic rigor and focus on vocational Christian ministry. The keynote of the Bible college movement is service to God and to the community.

With over 500 Bible colleges in existence, their presence should not go unnoticed. The need for Bible college career development programming has been implied from outcomes studies, but no systematic effort has been made to assist these insititutions in this regard. Part of the problem has been the difficulty of the integration of Biblical world view with career development theory. Issues such as divine calling and spiritual gifts do not lend themselves to easy assessment or explanation for individual decision-making. Additionally, financial constraints have limited most Bible colleges in career development programming. This study is partly in response to the AABC Research Commission's call for research in the area of counseling services.

Reports from Bible college graduates reveal that graduates experience a variety of configurations of work and leisure. They work in a variety of settings including schools, colleges, Christian and non-Christian, non-profit organizations, the military, and business and industry. Most are involved in some type of ministry as work or as leisure. Counselors must help students plan for uncertainty in the ministry workplace and to consider career options open to them from a Biblical perspective. It is vital that students see the possibility of leisure as a calling even as work has been viewed a calling.

Conceptual Design Issues

Conceptual design issues of instruction in career decision-making with a developmental focus conclude this literature review. Instructional design principles specific to the counseling intervention is applied to each element of the design. These elements include (1) workshop assumptions and format, and (2) a student career decision-making workshop workbook.

Workshop Assumptions and Format

Both the materials and the manner in which the materials are presented are vitally important to successful workshop delivery. A number of authors (Chapados, Rentfrow, & Hochheiser, 1987; Davis, 1974; Kesso, 1986; Martin & Hiebert, 1985; Scherer, 1984) from both the counseling literature and the human resource development literature are most helpful in this regard.

Kello (1986) provides a series of questions to elicit thought on the development of a workshop including: Which parts should be covered in classroom lecture and discussion? How much time should be allocated to each part? How will audiovisual aids be incorporated into the training? How much detail can the trainer go into without overloading the participant? When and how should simulator training (if relevant) be integrated with the classroom training for maximum

effectiveness?

Foundational to the development of an effective workshop for college students is the establishment of assumptions or conditions for adult learning (Chapados, Rentfrow, & Hochheiser, 1987; Davis, 1974; Martin & Hiebert, 1985; Scherer, 1984). Some assumptions for design in developing a person-centered workshop format, for example, are provided by Scherer (1984):

1. People are brimming with life experiences. They are not tabula rasae. A major design task is to help them convert experience into learning.

2. People usually show up with unresolved self-esteem issues. Help people feel safe and capable in the early stages of the design.

3. People have different learning styles....A good design will allow for different styles and not be a projection of the leader's own style.

4. Early behavior will be self-oriented. Don't expect people to work together effectively on group or organizational tasks at the beginning. They are working on inclusion and psychological safety. Hold group or organizational activities until later.

5. A sense of community can facilitate learning. Many people learn faster and better when they feel supported by others, when they sense that they are not alone and when they see others struggling with them.

6. People pursue satisfaction of their own needs with great enthusiasm. Apathy is the result of being asked to pursue someone else's goals. Hook people up with their own needs early in the design. Find out why they're really coming to your event. (Scherer, 1984, pp. 64-65)

Martin & Hiebert (1985) further suggest that the conditions for learning include meaningful specification, practice, and feedback. "Meaningfulness refers to the number of and quality of the associations or connections that a client (learner) can make between what is to be learned and what he/she already knows" (Martin & Hiebert, 1985, p. 18). Assumptions for learning based upon meaningful specification include: (1) instructional activities are meaningful to learners when the learning objectives are clear to them; (2) instructional counseling is meaningful when the instructional language is congruent with that of the learner's; (3) examples and illustrations are more effective as they relate to the learner's experience, interests, and/or activities outside the learning situation; (4) simulated experiences are most helpful when examples and illustrations for new learning are not readily available from the learner's experience; and (5) instructional organization is most helpful when the learner perceives logical and smooth transitions from one activity to another (Martin & Hiebert, 1985).

Practice and feedback are also necessary components to instructional counseling. Martin & Hiebert (1985) stipulate that learners need practice which satisfies the learning objective, matches the learning domain (i.e.,

behavioral, cognitive, or affective), presents the material in graduated sequences, and transfers information to real life situations. Effective feedback should be immediate, performance specific, descriptive of the performance, positive, encouraging, and reassuring.

A number of authors provide detailed explanations for the use of small groups, role playing, simulations, film and video, and exercises to enhance the training format (Davis, 1974; Eitington, 1984; Pike, 1989). Davis (1974) strongly encourages workshop designers to consider the requirements of learning to dictate which activities are actually selected for the workshop. Below are some questions to help in activity selection:

1. Is the method suited to the objective?
2. Does it lend itself to knowledge, skill, or attitude learning?
3. Might it yield multiple-learnings, i.e., more than one type?
4. Does it require a greater/lesser degree of background knowledge, skills, or attitudes than participants presently possess?
5. How much time does it take?
6. How much space does it take?
7. What kind of props does it take; are they available?
8. What specialized skills are required of the staff [or students]; are they competent in them?
9. Is the method comfortable for the staff [or students]; is it consistent with their style?

10. Is the method comfortable for the participants; is it consistent with their expectations?

11. Does the method call for activity or passivity on the part of the participants?

12. Does it maintain enough/too much control up front?

13. Is the method slow or fast paced?

14. Does it achieve the objective in the simplest way possible, or is it needlessly slow? (Davis, 1974, pp. 123-124)

Workshop Instructional Design

A number of authors have developed models for instructional design with the intent of aiding the learning of individuals (Dick & Carey, 1978; Gagne & Briggs, 1980; Kemp, 1978). These models have emerged as teachers have increasingly realized their need to understand the instructional processes associated with proven instructional methodologies.

One general model of instructional design, called the systems approach model is based upon a considerable amount of research and practical experience (Dick & Carey, 1978). It is referred to as a systems model in that it is made up of interacting elements, each having its own input and output. It also qualifies as a system in that it collects information which is fed back into the system so that the final output, or product, has the potential to reach a maximum level of effectiveness. The

Dick and Carey systems approach model (1978) is selected for this particular instructional design. It is intended to be used at the point when the instructor is able to identify a specific instructional goal, such as the decision-making goal outlined later in this study.

The components of the systems approach model can be summarized in ten steps. These ten steps are only briefly stated here for convenience:

1. Identifying an instructional goal.
2. Conducting an instructional analysis.
3. Identifying entry behaviors and characteristics.
4. Writing performance objectives.
5. Developing criterion-referenced test.
6. Developing an instructional strategy.
7. Developing and selecting instruction.
8. Designing and conducting the formative evaluation.
9. Revising instruction.
10. Conducting summative evaluation. (Dick & Carey, 1978, pp. 8-9)

These ten steps will be followed in the design of format and materials for the decision-making workshop. A full discussion of their application to this study is discussed in chapter 3.

Student Workshop Workbook

The student workshop workbook refers to a set of

written materials designed for student use during and after the workshop. It includes (1) a set of definitions, (2) a brief summary of career development, (3) a brief explanation of Gelatt's (1962) decision-making model, (4) a set of practice exercises for decision-making, and (5) a list of resources for further study.

Document Design Issues

The workshop material refers specifically to the student workbook. The construction of the workbook will follow guidelines which are considered to be critical to the development of a document that communicates information in a usable manner. Three important issues have been identified as important in document design (Redish, 1980; Malmberg, 1984): (1) readability, (2) comprehensibility, and (3) usability.

Readability

The readability of a document can be determined by observer estimation, comprehension testing, or readability formula application (Klare, 1974). For practical purposes, the most common means to determine readability is the use of readability formulae (Redish, 1980). Readability formulae are based upon correlations with standardized reading passages, comprehension tests, and other measures. Data analysis of multiple variables to derive a score for a given text is accomplished through

the use of a formula. The variables include word length, word frequency, word familiarity, sentence length, and sentence complexity (Klare, 1974). Through the use of the derived score, a prediction is made of a given text's readability level relative to the standard used by the particular formula. Readability formulae are limited in that they do not consider variables such as meaning, content, grammar, intellectual sense, logical sequence, and graphic-prose coordination (DiStefano & Valencia, 1980; Duffy & Kabance, 1982; Gilliland, 1976; Klare, 1974; Redish, 1980).

Comprehensibility

The interaction of competence, motivation, textual content and readability serves as the primary determinant in reader performance (Klare, 1976). Readers can affect their own ability to comprehend a text as determined by their interest and motivation, background knowledge, and ability to encode, organize, and process language (Brooks & Dansereau, 1983; Davison & Kantor, 1982; Gilliland, 1976; Glynn & DiVesta, 1983; Tyler, Delaney, & Kincunnan, 1983). Textual variables refer to those such as inference load, the amount of new or technical content, and interest value (Duffy & Kabance; Johnson & Otto, 1982; Kemper, 1983). Since these variables are difficult to manipulate systematically, researchers have tended to

focus on the effects of selected reader cueing systems or techniques. These include advance organizers, inserted questions, instructional objectives, underlining, and headings and signals. Each of these are defined and evaluated in terms of helpfulness to readers in Malmberg's (1984) study.

Usability

Usability is a goal in document preparation which targets the helpfulness of information to a reader (Redish, 1980). To reach that goal, the document developer requires an accurate perception of the target audience and how that target might interact with the product (Atlas, 1980). It is with this goal in mind that the Document Design Project of the American Institutes for Research has developed a manual of suggested design guidelines (Felker, Pickering, Charrow, Holland, & Redish, 1981). A summary of these guidelines are found in Appendix A. The guidelines address text organization, sentence construction, typography, and graphics.

Summary

The construction of the workshop workbook will follow guidelines which are considered to be critical to the development of a document that communicates information in a usable manner. The three most important issues in document design include readability, comprehen-

sibility, and usability. For practical purposes, the most common means to determine readability is the use of readability formulae.

Reader performance is affected by several factors including reader competence, motivation, textual content and readability. Research has highlighted the importance of advance organizers, inserted questions, instructional objectives, underlining, and headings and signals.

Usability targets the helpfulness of a document's information to the reader. The document developer needs an accurate perception of the target audience and how that target might interact with the product. A helpful manual of suggested design guidelines is available through the American Institute for Research.

Chapter 3

PLANNING AND DESIGN

This chapter describes the planning and design stage of this study. Initial activities are described in order to show how concepts from the literature review were translated into working prototypes. The steps in this process included: (1) pre-design, (2) design and development, and (3) review and revision.

Pre-Design

Every study should begin with a good foundation. The intent of the pre-design phase of this study was to establish the foundation from which the developer would operate. The following section describes the (1) pre-design activities and (2) design objectives.

Pre-Design Activities

The activities in the pre-design stage reflect the developer's orientation to Bible college students and the issues related to their career development. These activities included (1) conducting literature reviews, (2) selecting a Critical Review Panel, and (3) preparing a research proposal.

Literature Reviews

The author began a literature review in June 1989 and continued through March, 1991. The reviews covered career development theory, decision-making theory,

College student career development, Bible college students, instructional design and document design issues. Each of these reviews contributed background information for the development of a workbook prototype and for the research design activities.

Selecting a Critical Review Panel

The developer began forming a Critical Review Panel (CRP) in June 1990. Each panel member was called by phone or visited personally and asked to serve on the panel. A formal letter of request followed the initial contact.

The CRP process follows the pattern established by Thiagarajan, Semmel and Semmel, as reported by Hofmeister (1978). Their "Four - D" model requires the use of experts for assessing the status of prototypes for possible modification.

The Critical Review Panel for this study was composed of persons who had one or more of the following orientations: Bible college alumnus or faculty member, Career Development expert, personally knowledgeable in the Christian world view, or background in instructional design. (See Appendix B for the vitae of the five CRP members.)

Preparing a Research Proposal

The initial proposal for this study was presented to the dissertation committee on April 30, 1990. A plan was drafted in that meeting to conduct a pilot workshop early in September, 1990, after the initial workbook was written. Once that goal was completed, the committee consented to receive a formal proposal on September 25, 1990. The committee formally approved the proposal based upon Chapter 1 and summaries of chapters 2 and 3.

Design Objectives

This section describes the use of objectives as the guiding principle in the design and development process. The two foundational elements are (1) need statements and (2) content objectives.

Need Statements

Based upon literature reviews conducted for this study, the following need statements emerge:

1. There is a need for systematic career development interventions for Bible college students. One legitimate and vitally important intervention for college students generally is that of instructional counseling in decision-making skills. An effective means of delivery for such information is that of the workshop format.

2. There is need for career development materials which teach Bible college students effective decision-making skills. An effective form of written materials is that of the student workbook to supplement workshop activities. Such a workbook should provide basic background information on career development and decision-making. It should offer appropriate activities to encourage practice and to stimulate feedback. The workbook should include additional resources to which the student may go for further assistance.

Content Objectives

Guided by the needs statements a set of content objectives have been developed for the student workbook. The terminal objective is stated as:

> The student will be able to practice making one tentative work or leisure decision using H. B. Gelatt's six-step decision-making model.

Four major enabling objectives for the handboook were written in order to elaborate upon the terminal objective. The content of the student workshop workbook was to accomplish four goals:

1. The student will be able to explain the importance of a decision-making strategy to career development.

2. The student will be able to identify personal values relevant to his or her own career decision-making.

3. The student will be able to identify three sources of information relevant to his or her own career decision-making.

4. The student will be able to identify four possible strategies which can be applied to his or her career decision-making.

Design and Development

The educational design of the workbook is based upon the instructional design model by Dick and Carey (1978) as described in their book, The Systematic Design of Instruction. The book is intended to develop skills for "teacher-education students; classroom instructors; instructional designers working for professional schools such as medicine and law, or allied health sciences; materials designers for adult and vocational education; and instructional designers involved with military or industrial training" (Dick & Carey, 1978, preface). It is a behaviorally oriented model emphasizing (1) the identification of skills necessary for student learning to take place, and (2) the collection of data from students to revise instruction. The model was first utilized in a course at Florida State University in 1968.

The Dick & Carey Model (1978) may also be referred to as a systems approach to instructional design. As the term system implies, there is a specific input, process,

and output for each component in the design. The system collects information and provides feedback so that the final product reaches a desired level of effectiveness.

Instructional Design Stages

The ten components of the systems approach model are fully described by Dick & Carey (1978) but are listed concisely here for quick review:

1. Identifying the instructional goal.
2. Conducting an instructional analysis.
3. Identifying entry behaviors and characteristics.
4. Writing performance objectives.
5. Developing criterion-referenced tests.
6. Developing an instructional strategy.
7. Developing and selecting instruction.
8. Designing and conducting the formative evaluation.
9. Revising instruction.
10. Conducting summative evaluation.

This model is compatible with the Borg & Gall (1989) Research and Development model of research. R & D bears a close relationship to instructional technology, which requires the systematic use of research knowledge and methods to design and validate learning systems. Borg & Gall (1989) insure readers that a mistake has been made in the R & D process if "the developer does not draw upon research-based principles of instructional design in

planning a product" (p. 802).

Instructional Materials

The instructional materials used in systematically designed instruction are referred to as modules. "A module is a self-contained or self-instructional unit of instruction that has an integrated theme, provides students with information needed to acquire specified knowledge and skills, and serves as one component of a total curriculum" (Dick & Carey, 1978, p. 5). Most modules require the students to interact actively with the instructional materials rather than simply allowing the students to read the materials passively. Students are directed to perform a variety of learning tasks, receiving feedback upon completion of each performance. Alternative media forms such as audiotapes or filmstrips could be included. Students might also visit a lab or outside facility to supplement the instruction. After modules are completed, data is collected to determine the extent to which the module was effective in bringing about anticipated changes in student behavior.

In this study, the workshop workbook constitutes one module. Characteristics of modules also characterize the design of the workshop workbook. Each unit of instruction relates to the singular theme of career decision-making. The workbook requires students to interact

actively, to perform a variety of learning tasks, and to receive feedback upon completion of their performance.

Identifying an Instructional Goal

The first step in the instructional design process for this study was to identify the instructional goal. Instructional goals can derive from expertise, existing institutional or curricular goals or needs assessments. In a needs assessment, for example, a discrepancy between the present status and the desired goals becomes an identified need. This need may be directly convertible to instructional goals for the instructional program. The need for college students to have a decision-making strategy was clearly established in the literature review. That need therefore becomes the basis for the instructional goal.

Instructional goals describe what students will be able to do after studying the unit, not what teachers will do during the unit. What students will actually be able to do is open to question, since there is no guarantee for learning. However, to increase the possibility that students will learn, an interdisciplinary team of experts were formed, two of whom are proficient in instructional design. These two persons also served on the Critical Review Panel utilized in the Research and Development process.

Conducting the Instructional Analysis

Instructional analysis "is a procedure that, when applied to an instructional goal, results in the identification of the relevant subordinate skills which are required for a student to achieve the goal" (Dick & Carey, 1978, p. 25). It first appeared that the procedural method of instructional analysis would match the behavior described in the goal since the behavior is essentially a series of behaviors which must be performed in sequence to achieve the instructional goal. Dick and Carey (1979) list the criteria for selecting this method as:

1. The student must go through the steps in sequence.

2. Each step could be taught separately and independently of any other step.

3. The output of each step usually serves as the input for the next step.

The result of the analysis revealed that these criteria were met.

However, some objectives were included which better suited a hierarchical arrangement. They represent knowledge skills rather than performance skills. For that reason, the instructional analysis resulted in a combination approach with the major portion of the model

as procedural.

Identifying Entry Behaviors and Characteristics

A study of the entry behaviors and general characteristics of the target population was the focus of this step in the design. Such characteristics included age, interests, gender, grade level, previous experience, vocabulary or reading level, and general motivation for learning.

The target population for this study was identified as Bible college freshmen, males and females. It was reasonable to expect that students who have been accepted into an accredited Bible College have at least a 10th grade reading level, have at least some interest in their own career development, and have at least a rudimentary understanding of basic concepts such as work, leisure, and decision-making.

After identifying the tasks and skills to be included in the instructional materials, each of the lowest skills in the sequence were studied to determine the subordinate skills which would be expected of college freshmen for entry into such a workshop.

Writing Performance Objectives

Objectives are a key component in the Dick and Carey (1979) instructional design model. They require specification of the behaviors to be taught, a determination of

the instructional strategy, and the establishment of criteria for a summative evaluation of student performance. Objectives can increase the accuracy of communication, prevent instructional gaps or duplication, and help students and instructors to understand clear cut guidelines for what is to be learned during the workshop.

Instructional objectives can be terminal or enabling. Enabling objectives are those objectives which give direction toward the achievement of the terminal objective. The terminal objective is the conversion of the instructional goal to an objective. It describes what the student will be able to do upon completion of a unit of instruction. Matching performance objectives were written clearly stating the expected behavior along with the conditions and criteria for evaluation purposes.

The Critical Review Panel examined the following objectives and reported their evaluations on a concurrence checklist (see Appendix E). The Panel agreed upon all objectives by 73%. These objectives were prepared, based upon the first four major objecitves written in the pre-design stage:

Unit I

1. Given two life roles, the student will be able to recall Dr. Carl McDaniels' definition of career.

2. Given five life stages of career development, the student will be able to arrange the five stages in correct order.

Unit II

1. The student will be able to recall three of the five measures of readiness for career decision-making.

2. Given the six steps of H. B. Gelatt's decision-making model, the student will be able to arrange the six steps in correct order.

3. Given an example of a career decision-making situation, the student will be able to explain the importance of decision-making skills to career development.

4. Given a list of possible decisions, the student will be able to identify one personal work decision and one personal leisure decision.

Unit III

1. Given one key word, the student will be able to complete H. B. Gelatt's definition of a value.

2. Given a career decision-making situation, the student will be able to recall 3 of the 22 values important to career decision-making in that situation.

3. Given a list of 22 career-related values, the student will be able to identify 3 personal values related to work.

4. Given a list of 22 values, the student will be able to identify 3 personal values related to leisure.

5. Given a biblical example of values clarification, the student will be able to test 3 personal work values and 3 personal leisure values against scripture.

Unit IV

1. Given a partial list of sources, the student will be able to identify three kinds of information helpful in career decision-making.

2. The student will be able to recall three ways in which every Christian receives a divine calling as it relates to career development.

3. The student will be able to identify basic information about himself or herself by examining one personal work experience and one personal leisure experience.

4. Given a list of books and tests, the student will be able to document three specific sources of information which could be researched for additional career information.

5. Given a career decision-making situation, the student will be able to generate two alternatives to consider in the decision process.

Unit V

1. The student will be able to recall the three components critical to the effectiveness of a strategy for producing good outcomes.

2. The student will be able to match the names of the four kinds of risk strategies with their definitions.

3. Given a career decision-making situation, the student will be able to distinguish which of the four strategies is used in the situation.

4. Given the six-step decision-making model, the student will be able to practice applying scriptural information to each situation.

Developing Criterion-referenced Tests

A pretest was developed on the basis of the learning objectives stated above. The instrument was designed with 25 questions (see Appendix F). Most items required matching, filling in the blank, or the arranging of sequential concepts.

No attempt was made to determine reliability for the preliminary field test instrument. This became necessary once the main field test version of the instructional objectives was completed, since some minor revision was made after the prelminary field test. The reliability of the pretest was determined before embarking upon the main field test. A further discussion of instrument reli-

ability for the main field test will be presented in chapter 4.

Developing an Instructional Strategy

The primary purpose of this study was to design a workshop workbook. The workbook was designed to be self-instructional and self-contained. The strategy chosen for the workshop format was to focus on the workbook as much as possible. The author determined that the workbook would be taught in a workshop format, led by a variety of Bible college personnel. These facilitators were to teach the workbook, staying as close as possible to the workbook content. The workshop format recommended for the facilitators is found in the workbook introduction (see Appendix J).

Initial Prototype Development

With the preceding tasks accomplished, an initial prototype of the student workbook was prepared by the developer. This step in the Research and Development process coincides with the seventh step of Dick and Carey's instructional design process, developing an instructional strategy. The initial prototype reflected the developer's synthesis of the literature, content, and personal perspective of the career decision-making for Bible college students.

The composition of the initial prototype began July 1990 and continued through August, 1990. At this point emphasis was placed upon the basic content of the materials with minimal attention to sentence construction or comprehensible prose. The author presumed that the potential user would lack any knowledge of the career decision-making process and related terminology. Written rough drafts were entered into a microcomputer for editing and analysis.

Review and Revision

The developer began the review and revision process almost immediately after the initial prototype was developed. The text required continual writing and rewriting. Objectives required repeated refinements. Learning activities also required multiple revisions and, in some cases, replacement.

The formal review and revision process occurred in three steps. The following section describes the review process and the three prototype review and revision steps.

Review Process

Three types of data were gleaned from the prototypes through the general review process. The critical review panel (CRP) provided editorial and qualitative suggestions and prototype ratings. Also, as a method of

describing the various prototypes and assessing their surface characteristics, a readability formula was applied at each step. Reflecting the concern about using formulas as a writing or rewriting tool (Redish, 1979), readability formula data were not used as a criteria in revising documents.

Critical Review Panel

The CRP process followed the pattern established by Thiagarajan, Semmel and Semmel, as reported by Hofmeister (1978). Their "Four - D" model requires the use of experts for assessing the status of prototypes for possible modification.

Critical Review Panel members reviewed three prototypes of the workshop workbook. Their editorial comments were accompanied by the "Critical Review Form" (see Appendix C). This form provided ratings on format, content and usability to the reader utilizing from five to eight descriptive scales. A seven point scale ranged from a positive or high rating of "7" to a low rating of "1" between positive and negative descriptors. It was determined appropriate as indicated by the discussion on the semantic differential scale as presented in Isaac and Michael (1981, see pages 144-148.)

Readability Analysis

The use of software designed to check the grammatical structure also provided the capability to determine readability indices of the text. The use of Rightwriter, version 4.0 (QUE Corporation, 1990) enabled the application of three different formulae to each unit of the workbook. The formulae included in the program were:

1. Gunning-Fog, for evaluating newspaper readability;

2. Flesch, limited to secondary and post-secondary levels; and

3. Flesch-Kincaid

Each of these formulae were applied and reported for the purpose of general information for workbook users. However, the readability formulae were not utilized in any fashion in the revision process except to maintain an awareness of the need to keep the text nontechnical.

Initial Prototype Review and Revision

The following section describes the review and revision process applied to the initial prototype of the student workbook. The initial prototype contained four units of instruction. Data relative to each prototype has been combined in the accompanying tables (1-16).

Table 1

Results of Readability Formulae as Applied to Each Edition of the Workshop Workbook

Unit	Edition number	Readability Formulae		
		Flesch-Kincaid	Flesch Index	Fog Index
Unit I	1	9.1	57.7	11.7
	2	9.3	55.5	11.7
	Main	8.8	57.7	11.2
Unit II	1	9.4	55.7	11.6
	2	9.3	57.6	12.0
	Main	9.1	57.7	11.7
Unit III	1	9.5	53.3	11.7
	2	9.5	54.9	11.8
	Main	9.0	57.1	11.2
Unit IV	1	8.0	63.7	11.1
	2	9.8	51.8	12.0
	Main	9.2	54.1	11.4
Unit V	1			
	2	8.2	62.5	11.4
	Main	8.3	62.9	15.3

Review

The initial prototype review was conducted in September, 1990. CRP members indicated generally disparate ratings relative to format, content, and reader usability. As may be noted in Tables 1-5, format ratings for the first edition ranged from "7" to "2" on the seven point scale. Similar ratings were assigned in the areas of content and reader usability or "user friendliness."

Unit I format rating means ranged between 5.2 and 6.0. CRP members rated the Unit as moderately adequate (5.0) but highly important (6.8). Editorial comments (see Appendix D) indicated that the writing style was "sometimes jerky" and showed a "lack of clarity." Some members suggested including organizing paragraphs (introductions) at the start of sections. User friendly ratings revealed some lack of clarity in the learning activity instructions (5.2).

Unit II format ratings ranged from a mean of 5.6 (clarity) to 6.0 (all other descriptors). Content in Unit II was relevant (6.4) and important (6.8). Most members believed the topic of values to be very important. Some members felt that the material was only moderately adequate (5.2). Editorial comments indicated a need to explain the Christian view of values more fully. CRP ratings indicated that Unit II user friendly

Table 2

Format Ratings for Each of Three Editions of the Student Workbook -- Unit I

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
Well organized	1		3	1	1				Poorly organized	5.4
	2	2	2	1						6.2
	3	3	2							6.6
Useful	1		4						Useless	6.0
	2	1	4							6.2
	3	1	4							6.2
Clear	1		2	2	1				Confusing	5.2
	2	1	4							6.2
	3	1	4							6.4
Adequate	1	1	2	1					Inadequate	5.2
	2	2	2	1						6.2
	3	3	2							6.6
Effective	1		4	1					Ineffective	5.8
	2	3	1	1						6.4
	3	2	3							6.4
Logically sequenced	1								Random	
	2	2	2	1						6.2
	3	3	2							6.6

Note. Numerals indicate frequency of specific rating.

Table 3

Content Ratings for Each of Three Editions of the Student Workbook -- Unit I

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
	1	1	3	1						6.0
Useful	2	1	3	1					Useless	6.0
	3	3	2							6.6
	1	1	2	2						5.8
Clear	2	1	4						Confusing	6.2
	3		5							6.0
	1	1	3	1						6.0
Practical	2		5						Impractical	6.0
	3	2	3							6.4
	1	2	1	1						5.0
Adequate	2		5						Inadequate	6.0
	3	3	2							6.6
	1	2	2				1			5.6
Relevant	2	1	4						Irrelevant	6.2
	3	3	2							6.6
	1	1	1	1	1	1				5.6
Complete	2		4	1					Deficient	5.8
	3	1	4							6.2
	1	4	1							6.8
Important	2	2	3						Unimportant	6.4
	3	3	2							6.6

Note. Numerals indicate frequency of specific rating.

Table 4

User Friendly Ratings for Each of Three Editions of the Student Workbook -- Unit I

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
	1		3	1						5.75
Useful	2	1	3			1			Useless	5.6
	3	3	2							6.6
	1		2	2	1					5.2
Clear	2		3				2		Confusing	4.4
	3	2	3							6.4
	1	1	2	2						5.8
Practical	2		4				1		Impractical	5.2
	3	2	3							6.4
	1	2		2		1				5.4
Adequate	2	1	3			1			Inadequate	5.6
	3	3	2							6.6
	1	1	3	1						6.0
Appropriate	2	2	2		1				Inappropriate	6.0
	3	3	2							6.6
	1	1	3							6.25
Relevant	2	3	1			1			Irrelevant	5.4
	3	3	2							6.6
	1	1	1	2	1					5.4
Complete	2		4			1			Deficient	5.4
	3	2	3							6.4
	1	2	2							6.5
Important	2	3	1		1				Unimportant	6.0
	3	3	2							6.6

Note. Numerals indicate frequency of specific rating.

Table 5

Format Ratings for Each of Three Editions of the Student Workbook -- Unit II

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
Well organized	1		4						Poorly organized	6.0
	2	1	2		2					5.4
	3	2	2	1						6.2
Useful	1		4						Useless	6.0
	2	1	2	2						5.8
	3	2	2	1						6.0
Clear	1		2	1					Confusing	5.6
	2		3	1	1					5.4
	3	2	3							6.4
Adequate	1		4						Inadequate	6.0
	2		3	2						5.6
	3	2	3							6.4
Effective	1	1	3	1					Ineffective	6.0
	2	1	1	2	1					5.4
	3	2	3							6.4
Logically sequenced	1								Random	
	2	3			2					5.2
	3	2	2			1				5.8

Note. Numerals indicate frequency of specific rating.

Table 6

Content Ratings for Each of Three Editions of the Student Workbook -- Unit II

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
	1		5							6.0
Useful	2	1	3						Useless	6.25
	3	2	1	2						6.0
	1		3	2						5.6
Clear	2		4	1					Confusing	5.8
	3	2	2	1						6.2
	1	1	3	1						6.0
Practical	2		4	1					Impractical	5.8
	3	2	3							6.4
	1	1	2	1			1			5.2
Adequate	2		5						Inadequate	6.0
	3	2	3							6.4
	1	2	3							6.4
Relevant	2	2	3						Irrelevant	6.4
	3	2	3							6.4
	1		1	3			1			4.6
Complete	2		5						Deficient	6.0
	3	1	4							6.2
	1	4	1							6.8
Important	2	3	2						Unimportant	6.6
	3	3	2							6.6

Note. Numerals indicate frequency of specific rating.

Table 7

User Friendly Ratings for Each of Three Editions of the Student Workbook -- Unit II

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
	1		5							6.0
Useful	2	2	1	1	1				Useless	5.8
	3	2	2	1						6.2
	1		2	3						5.4
Clear	2		2	2		1			Confusing	5.0
	3	1	2	2						5.8
	1		3	2						5.6
Practical	2	1	2	2					Impractical	5.8
	3	3	1	1						6.4
	1		3	1			1			5.0
Adequate	2	2	1	1	1				Inadequate	5.8
	3	2	2	1						6.2
	1	2	3							6.4
Appropriate	2	1	2	1	1				Inappropriate	5.6
	3	2	2	1						6.2
	1	2	3							6.4
Relevant	2	1	2	1	1				Irrelevant	5.6
	3	2	2	1						6.2
	1		2	1	1		1			5.0
Complete	2		3	2					Deficient	5.6
	3	2	2	1						6.2
	1	4	1							6.8
Important	2	2	1	1	1				Unimportant	5.8
	3	3	1	1						6.4

Note. Numerals indicate frequency of specific rating.

Table 8

Format Ratings for Each of Three Editions of the Student Workbook -- Unit III

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
	1		2	2		1				5.0
Well organized	2	1	3	1					Poorly organized	6.0
	3		5							6.0
	1		3	1						5.75
Useful	2		3	2					Useless	5.6
	3	2	3							6.4
	1			4						5.0
Clear	2		3	2					Confusing	5.6
	3		4	1						5.8
	1		3	1						5.75
Adequate	2		3	2					Inadequate	5.6
	3	2	3							5.8
	1	1	2	1						6.0
Effective	2		3	2					Ineffective	5.6
	3	2	2	1						6.2
	1									
Logically sequenced	2		2	3					Random	5.4
	3	3	1	1						6.4

Note. Numerals indicate frequency of specific rating.

Table 9

Content Ratings for Each of Three Editions of the Student Workbook -- Unit III

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
	1		4	1						5.8
Useful	2	1	3	1					Useless	6.0
	3	2	3							6.4
	1		2	2	1					5.2
Clear	2		2	3					Confusing	5.4
	3	1	1	1	1	1				5.0
	1	1	4							6.2
Practical	2		3	2					Impractical	5.6
	3	2	1	2						6.0
	1		2	1			1			4.75
Adequate	2		3	2					Inadequate	5.6
	3	1	2	2						5.8
	1	2	2	1						6.2
Relevant	2	2	3						Irrelevant	6.4
	3	2	3							6.4
	1		2	2			1			4.8
Complete	2		3	2					Deficient	5.6
	3	1	2	2						5.8
	1	4	1							6.8
Important	2	3	2						Unimportant	6.6
	3	3	2							6.6

Note. Numerals indicate frequency of specific rating.

Table 10

User Friendly Ratings for Each of Three Editions of the Student Workbook -- Unit III

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
	1		4	1						5.8
Useful	2		3	2					Useless	5.6
	3	3	2							6.6
	1		1	3	1					5.0
Clear	2		2	3					Confusing	5.4
	3	2	2	1						6.0
	1	1	3	1						6.0
Practical	2		4	1					Impractical	5.8
	3	3	1	1						6.4
	1	2	2				1			5.6
Adequate	2		4	1					Inadequate	5.8
	3	2	2	1						6.2
	1	2	2							6.5
Appropriate	2	2	2	1					Inappropriate	6.2
	3	3	2							6.6
	1	2	2	1						6.2
Relevant	2	2	1	2					Irrelevant	6.0
	3	2	3							6.4
	1		4				1			5.2
Complete	2		2	3					Deficient	5.4
	3	1	3	1						6.0
	1	3	2							6.6
Important	2	2	1	2					Unimportant	6.0
	3	3	2							6.6

Note. Numerals indicate frequency of specific rating.

Table 11

Format Ratings for Each of Three Editions of the Student Workbook -- Unit IV

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
	1	1	3	1						6.0
Well organized	2	1	3	1					Poorly organized	6.0
	3	1	4							6.2
	1	1	4							6.2
Useful	2	1	3	1					Useless	6.0
	3	3	2							6.6
	1		3	2						5.6
Clear	2	1	3	1					Confusing	6.0
	3	1	4							6.2
	1		4	1						5.8
Adequate	2		4	1					Inadequate	5.8
	3	3	2							6.6
	1		5							6.0
Effective	2	1	3	1					Ineffective	6.0
	3	2	3							6.4
	1									
Logically sequenced	2	1	3	1					Random	6.0
	3	1	3	1						6.0

Note. Numerals indicate frequency of specific rating.

Table 12

Content Ratings for Each of Three Editions of the Student Workbook -- Unit IV

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
	1	2	3							6.4
Useful	2	2	1	2					Useless	6.0
	3	2	3							6.4
	1		3	2						5.6
Clear	2	1	2	2					Confusing	5.8
	3		2	3						5.4
	1	1	4							6.2
Practical	2	1	4						Impractical	6.2
	3	1	4							6.2
	1		4		1					5.6
Adequate	2		3	1	1				Inadequate	5.4
	3	1	3	1						6.0
	1	2	2	1						6.2
Relevant	2	1	4						Irrelevant	6.2
	3	3	2							6.6
	1		1	2	1					5.0
Complete	2		3	1	1				Deficient	5.4
	3	1	2	2						5.8
	1	3	2							6.6
Important	2	3	2						Unimportant	6.6
	3	3	2							6.6

Note. Numerals indicate frequency of specific rating.

Table 13

User Friendly Ratings for Each of Three Editions of the Student Workbook -- Unit IV

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
	1	1	4							6.2
Useful	2	1	4						Useless	6.2
	3	2	3							6.4
	1		4	1						5.8
Clear	2		4	1					Confusing	5.8
	3	1	3	1						5.8
	1	1	4							6.2
Practical	2	1	4						Impractical	6.2
	3	2	2	1						6.2
	1		3	1	1					5.4
Adequate	2		5						Inadequate	6.0
	3	2	2	1						6.2
	1		3		1					5.5
Appropriate	2	1	4						Inappropriate	6.2
	3	2	3							6.4
	1		4	1						5.8
Relevant	2	1	4						Irrelevant	6.2
	3	2	3							6.4
	1		2	2	1					5.2
Complete	2		4	1					Deficient	5.8
	3	1	3	1						6.0
	1	3	2							6.6
Important	2	2	3						Unimportant	6.4
	3	1	3	1						6.0

Note. Numerals indicate frequency of specific rating.

Table 14

Format Ratings for Each of Three Editions of the Student Workbook -- Unit V

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
Well organized	1								Poorly organized	
	2	2	2	1						6.2
	3	2	3							6.4
Useful	1								Useless	
	2	1	3	1						6.0
	3	2	3							6.4
Clear	1								Confusing	
	2		4	1						5.8
	3	2	3							6.4
Adequate	1								Inadequate	
	2		4	1						5.8
	3	2	3							6.4
Effective	1								Ineffective	
	2	1	3	1						6.0
	3	2	3							6.4
Logically sequenced	1								Random	
	2	2	2	1						6.2
	3	2	3							6.4

Note. Numerals indicate frequency of specific rating.

Table 15

Content Ratings for Each of Three Editions of the Student Workbook -- Unit V

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
	1									
Useful	2	1	4						Useless	6.2
	3	3	2							6.6
	1									
Clear	2		5						Confusing	6.0
	3	1	3		1					5.8
	1									
Practical	2	2	3						Impractical	6.4
	3	3	1	1						6.4
	1									
Adequate	2		5						Inadequate	6.0
	3	3	1	1						6.4
	1									
Relevant	2	2	3						Irrelevant	6.4
	3	3	2							6.6
	1									
Complete	2		5						Deficient	6.0
	3	2	2	1						6.2
	1									
Important	2	2	3						Unimportant	6.4
	3	3	2							6.6

Note. Numerals indicate frequency of specific rating.

Table 16

User Friendly Ratings for Each of Three Editions of the Student Workbook -- Unit V

Descriptor	Edition number	Rating: High 7	6	5	4	3	2	Low 1	Descriptor	Mean
	1									
Useful	2	2	3						Useless	6.4
	3	3	2							6.6
	1									
Clear	2		5						Confusing	6.0
	3	2	2	1						6.2
	1									
Practical	2	2	2	1					Impractical	6.2
	3	3	1	1						6.4
	1									
Adequate	2		4		1				Inadequate	5.6
	3	3	1	1						6.4
	1									
Appropriate	2	2	3						Inappropriate	6.4
	3	3	2							6.6
	1									
Relevant	2	2	3						Irrelevant	6.4
	3	3	2							6.6
	1									
Complete	2		4	1					Deficient	5.8
	3	2	1	1						6.2
	1									
Important	2	2	3						Unimportant	6.4
	3	3	2							6.6

Note. Numerals indicate frequency of specific rating.

characteristics were moderately complete (5.0), moderately adequate (5.0), and very important.

Format ratings indicated Unit III could be better organized (5.0), given greater clarity (5.0), but generally effective (6.0). Unit III Content ratings revealed some concern about the adequacy (5.75) and completeness (4.8) of content. Editorial comments indicated concern over the incomplete treatment of spiritual gifts as a part of the career decision-making formula. The content was viewed as important (6.8) and generally relevant (6.2).

User Friendly ratings in Unit III were recognized as important (6.6) and relevant (6.2). Members deemed the instructions as needing more clarity (5.0) and completeness (5.2).

Format ratings for Unit IV indicated that this Unit was useful (6.2), well organized (6.0), and effective (6.0). Content ratings revealed the importance (6.6) and the usefulness (6.4) of the content. The Unit was determined to be less than complete (5.0). Some members suggested expanding the final learning activity, which requires the student to practice making a decision. The concern was that the student would not get enough practice.

CRP members rated user friendly characteristics in Unit IV as important (6.6), useful (6.2), and practical (6.2). Members also indicated a need for improvement on completeness (5.2)

In summary, qualitative and editorial comments of the panel members were positive regarding the format, content, and usability of the student workbook. Areas of concern included organization, sentence flow, and theological completeness.

Readability Analysis

Units I through IV of the workbook revealed a reading level requiring between an eighth grade and a tenth grade education. Units I and II read at a ninth grade level; Unit III at a tenth grade level; and, Unit IV at an eighth grade level. The accompanying table provides an overview on the readability indices for each prototype. Further, it may interest the reader to note that the total number of words in the document was 13,744.

Revision

A revision of the first prototype was begun as suggested changes from the CRP were incorporated. Content was a primary focus of the revision, especially the sections which were identified in the first review as needing elaboration and clarification. The goal was to

expand and to clarify the sections on work and leisure, values, gifts, and calling.

Second Prototype Review and Revision

The second prototype reflected the suggestions of the CRP. In addition, it also included a fifth unit. The first prototype revealed that the first unit contained too much content. It was decided that the first unit of prototype one would be divided into two units for future prototypes.

The second prototype also emphasized content, general ease of reading and structure. Document design factors relative to comprehensibility were not addressed.

Review

The second edition was submitted to the CRP in November, 1990. Ratings on the Critical Review Form reflected CRP members' general written comments regarding improvements in content and form. One member suggested that the paragraph mode was overused and that the bullet format might enhance the Unit. There was specific concern that the Unit did not contain enough motivational elements for self-instructional material.

Members rated all format elements in Unit I slightly higher than in prototype 1 (see Tables 6-10). The most notable drop in user friendliness was from 5.2 to 4.4 on clarity. Content ratings were generally

comparable. As one member commented, "...this version 'hangs tight.'"

Format ratings on Unit II showed a slight decline on every descriptor. Editorial comments suggested concern over the need for more summaries and greater clarity in learning activities (see Appendix D). Content ratings improved significantly in completeness (6.0), but otherwise remained the same. User friendliness revealed a noticeable reduced rating on appropriateness (5.6), relevance (5.6), and importance (5.8). Format ratings indicated an improvement in organization (6.0), with other descriptors relatively similar in rating to prototype 1. Content and user friendly ratings generally remained the same.

All ratings for Units III and IV were also found to be relatively stable from prototype 1 to prototype 2. The reason for the lack of increased rating may be due to the inadequacy of the revisions based on the first review, or it may reflect an increase in skill in viewing the materials critically as a result of the first review process.

Unit V ratings cannot be compared with prototype 1 since the first edition only had four units. The ratings for Unit V ranged from 5.6 (user friendly: adequate) to 6.4 (content: practical, relevant, important; user

friendly: useful, appropriate, relevant, important).

Readability indices indicated that the grade level required for the first three units held steady from prototype 1. Unit I reading level went from an eighth grade to a tenth grade level. This may partly result from an attempt to elaborate upon certain theological concerns such as spiritual gifts and calling. The elaboration resulted in more sentences containing multiple clauses. The readability for Unit V indicated an eighth grade level. The total number of words in all five units of this edition was 14,689.

Revision

The third prototype was developed in light of suggestions made by CRP members and their ratings. The developer continued to work on writing style, content, and format. The majority of the revision involved clarification of the concepts of work and leisure in Unit I. Unit II required elaboration upon values clarification in light of Christian theology. Unit III changes made included improvement in learning activities. Unit IV changes included clarification regarding spiritual gifts and calling. Unit V changes resulted in a reduction of the requirements in the final learning exercise from two practice career decisions to one. While it was believed that more practice was needed, the

time element was not compatible with the workshop limits this workbook was designed for.

Third Prototype Review and Revision

Previous prototypes focused on content, general organization, sentence structure, and meaning. The third edition addressed a continual refinement of content and learning activities. This was in preparation for the main field test activities.

Review

The third prototype was mailed to the CRP with two reporting forms in December, 1990. Critical review form ratings of the third prototype indicated a general improvement in the format, content, and usability of the workbook (see Tables 2-16). Members' comments were generally more positive (see Appendix D). For example, referring to all five units, one member said, "They look good!" Another member said, "I like the variety --boxes, bullets, and summaries." Another said, "This [section on calling] is good!"

There was a marked improvement from prototypes I and II found in ratings on the third edition. Nearly all ratings on Unit I rated a 6.4 or 6.6. The lowest ratings on Unit II related to the logical sequencing on format (5.8) and the clarity of user friendliness (5.8). Lack of clarity was still indicated on the content (5.0) of

Unit III. Ratings on Units IV and V were very good, generally 6.0 and above.

The readability indices for Units I through IV indicated a ninth grade level. The indices revealed an eighth grade level for Unit V. The main field test edition of the workbook consisted of 62 pages, containing a total of 16,977 words.

In summary, the basic information in the student workbook remained stable throughout the prototype development and revision process. However, a major structure change occurred between prototype 1 and 2, as Unit I was divided into two separate units of instruction. Editorial changes primarily affected tone and ease of understanding. Readability levels fluctuated throughout the revision process. CRP members rated format, content and user friendliness higher on prototype 3 than on the earlier versions. Verification of comprehensibility and usability to the reader was a primary focus of the field test process described in the next chapter.

Chapter 4

FIELD TESTING AND REVISION

This chapter describes the activities related to assessing the effectivenss of the career decision-making workbook. Field testing focused on utilizing the workbook with target audiences to assess the potential of the materials to enhance student practice in career decision-making. Field test activities included (1) preliminary and (2) main field testing.

Preliminary Field Testing

Within the Research & Development process, the preliminary field test stage is the point at which the prototype is presented to a representative group of potential users to assess its feasibility (Hood, 1973). In the present study, the preliminary field test edition of the student workbook was reviewed by the Critical Review Panel and students. The assessment information was then utilized to prepare the main field test edition. Topics which describe this process include (1) field test procedures, (2) field test results, and product revision activities.

Field Test Procedures

In keeping with the conceptual design of the prototype materials, field test procedures were arranged within a small Bible college in southern West Virginia.

In September, 1990, arrangements were made with the Academic Dean of the College to conduct both the preliminary and the main field tests at the College. The preliminary field test was conducted in November, 1990 followed by the main field test in January, 1991.

An announcement of the workshop was posted two weeks in advance on a bulletin board in the main administration building. Students were invited to register for the workshop by signing their names on the announcement flyer. Students were informed that the workshop was limited to ten students, but that two additional students were needed as alternates. Twelve students signed up and actually attended the workshop, including the pretest. Eleven students were interviewed, one had to leave early due to his work schedule.

The workshop was conducted over a two day period. The first two sessions were conducted on a Friday afternoon between 2:00 and 4:00. The remaining three sessions were conducted on the following Saturday between 9:00 and 11:45 am. The workshop was held in a small classroom and was videotaped in order to verify its occurrence. Ten minute breaks were given between each session of the workshop.

A pretest was given to students in the initial 30 minutes of the workshop. Each student was allowed to

complete the test at his or her own pace. All were able to complete the test within the designated time period.

Immediately following the pretest, workshop workbooks were distributed to students. The author briefly explained the purpose of the workshop to ensure that students understood the purpose of the workshop. The explanation included a discussion on the role of the workbook within the workshop context.

The workshop was conducted by the workbook author. He followed the workbook closely through the narrative sections, stopping at each learning activity. At that point, students were directed to read the instructions to the activity and then to complete the activity.

Upon completing the workshop, students completed a posttest (identical to the pretest). Posttest scores were then tabulated and incorporated into a graph indicating workshop outcomes (see Graphs 1-5). The results show that the workbook was most effective in helping students learn definitions related to career development. Posttest scores did not reflect the effectiveness of the workbook to teach decision-making skills.

Workshop Participants

Potential users of the workbook included Bible college freshmen and Bible college personnel. Persons

constituting the field test sample included 12 Bible college freshmen. Students who attended the workshop did so as volunteers. The mean age of the attenders was 19.75, and composed of five females and seven males. The mean age was 20.28 for the males and 19 for the females.

Pretest - Posttest Procedure

As stated earlier, a test instrument was prepared to serve as both the pretest and posttest. The test consisted of 25 items, designed to measure the effectiveness of the workbook in accomplishing its purpose. The test was administered to all workshop participants in a simple pretest - posttest design.

Interview Structure

All students in the field test sample were interviewed following the questions presented in Appendix G. The basic format called for the student to read the materials and respond to a series of interview questions. The interview structure was designed to elicit information relative to the following questions:

1. Do the materials provide information necessary to the practice of career decision-making by Bible college freshmen?

2. Do the materials provide activities which are useful to the practice of career decision-making by Bible college freshmen?

3. What aspects of the workbook could be improved?

Due to the unique response patterns one or more items on the questionaire might have been addressed in one response. Therefore, prior to completion of each interview, the developer checked to assure that the intent of every item was addressed at some point in the interview.

Field Test Results

Analysis of the interviews was accomlished by transcribing responses from the audio tapes to the Interview Data Forms and then compiling the responses by interview question. (The compiled responses are included in Appendix H.) This data was then synthesized and appears below under the following headings: (1) general impressions, (2) pretest - posttest results, (3) potential for encouraging practice in decision-making, and (3) revision recommendations. A further discussion then follows.

General Impressions

Students generally supplied positive responses during the post-workshop interviews. General impressions were that it was organized well, written well, and that it was helpful. In terms of organization, one student said,

> I thought it was well organized. I like it. When he directed us to read a section and perform the

> activities, it provided organization to the workshop. His questions were not like questions you didn't know the answers to.

Most every student recognized the workbook as a decision-making tool and believed that it effectively met its goal. Offering a general impression of the workbook, one student said,

> There was alot of practical things...good material that applied to me. For me, I have a hard time making decisions. I'm working on decisions for a career. I've not decided yet, so this is good.

Another student commenting on the content of the workbook said, "The content is really good and it's effective. It really helps you understand...how to choose."

The most negative comment related to the amount of material covered in the five sessions. As one student reported, "it's kind of long, but if you're really interested in finding what kind of career you want to go into, it's really good..."

Other than length, students deemed the content effective, easy to read and to understand, and fairly interesting. Some suggested improving interest level by adding pictures, quotes, and different kinds of fonts.

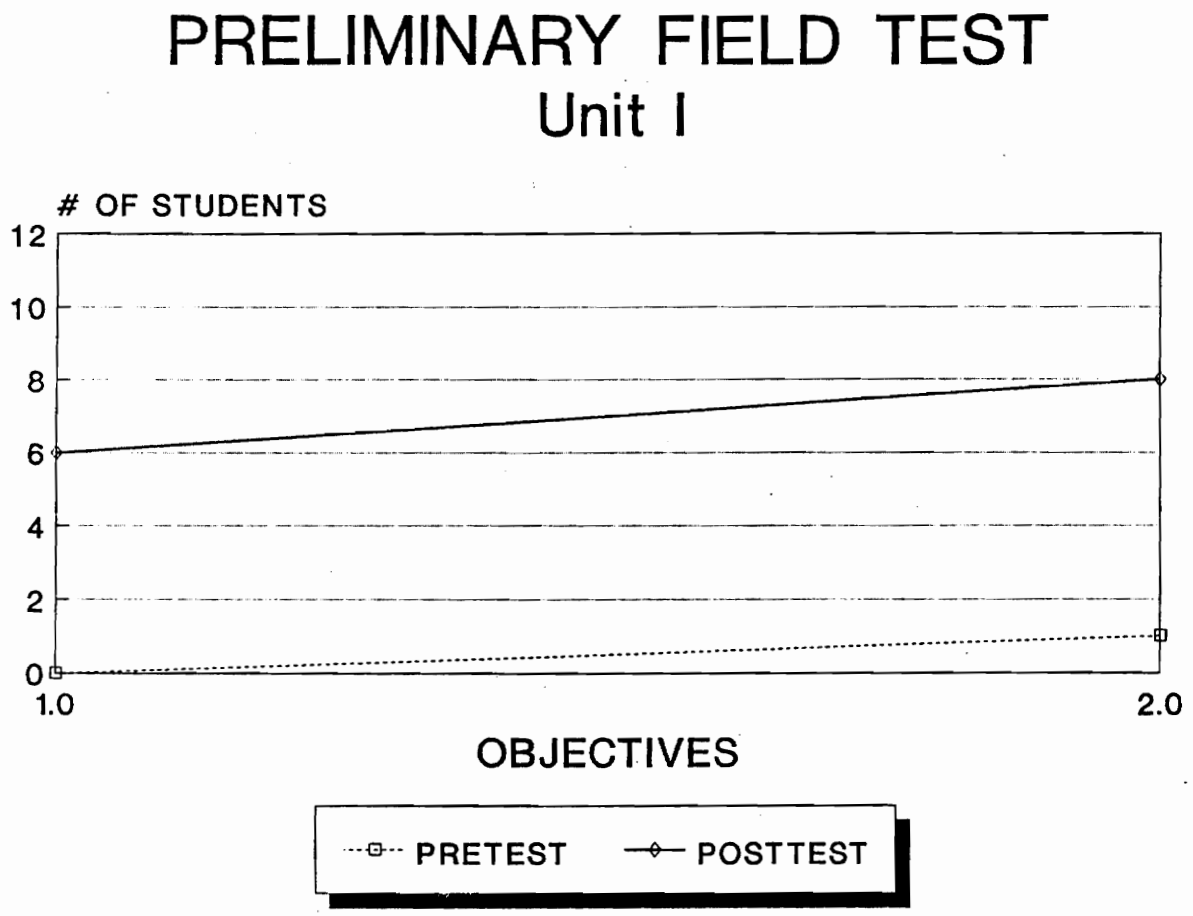
Pretest - Posttest Results

Both the pretest and posttest results were tabulated and manipulated into graph form (see Graphs 1-5). The results indicate that the workbook was relatively ineffective in teaching a decision-making model to the

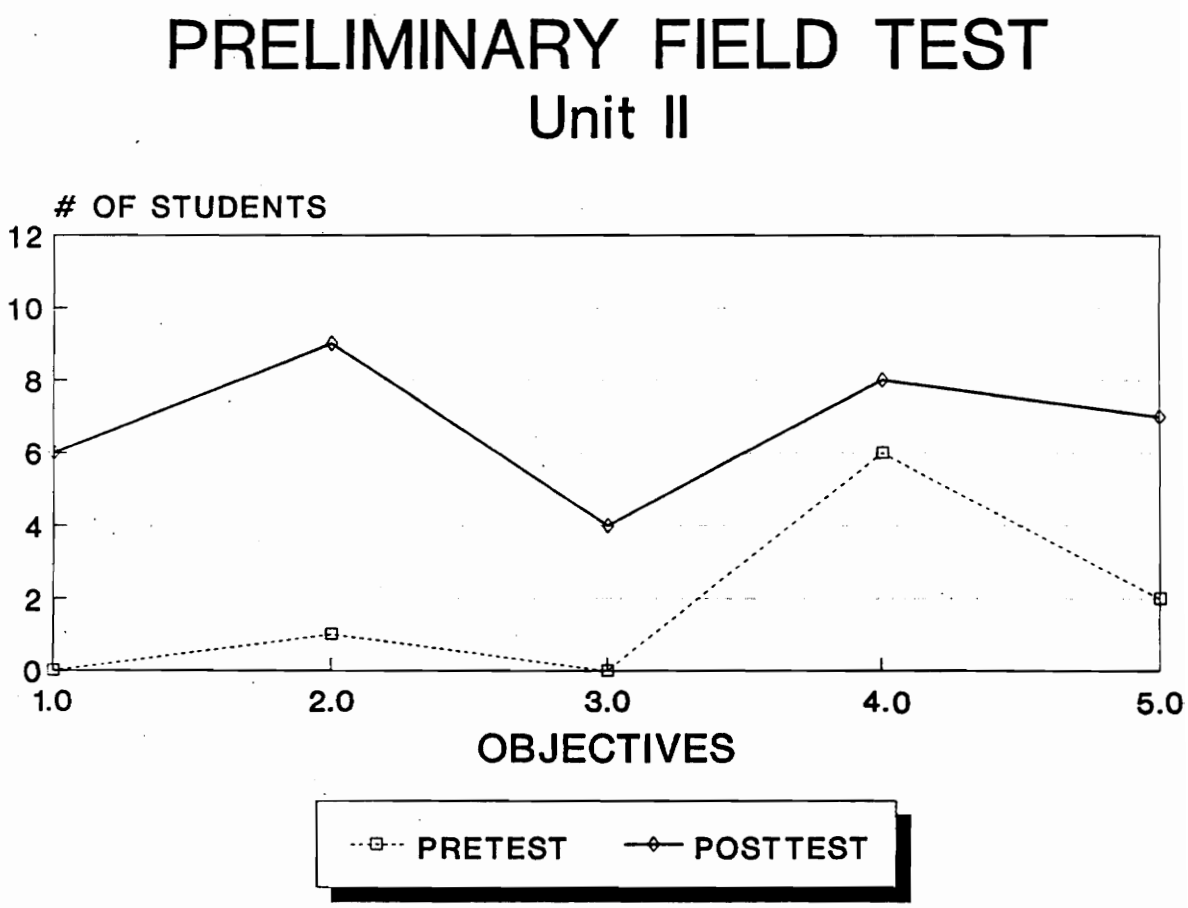
student population. However, the data reveals that the workbook was effective in instructing students in some objectives which could better enable them to make decisions.

The graphs indicate that Unit I was effective in helping students accomplish both of its two objectives. (See Appendix C as a reference for the list of workbook objectives.) All objectives in Unit II were accomplished with a measure of success. The pretest and posttest scores were not as disparate for the Unit III objectives with the exception of scores related to the first objective. All objectives were accomplished with a measure of success for Unit IV except for a decline from the pretest to posttest for objective 5. Objectives 5 and 6 in Unit V served as the terminal objective for the workbook. Only one student was able to complete each objective. Instruction seemed to be most effective for objectives 1, 2, and 4.

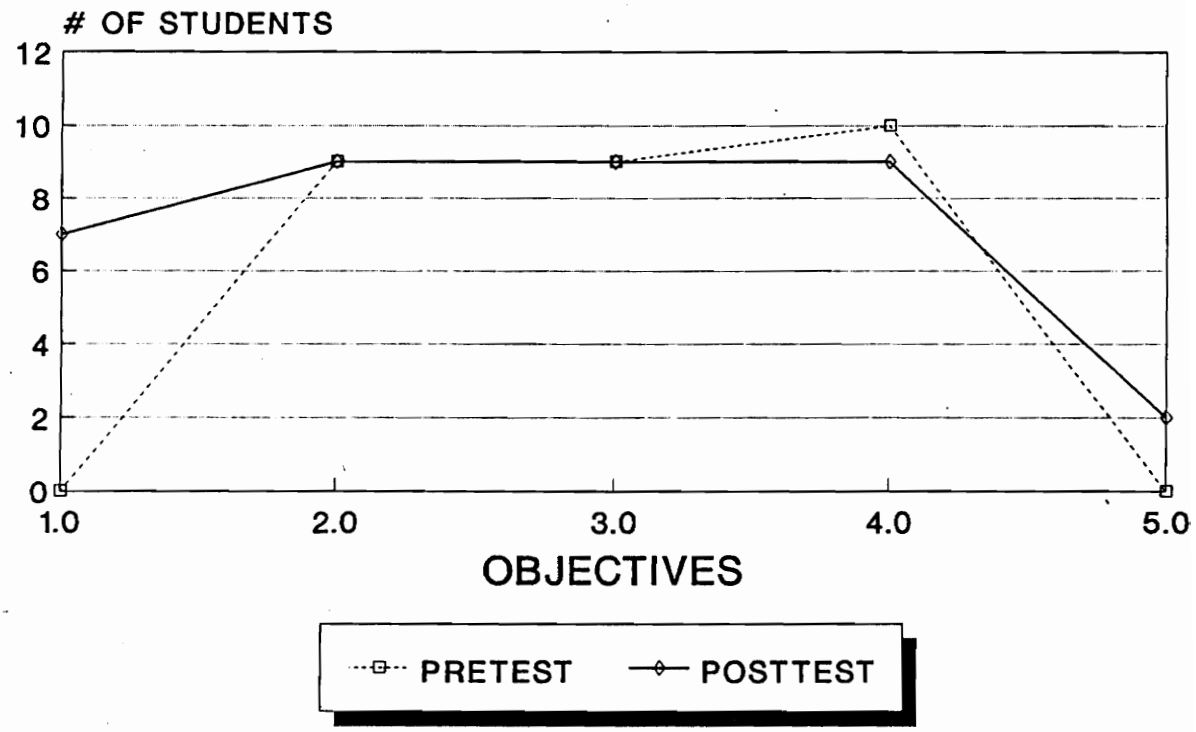
Overall, the workbook was effective in helping students accomplish enabling objectives. It appeared particularly effective in instructing students to (1) remember the sequence of the decision model (Unit I, objective 2, 80%), (2) recall measures of readiness for decision-making (Unit II, objective 2, 90%), (3) recall key elements of a divine calling (Unit IV, objective 2,



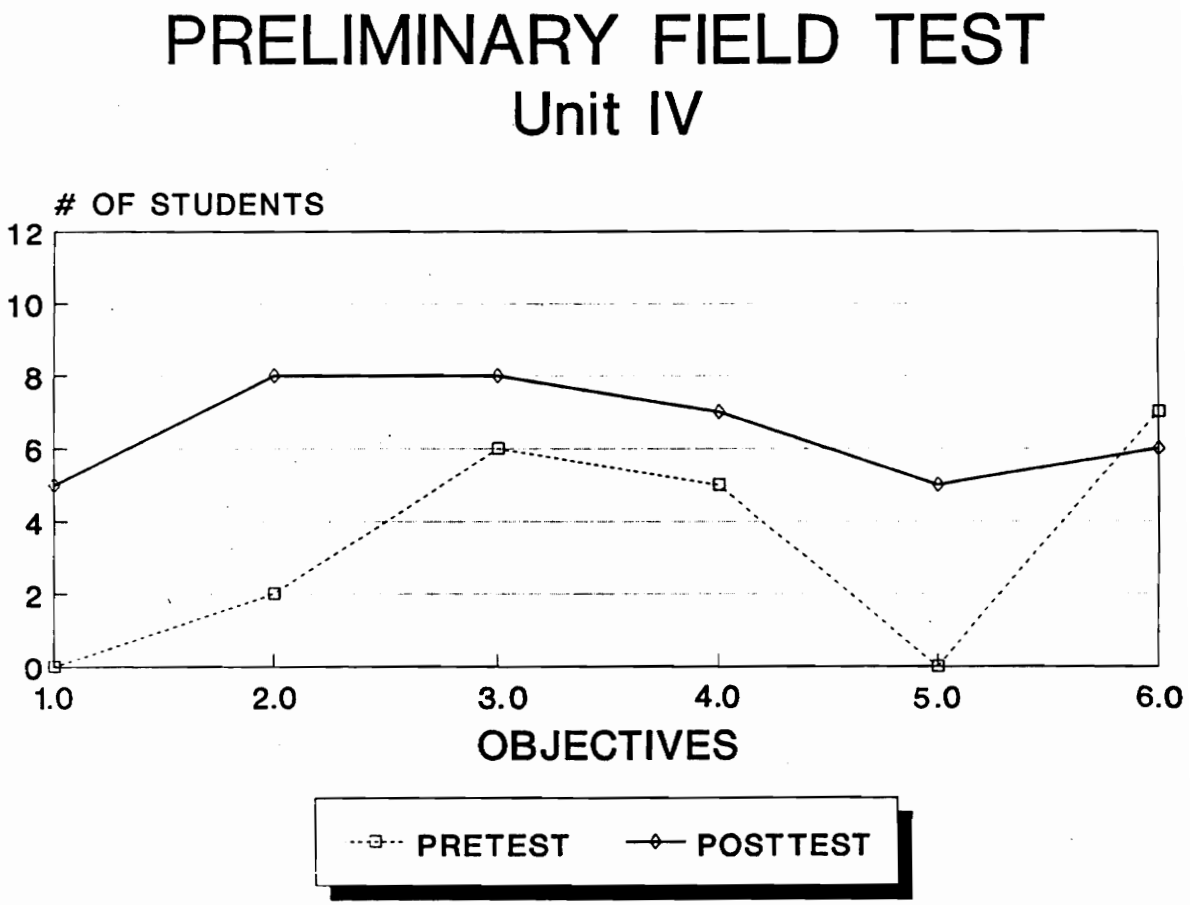
Graph 1. Preliminary Field Test Pretest - Posttest Scores for Unit I



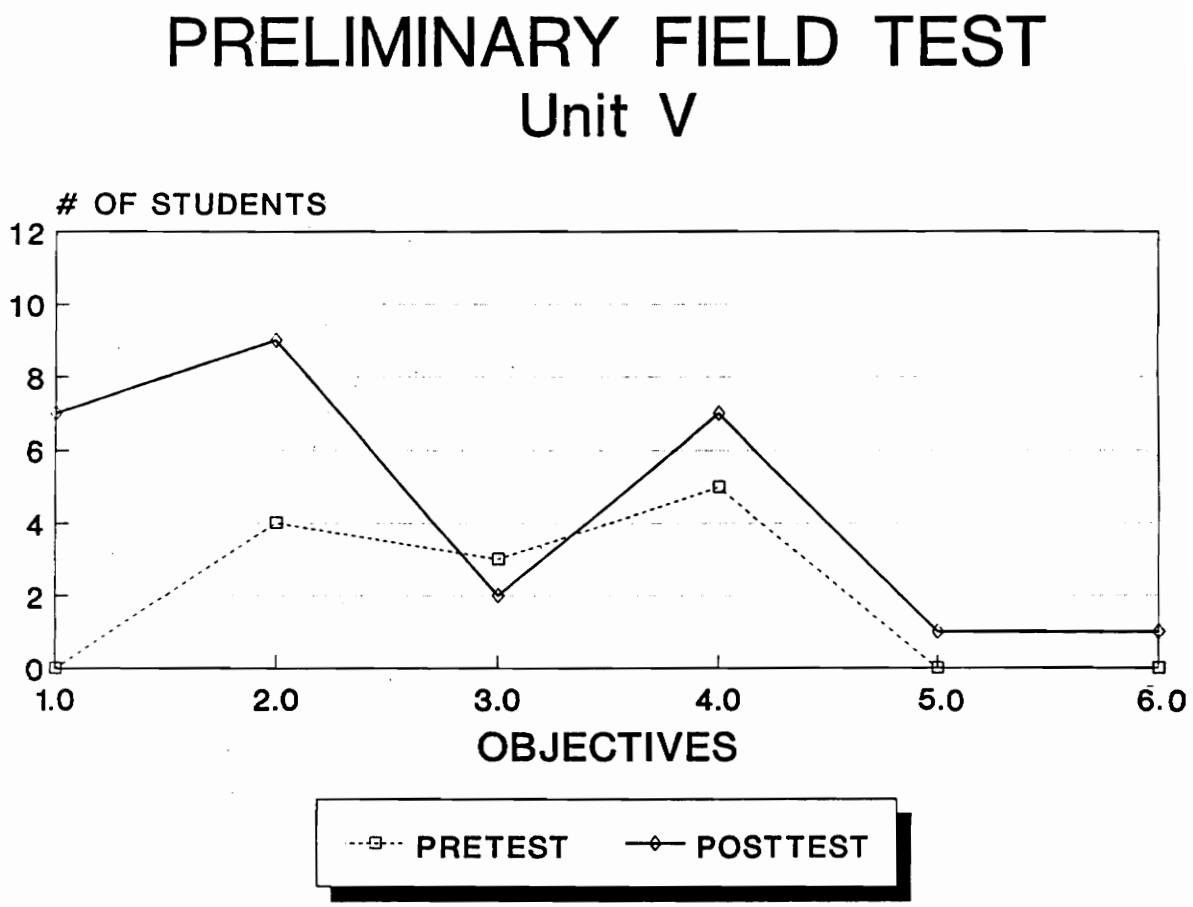
Graph 2. Preliminary Field Test Pretest - Posttest Scores for Unit II



Graph 3. Preliminary Field Test Pretest - Posttest Scores for Unit III



Graph 4. Preliminary Field Test Pretest - Posttest Scores for Unit IV



Graph 5. Preliminary Field Test Pretest - Posttest Scores for Unit V

80%), (4) recognize kinds of decision-making strategy (Unit V, objective 2, 90%), and (5) apply scriptural information to career decision-making situations (Unit V, objective 4, 90%).

The workbook was not effective in bringing students to the point of making tentative career decisions by utilizing the decision model presented in the workbook. However, it may be that these objectives can only be achieved by allowing more time for maturation to occur. It may equally require more experience in the use of the model.

Potential for Encouraging Practice in Decision-Making

Most students believed that the workbook had changed their view of career development and career decision-making. The perceived changes related to recognizing the importance of spiritual components of career development and decision-making.

Some suggested that the workbook helped them focus on the effect of current decisions on future outcomes. Reflecting this position, one student said,

> ...it really changed my understanding. The decisions that I make today will affect the decisions I make tomorrow, or even 20 years from now.

In response to a query on the intention of the workbook, another said,

> I think it's intended to make sure you weigh your decision before God...to consider where your decisions will lead and also to clarify what processes you used to make a decision.

Revision Recommendations

Numerous suggestions were made during the student interviews for improving the workbook. Among these are:

1. add some pictures, sketches
2. make the exercises more challenging
3. add a list of types of jobs to choose from
4. use variety in fonts
5. reposition activities throughout the narrative sections
6. add more illustrations

Product Revision Activities

Product revision was essentially a compilation synthesis and directed editing process. Field test data were first compiled as displayed in Appendix E. Editorial notes were compiled on a page-by-page basis. These data were synthesized by the author and gave direction to the section-by-section editing process. The following major modifications were made to the preliminary field test editions of student workbook.

1. Some learning activities were repositioned to break up the narrative sections more.

2. Pictures were added for the next edition of the workbook.

3. Some learning activities were refined and made more challenging.

4. Some organizing paragraphs were incorporated into the text.

5. More illustrations were added.

Suggestions Not Implemented

The workbook was not shortened as recommended by students. the reason for the complaint may relate more to the intense workshop format than to the workbook itself. Most complaints surfaced within the context of discussing the lack of variety in instructing the workbook. For example, one student remarked, "The workshop is extensive. If may he could give them to us the day before so we could read it instead of just jumping into it."

Also, changes in fonts were not made for the next edition. The author's primary concern during the revision process was with the content and organization of the material rather than document appearance.

Main Field Test

The purpose of this stage in the Research and Development model is to determine if the product meets design specifications and how it might be improved. In the present study, the main field test edition of the student workbook was distributed to students and to Bible

college personnel who served as workshop facilitators. Student interviews and facilitator interviews produced the data utilized to assess the materials and make recommendations for future use. Topics which describe this process include (1) pretest - posttest reliability, (2) field test procedures, (2) field test results, and (3) product revision recommendations.

Pretest-Posttest Reliability

Some modifications were made to the instrument utilized in obtaining pretest - posttest data from students who attended the main field test (see Appendix F). Once the revisions were made, 18 Bible college upperclassmen were recruited to help determine the reliability of the instrument. Four weeks before the main field test, 18 Bible college upperclassmen were administered the pretest. Two weeks later, fifteen of the same students (7 males and 8 females) were administered the same instrument (which would also serve as the posttest). Average agreement between the first administration items and second administration items was determined to be 73%.

Field Test Procedures

In keeping with the conceptual design of the prototype materials again, field test procedures were arranged within three Bible colleges in the southeastern

United States. In December 1990, final arrangements for the main field test were made with the Academic Deans of the Bible colleges. The colleges were located in Kentucky, Tennessee, and West Virginia.

The main field tests were conducted in January and February, 1991. Announcements of the workshops were posted two weeks in advance on bulletin boards in the main administration buildings. Bible college freshmen were invited to register for the workshop by signing their names on the announcement flyers. Students were informed that each workshop was limited to 10 students.

Each workshop was conducted over a two day period. The first two sessions were conducted on an afternoon between 2:00 and 5:00 pm. The following three sessions were conducted on the next morning between 8:00 and 12:00 noon. Each workshop was conducted in a small classroom. Ten minute breaks were given between each session of the workshop.

A pretest was given to students in the initial 30 minutes of the workshop. Each student was allowed to complete the test at an individual pace. The pretest (see Appendix I) was a modified version of the pretest utilized in the preliminary field test (see Appendix F).

Immediately following the pretest, workshop workbooks were distributed to students. A brief

explanation was given at the time to ensure that students understood the purpose of the workshop. The author briefly discussed the role of the workbook within the workshop context.

The workbook author led the workshop at the Bible college in Tennessee. A Bible college Admissions Counselor facilitated the workshop conducted in Kentucky. A Dean of Men facilitated the workshop in West Virginia. Each facilitator followed the workbook closely through the narrative sections, stopping at each learning activity. At that point, facilitators directed students to read the instructions for the activity and then to complete the activity.

Workshop Participants

Potential users of the workbook included Bible college freshmen and Bible college personnel. Persons constituting the field test sample included 25 Bible college freshmen. Of those who were able to attend the workshops, and take the pretest, two students were unable to complete the posttest requirement.

The preliminary field test was conducted in a workshop format. Students who attended the workshops did so as volunteers. Nine students attended the West Virginia workshop; six attended the Kentucky workshop; 10 attended the Tennessee workshop. The mean age of the

attenders was 21.39 and composed of 11 females and 15 females. The mean age was 21.07 for the males and 19.46 for the females.

Pretest - Posttest Procedure

The pretest and posttest were identical instruments designed to measure criteria outcomes. The test was a modified version of the instrument used in the preliminary field test. It consisted of 21 items, designed to measure the effectiveness of the workbook in accomplishing its purpose. The pretest was administered in each workshop during the first 30 minutes of the first session. The pretest was administered to all 25 workshop participants but the posttest was only administered to 24 of the students. Two students did not take the posttest (one due to illness, one chose not to participate).

Interview Structure

The subjects in the field test sample were interviewed following the interview structure presented in Appendix G. The basic format called for the student to attend the workshop and then to respond to the same interview instrument similar to that used in the prliminary field test. The interviews were conducted immediately following the completion of the workshops.

The Kentucky workshop interviews were conducted by the Academic Dean since the workshop enrollment was

small. The Tennessee student interviewers consisted of three full-time Christian professionals from a mission agency near the College. The West Virginia interviews were conducted by college support staff. Interviewers were given an orientation to the interview process as well as written instructions and a copy of the interview questions. Interviewers were also given a cassette tape and cassette tape recorder. Each was instructed on the use of the recorder for interviewing purposes.

Field Test Results

The analysis of the interviews and testing was accomplished in the same fashion as the preliminary field test. Interview responses were transcribed from the audio tapes to the Interview Data Forms and then compiled for each interview question (see Appendix K). Pretest and posttest results were tabulated and manipulated into graph form. The resulting data were then synthesized and are presented below under the following headings: (1) general impressions, (2) pretest-posttest results, (3) potential for encouraging practice in decision-making, and (4) revision recommendations.

General Impressions

General impressions were that the workbook was helpful. Students stated that it was easy to understand, and perceived it to be a useful tool for future use by

Bible college students. Common comments included: "I thought it was very good."; "I enjoyed it alot, and I hadn't really thought about those questions before, so it was really a good experience."; "I thought it was very good, very informative."

According to students, the most important section related to the topic of values. One student said, "I like the values. It has alot to do with decision-making." Another said, "It talked alot about values. I think that was the really important part of the book." A third student said, "For me...values are important."

On the issue of divine guidance, another important topic, students were clear about the workbook's effectiveness. As one student said, "It has helped me reconfirm my belief that I've been called of God." Another said, "Even if you don't choose a ministry but do something else in your career, it [a non-ministry-related job] may still be God's will for a while." One student believed that the "part about the will of God" was the most important section of the workbook.

The goal of the workbook was perceived to help students in career decision-making. Comments supporting this include the following:

> [It is intended] to help you make career decisions and to take a Christian perspective.

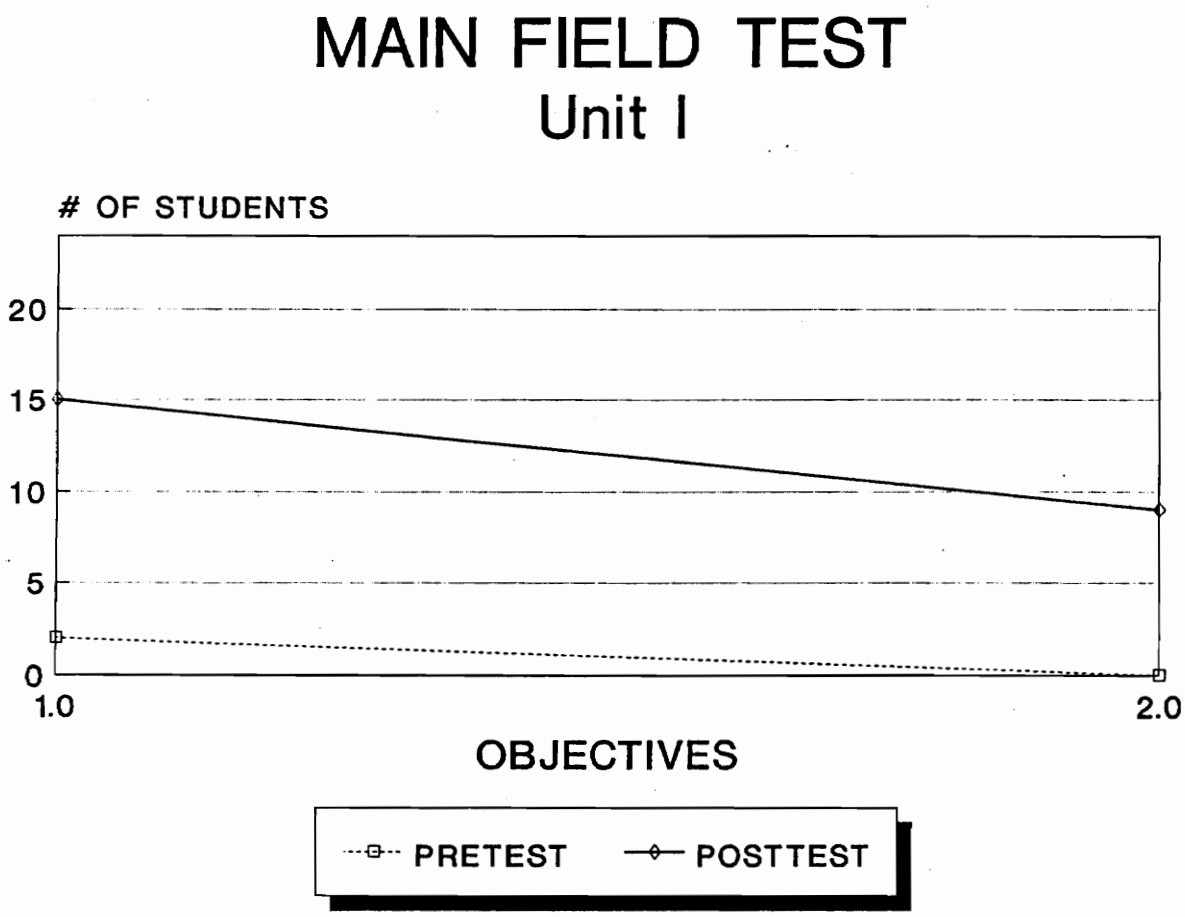
> I think it is intended to go through a process to help you in decision-making.
>
> Help you make a decision...a career decision.
>
> It is intended to help you make decisions on any any level, in any situation.
>
> To help us make good career decisions.

Most students responded that they believed the workbook accomplished its goal in teaching a decision-making process.

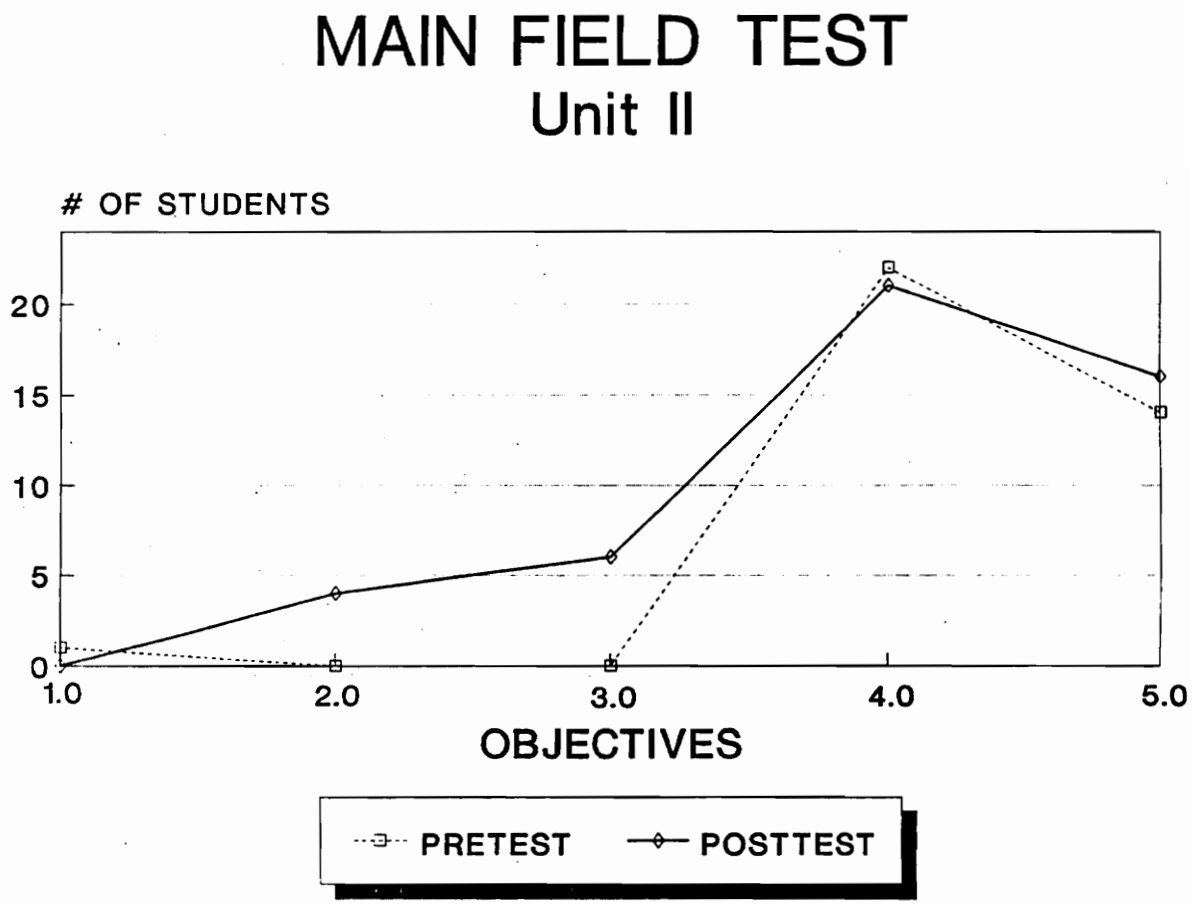
A recurring theme was again related to the amount of material covered in the five sessions. One student said, "I found it quite difficult to concentrate because it was quite long." Another evaluated the content as "a little lengthy."

Pretest - Posttest Results

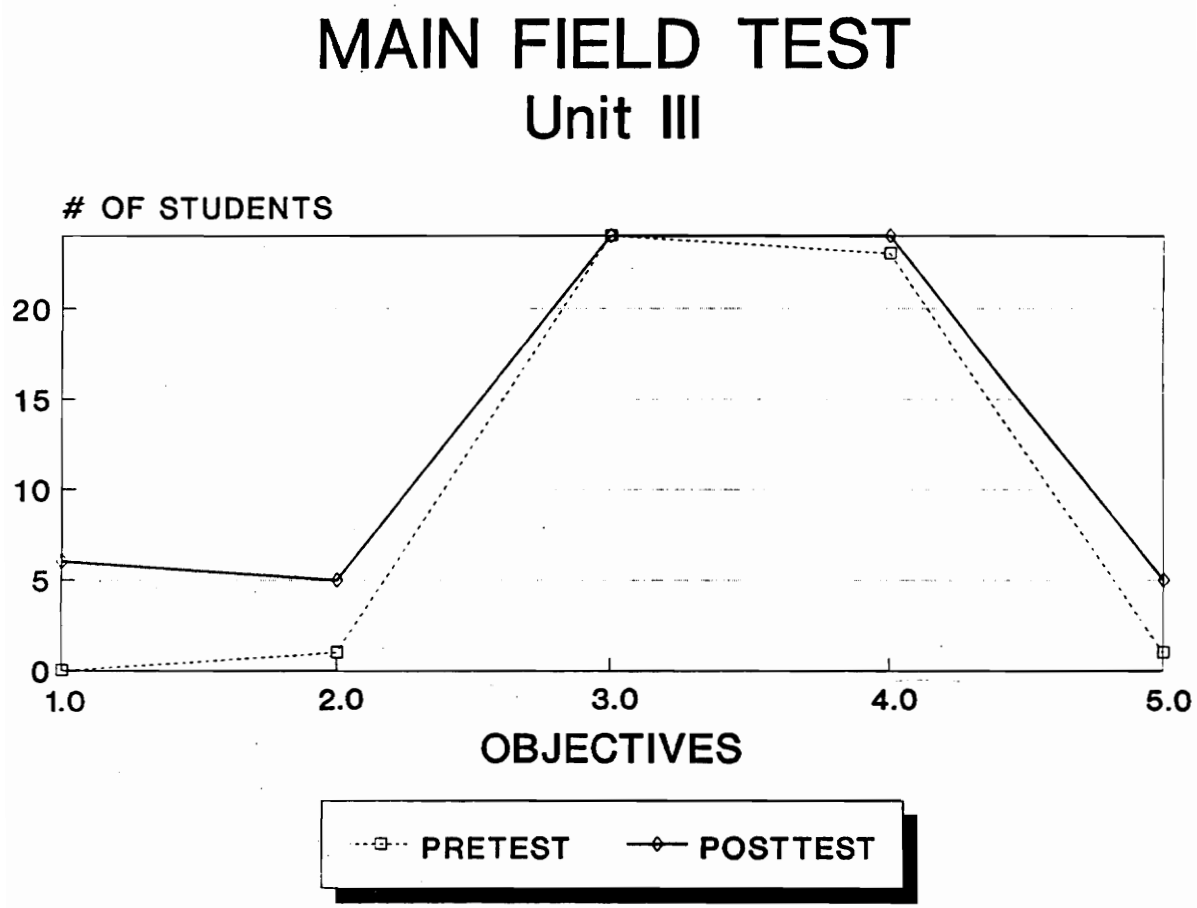
Pretests and posttests were again tabulated and manipulated into graph form (see graphs 6-10). The results show that the workbook was minimally effective in accomplishing two cognitive objectives in Unit I, objectives 1 (from less than 5% to 62%) and 2 (from 0% to 38%). (See Appendix E for a list of the objectives.) It was also effective for one cognitive objective in Unit IV, objective 4 (from 46% to 79%). In addition, the workbook was effective in accomplishing one skill objective in Unit IV, objective 3 (from 0% to 46%).



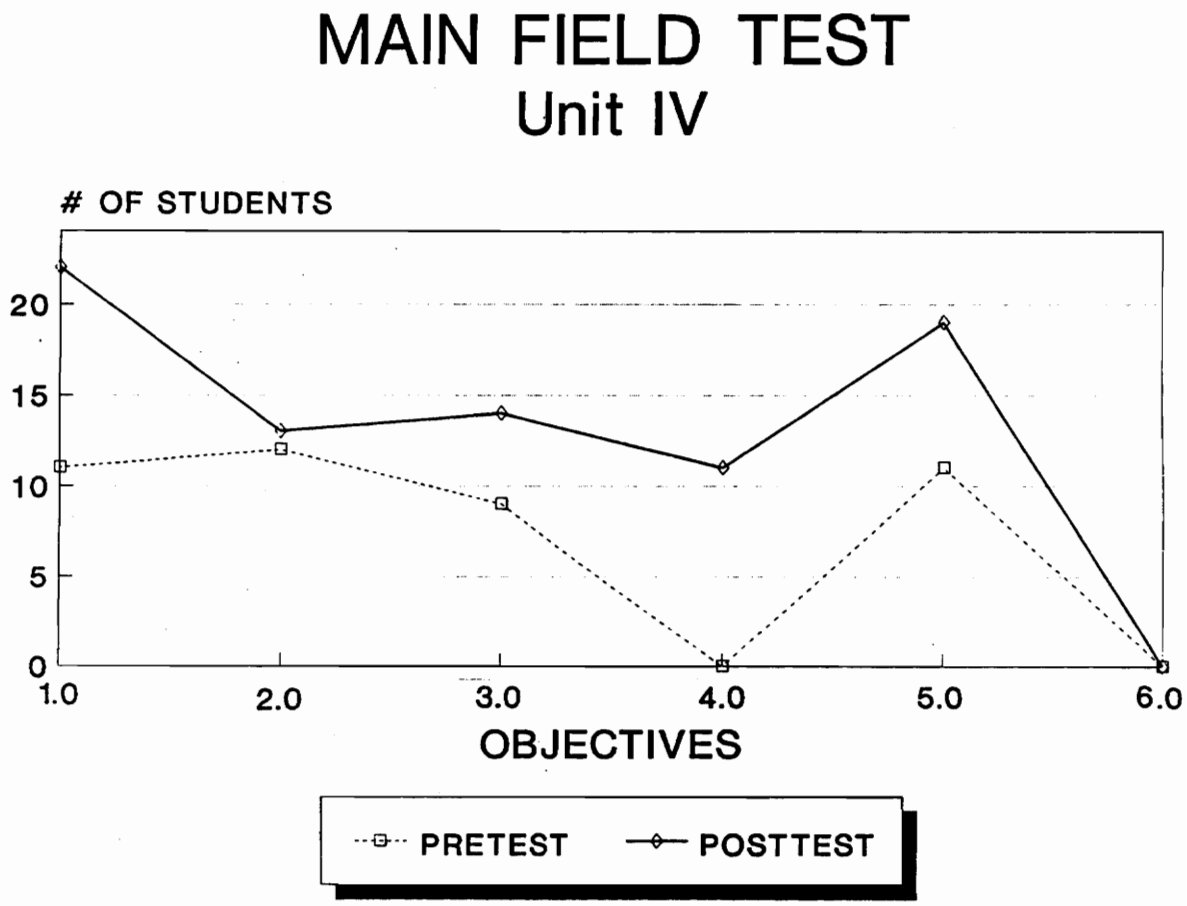
Graph 6. Main Field Test Pretest -Posttest Scores for Unit I



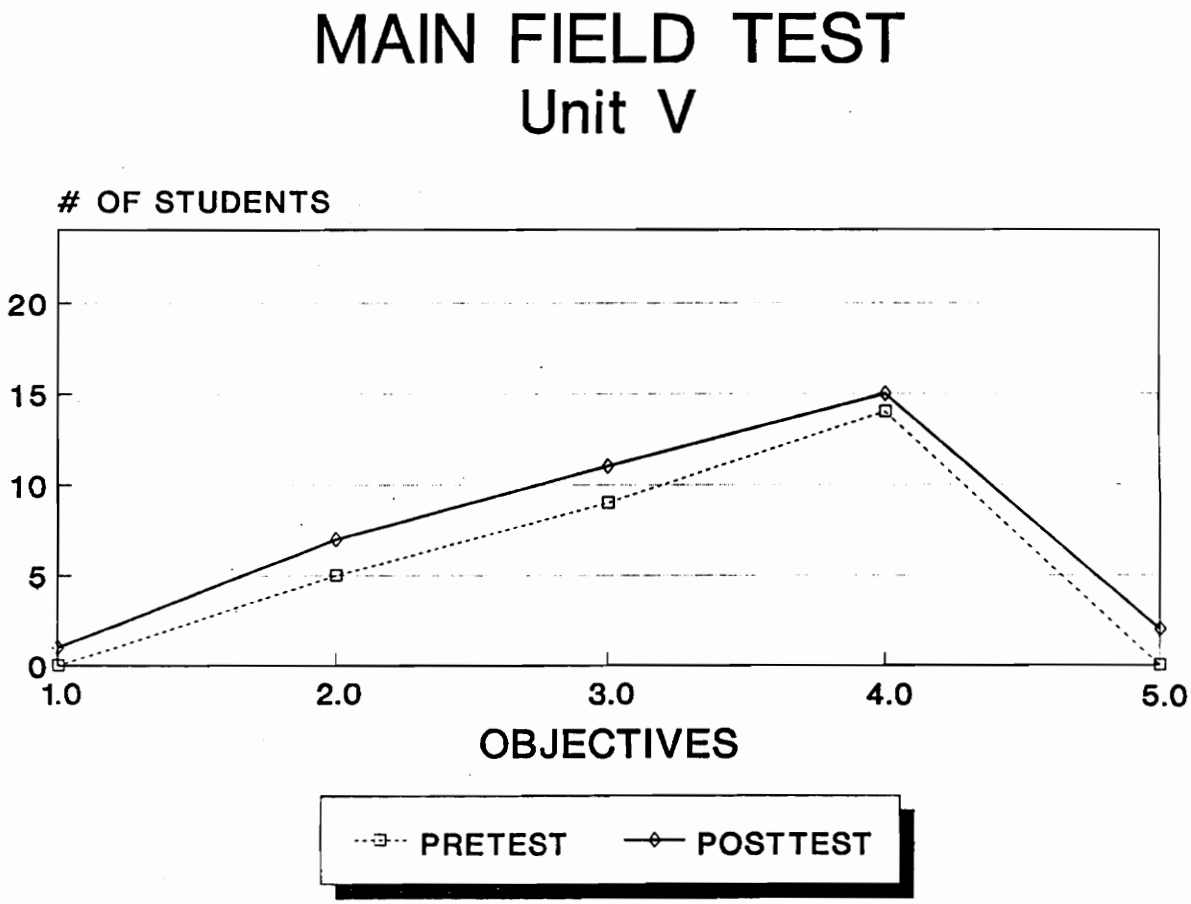
Graph 7. Main Field Test Pretest -Posttest Scores for Unit II



Graph 8. Main Field Test Pretest - Posttest Scores for Unit III



Graph 9. Main Field Test Pretest - Posttest Scores for Unit IV



Graph 10. Main Field Test Pretest - Posttest Scores for Unit V

The workbook revealed little success in teaching other enabling objectives. In comparison with the results from the preliminary field test, the results of the pretest-posttest were weak. However, the data from student interviews reveal that the workbook holds promise as a career development intervention resource.

Potential for Encouraging Practice in Decision-Making

Most students believed that the workbook had not really changed their view of career development and career decision-making. Several students saw the workbook as reinforcing to their career decision-making skills rather than offering something new.

Students did give a mixed reaction about the potential availability of the workbook in college libraries. The question posed was, "Would you have used the workbook without someone directing you to do so if you had found it in the college library?" Responses included:

> Yes, because it is real practical.
>
> Probably not. It's just not me. I don't usually use workbooks unless I had a really big decision to make or if I was really confused about what I was going to do as a career.
>
> I probably would if I realized exactly what it was...something to help me with my career decision-making.

> I don't know. If I was struggling with a decision and I was looking for a book to help me, I think I would.

These statements suggest that students would not necessarily use a workbook simply because of it's availability. On the other hand, if motivated by a recognized need for assistance, they would consider this workbook as a possible resource.

Revision Reccomendations

Numerous suggestions were made during student interviews for improving the workbook. Among these are:

1. add more pictures
2. add a list of types of jobs to choose from
3. add more illustrations
4. correct typographical errors
5. reduce redundancy

Some students indicated they had little complaint with the workbook, but the manner in which the workshop was taught could be improved markedly. One student thought that "maybe it could be taught a little better." Another said, "...have more discussion."

Workshop Facilitator Feedback

Interviews conducted with the workshop facilitators revealed a response consistent with student responses. They believed that the workbook was helpful to students and that it has potential in teaching decision-making.

The main concern of the facilitators was with the manner in which the workbook was presented. The concerns related both to the amount of content presented in a workshop format, and the lack of variety in instructional methodology. As one facilitator said,

> I think I could do a much better job presenting the material if I had more time. We didn't have any time for discussion. Students seemed to lose interest near the end.

Another facilitator said,

> The workbook is good. I think that it would be a big help to us if we had some audio visuals to keep student interest.

Both facilitators were agreed that the material could be presented reasonably well by others if they were (1) given more pre-workshop orientation to the material, (2) given more time for student discussion, and (3) given audio/visual materials to aid instruction.

Product Revision Activities

Product revision was essentially a compilation synthesis and directed editing process. Field test data were first compiled as displayed in Appendix K. Editorial notes were compiled on a page-by-page basis. This data were synthesized by the author and provided direction to the section-by-section editing process. The following major modifications were made to the preliminary field test editions of the workbook:

1. Some learning activities were repositioned to

break up the narrative sections better.

2. Pictures were added for the next edition of the workbook.

3. Some learning activities were refined and made more challenging.

4. Some organizing paragraphs were added.

5. More illustrations were added.

Suggestions Not Implemented

The workbook was again not shortened as recommended by students. The reason for not doing so is related to the same rationale for not doing so in the preliminary field test edition. The author suspects that the intense workshop format is the focus of complaints rather than the workbook itself. The context for the complaints were again found within the discussions about the lack of variety in instructing the workbook. As one student suggested, "Maybe a longer workshop would be more helpful."

Also, changes in fonts were not made for the next edition. The author's primary concern during the revision process was with the content and organization of the material rather than document appearance.

Summary

A preliminary field test and a main field test were conducted in three Bible colleges during the 1990-1991

academic year. In all, a total of 38 students attended the workshops and worked through the career decision-making workbook. Each field test produced results which were tabulated and then translated into workbook revisions. Students generally found the workbook informative, practical, easy to read, understandable, and usable. Concerns which resulted in negative responses by students related to length of the workshop and document design issues. Overall, students believed that the workbook was effective in teaching a decision-making model which incorporated biblical perspectives on career decision-making. A criterion outcomes assessment did not indicate this to be true. However, it may be that students simply need more time to mature in the use of the model. That is not to say that the workbook is ineffective.

Chapter 5

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

This chapter includes a discussion of the field test results and presents the conclusions extrapolated from the results. Formative evaluations of the material were conducted through the main field test stage. Interviews of students and workshop facilitators were conducted with the purpose of determining the effectiveness of the materials on student decision-making. This research activity was conducted in preparation for the use of the material in operational settings. Recommendations for future adoption and implementation of the materials will follow the discussion.

Background

The primary purpose of this study was to develop and field-test career decision-making materials for Bible college freshmen. A design model was utilized which incorporated formative and summative evaluation procedures to insure that this purpose was accomplished. This section is a discussion of the rationale and the process.

Rationale for the Study

The literature review foundational to this study uncovered research on populations from Catholic colleges, Protestant colleges, independent private colleges, state

colleges, and community colleges. The review revealed an existing paucity of research directed at the career development programs in Bible colleges. The discovery is significant in light of the fact that Bible colleges are such a vital force in the preparation of vocational church-related workers.

A common expectation is that Bible college students will become full-time ministers. Contrary to popular opinion, research indicates that a significant number (48%) of Bible college students will not end up in full-time, paid Christian ministry positions (Bosma & O'Rear, 1981; Christianity Today, 1982). The fact that 13% of surveyed Bible college alumni indicated they would now change their major, and that 17% would transfer, suggests a need for some students to clarify their vocational goals (Bosma and O'Rear, 1981). An abundance of such students and graduates places the integrity of the Bible college movement at risk. To reduce the risk, Bible colleges will need to provide clear guidance in the domain of full-time ministry occupations.

Providing clear guidance has not been an easy task for Bible college personnel to perform. With tight budgets, most Bible colleges are not able to hire personnel with significant career development training. Uninformed staff members who attempt to provide career

advisement or counseling may not do so from the perspective offered by recent research on the work/leisure connection. And thus, students may miss the benefits of the latest knowledge in the field.

This author found a void in materials which integrate a religious world view with career development. More specifically, a need emerged for career decision-making material which integrates theologies of work and leisure with career development theory. A plethora of material highlighting work and leisure from a religious perspective have recently become available at the popular level (Bernbaum & Steer, 1986; Hardy, 1990; Mattson & Miller, 1982; Sherman & Hendricks, 1987; White & White, 1988). The author deemed these useful in the development of self-instructional material specific to the Bible college population.

One career development product is not able to provide the information or direction needed in a comprehensive career development program. For that reason, a product was to develop which would provide a first step toward the development of a complete program. The product of this study could reasonably become the basis of that first step.

The volumes of career development material reviewed reduced themselves to the essential element in the career

process, i.e., decision making (Dunphy, 1969). It was an assumption of this study that Bible college students need assistance in decision-making like most other college students. This field-tested product was intended to address for them the essential issue of decision-making.

The author determined that it was important to provide a rational decision-making model which might take some of the unnecessary subjectivity out of ministry-career decision making. He also determined that it was important to keep spiritual concepts, such as divine calling, an integral part of the decision-making matrix.

The workbook developed in this study was designed to enhance Bible college students abilities in career decision-making. It was also designed to help students develop a sense of their spiritual selves (see Parks, 1982) by encouraging them to focus on values and calling in the context of career development. The discussion of values was at the heart of this effort. An accurate understanding of the spiritual self as a component in career decision making is more likely to emerge when values are clarified.

Concept Development

There are over 500 Bible colleges and institutes in North America (Caprenter and Shipps, 1987). The accrediting body of these institutions (AABC) has called for

continued research and development of career development materials (AABC Newsletter, 1990). This study was in response to that request.

The outstanding need is systematic career development interventions for Bible college students. In particular, career development materials are needed which teach Bible college students effective decision-making skills.

An effective form of written materials is that of the student workbook. The focus of the research for this study was devoted to the development and field testing of such a workbook. The concept development process grew out of the literature, theory and document design elements identified early in the research.

The author began a literature review in June 1989 and continued through March, 1991. The reviews covered career development theory, decision theory, college student career development, Bible college students, instructional design and document design issues.

The author began forming a Critical Review Panel in June 1990. The panel consisted of Bible college personnel and persons with knowledge of career development. The critical review process followed the pattern established by Thiagarajan, Semmel and Semmel (see Hofmeister, 1978). The author began the review and

revision process almost immediately after the initial prototype was completed.

There were a total of three reviews and three revisions. The intitial prototype review was conducted in September, 1990. Revisions were made in October, 1990. The second prototype was submitted to the Panel in November, 1990. Revisions of the second prototype also occurred in November. The second prototype became the preliminary field test edition. The field test was conducted in November also. The third protype was reviewed in December, 1990. Revisions were made for the main field test, which was conducted in January, 1991.

The initial proposal was presented to the dissertation committee on April 30, 1990. A plan was drafted in that meeting to conduct a pilot workshop early in September 1990. The developer immediately started a draft of the workbook. A set of content objectives guided the development. The objectives were built upon need statements which emerged from the literature review.

The educucational design of the workbook was based upon the instructional design model by Dick and Carey (1978). It was found to be consistent with the Borg and Gall (1989) Research and Development model of research. With objectives and research models in place, a draft module of instruction was completed for the formal

proposal. On September 25, 1990, the Committee approved the formal proposal.

The next stage of the research was to develop criterion-referenced tests. Drafts of these were prepared congruent with the time of the development of the first draft of the workbook. Refinements were made to the instruments in October, 1990 in preparation for the preliminary field test and again prior to the main field test.

Theory Base

The work of Donald Super, Carl McDaniels, and H. B. Gelatt provided the theoretical base upon which this study was developed. Super's empirically-grounded theory of career development provided the basic framework upon which the workbook was developed. The developer of the workbook applied the concept of decision-making as a developmental process (Super, 1957, 1963, 1984) rather than a singular occupational choice. It is consistent with the view that career changes result from a series of minidecisions of varying importance (Super, 1981).

The work/leisure connection is at the core of the workbook, reflecting the increased attention that the leisure concept is receiving in the literature, both religious and nonreligious (Bernbaume and Steer, 1986; McDaniels, 1989; Ryken, 1987; Sherman and Hendricks,

1987; Wright, 1984; Yankelovich and Lefkowitz, 1982a, 1982b).

Super (1940) suggested that leisure could be experienced as an extension of one's occupation, a compensation for occupations, or unrelated to once's occupation. McDaniels' theory of leisure development (1989) was superimposed upon Super's work, emphasizing leisure as a counterbalance in the career pattern. For that reason, the workbook presents the leisurite role as a potential equal with the worker role (Career = Work + Leisure). It further presents the view that occupational choices are emergent from a variety of experiences including leisure experiences.

Gelatt's rational decision-making model (1962) was adapted to apply more specifically to career decision-making. Pursuing the rationale of the model, the workbook developer encourages students (1) to learn about themselves, (2) to participate in the decision-making process, (3) to learn how to make decisions more independently, and (4) to accept responsibility for their decisions.

The workbook also makes a distinction between terminal decisions and tentative (or investigatory) decisions (Gelatt, 1962; Phillip, 1982). The resulting instructional design leads to a tentative decision rather

than a terminal decision, since the decision may require more information, more maturity, or more minidecisions before a final decision can be made.

Following Gelatt's model (1962), the workbook contains a prediction system, value system, and the criterion. In addition, a strategy is provided for turning values, objectives, and information into a decision. Students are given a change to choose from four strategies based on risk management (Gelatt et al., 1973).

Values provided the integrating framework for Gelatt's decision making materials (Gelatt et al., 1973) and also for the workbook designed in this study. One variation with this study was that the workbook presented values which were esteemed by the Scriptures. Gelatt's (Gelatt et al., 1973) view on values was that values are simply a matter of free choice without reference to any Divine mandate (see Lewis & Lewis, 1982).

The intent of the decision-making intervention was to provide students with a self-instructional workbook which could be used in a workshop format. It also provided Bible college personnel with a career development tool targeted for Bible college freshmen. Such population-specific materials were unavailable before this study.

The workbook was designed specifically for Bible college freshmen. While the developmental stage of this population raises questions about their maturity to make major career decisions (Phillips & Strohmer, 1982), the workbook was developed with a view that freshmen could begin to practice making tentative career decisions. These decisions might not include decisions involving choice of major or occupation (Jones & Chenery, 1980). However, these decisions might certainly include whether or not to join a basketball team while in college or to seek a part-time job.

Pickering and Vacc's (1984) review of the literature suggested that self-help interventions were less effective than counselor-involved interventions. For that reason, the workshop format was chosen as a means of involving workshop leaders to facilitate the utilization of the self-instructional workbook. The workshop, seminar, and course formats had been found useful in various studies involving career decision-making (Krumboltz, Kinnier, Rude, Scherba, & Hamel, 1986; Lent, Larkin, and Hasegawa, 1986; Pickering and Vacc, 1984; Savickas, 1990).

Document Design

Once learning objectives were prepared, the communication of essential career decision-making

information to Bible college freshmen became the primary focus of this study. Written materials were the selected medium. Although important, readability and comprehensibility were regarded as part of the broader concept of usability to the reader.

Docmuent design guidelines developed by the Document Design Project (Felker, Pickering, Charrow, Holland, and Redish, 1981) guided the actual development of the career decision workbook. These guidelines assisted the development of a comprehensible and reader-usable document for this study.

Document Review and Revision

The document design and revision process was part of the basic Research and Development process. A panel of experts was employed as required by the Research and Development model. The Panel repeatedly assessed the material and suggested various improvements. This process resulted in a document which, according to the Critical Review Panel (CRP), (1) met product content objectives and (2) was rated satisfactory relative to format, content and usability to the reader. Each rating was more positive.

Preliminary Field Testing

The presentation of a prototype to a representative group of potential users is a part of the Research and

Developoment process (Hood, 1973). Respecting this design, a group of 12 Bible college freshmen attended a workshop for the purpose of utilizing the career decision workbook. The workshop was conducted by the developer at a non-denominational Bible college in Southern West Virginia.

A pretest and posttest were given to students as a part of the workshop requirements. Interviews were also conducted with students following the workshops. The data collected from these assessments were utilized in a revision of the workbook for use in the main field test.

The results of the field test were generally positive. Students expressed support for the format, content and reader usability of the material. Interview results indicated that the workbook was well organized, well written, helpful. The content was deemed effective, easy to read and to understand, and somewhat interesting. Students recognized the workbook as a decision-making tool and believed that it effectively met its goal. The pretest and posttest data indicated that the workbook (as utilized in a workshop format) was relatively ineffective in teaching a decision-making model to the student population.

Main Field Testing

Main field test activities focused on the

distribution to and use by students and workshop leaders. Interviews were conducted with students following the workshops. The intent was to determine if (1) the workbook was usable by workshop facilitators and (2) the workbook influenced student career decision-making. Also, issues regarding future operational field testing were to be identified.

Main Field Test Results

The 24 students and the participating workshop leaders in this study indicated that the workbook was usable and contained appropriate content. Although the length of the workbook was a repeated concern, no suggestions were given for improvement in content. Some students did suggest that more time be given for studying the workbook. The workbook did exceed the amount of materials originally given in Gelatt's decision-making workbook. The amount of material covered in the workshop format was a stated concern of the facilitators. The size of the workbook is an indicator of the content required to integrate career development with spiritual concepts.

Students generally believed that the section on values was the most helpful. Student interviews revealed the effectiveness of the values clarification exercises in helping them crystallize their own values. The same

held true for the learning exercises in Unit III, on information. The inclusion of the material related to divine calling were deemed most helpful.

The prettest - posttest data suggested that the workbook was most effective in accomplishing cognitive objectives, especially those involving singular definitions. There was little indication that students were able to recall by memory the various components of the six-step model. For that reason, students were unable to apply the model without referring to the workbook.

Discussion of the Results of the Study

The effectiveness of the workshop format for this workbook was not supported by the data. Several factors may have contributed to this situation. First, a workshop format was chosen as an expedient way to provide career development for students (Pickering & Vacc, 1984). In preparation for the field testing of the workbook, the workshop mode became a requirement. It was discovered that the colleges in this study would have been unwilling to include the career decision-making material into their orientation programs or other courses. One limitation of the worshop format, however, was that it did not provide students time to mature in their understanding of the decision-making process.

Secondly, the amount of information in the five-unit workbook was reported by students to be overwhelming. Workshop participants suggested that more time be given for self-study, which would encourage better assimilation of the material. This is consistent with Pickering and Vacc's (1984) appraisal, i.e., that long-term interventions are generally more successful than short-term interventions. However, they also reported that short term interventions are more popular and advantageous to students who had limited time to give to career development. That was a relevent consideration regarding the student population in this study.

Thirdly, the facilitators were not given formal training to conduct the workshops. They led the workshops on the basis of their own knowledge of career development and a brief orientation to the workbook by the developer. Of the three workshop facilitators, the author was the only one who had been formally trained in career development theory.

Fourth, there was both an absence of audio-visuals and alternate teaching methodology. The lecture format was the primary teaching method and no materials were provided to support the facilitator except for the workbook itself. Also, no group or lab methodology was utilized, which could have increased student interest

during the workshops.

Finally, there was no experimentation with the appearance of the workbook. Line drawings were added to the main field test edition, but with limited attention given to the overall appearance. It is generally accepted that document appearance is useful toward improving student attention to the content and therefore useful to learning. It is possible that the limited attention to document appearance also limited it's effectiveness in producing the desired objective.

Product Objectives

The broad objectives of the workbook led to a discussion of (1) the importance of a decision-making strategy to career development, (2) personal values relevant to personal career decision-making, (3) relevant sources of information useful for career decision-making, and (4) four strategies applicable to career decision-making. The use of the workbook in a workshop format did not result in the ability of students to perform all objectives in test situations. Of the four broad objectives, students were able to identify personal values related to career decision-making.

Document Design

Communication of the necessary information to Bible college freshmen was a major consideration in the concept

development process. Written materials were the selected medium. Although important, readability and comprehensibility were regarded as part of the broader concept of usability to the reader.

Docmuent design guidelines developed by the Docment Design Project (Felker, Pickering, Charrow, Holland, and Redish, 1981) guided the actual development of the career decision workbook. These guidelines assisted the development of a comprehensible and reader-usable document for this study. Students reported that the workbook was easy to read and easy to understand.

Main field test data indicated that students benefitted from the workshop workbook. However, the data indicated a mixed response to the effectiveness of the career decision-making workbook. Posttests indicated that the students were unable to accomplish the terminal objective. However, students did report that the workbook helped them to (1) crystallize their current career thinking, (2) increase their appreciation for a spiritual-rational model, (3) understand the importance of leisure as part of the concept of career, and (4) seriously think about the future consequences of their decisions.

Conclusions

The following conclusions can be made relative to

this study:

1. The basic content and format of the career decision-making workbook was helpful to Bible college students.

2. Students appreciated the material on values clarification and divine calling above other material.

3. The workbook has the potential to increase the effectiveness of student decision-making. The effectiveness of the material could be enhanced in a workshop or mini-course format by including various teaching methods and the use of audio visuals as suggested by Davis (1974), Eitington (1984), and Pike (1989).

4. The workbook is adaptable to the needs of a variety of Bible colleges and their student populations.

5. The workbook was not effective in accomplishing it's terminal objective as utilized in the workshop format.

6. The use of the Research and Development model and the Dick and Carey (1978) instructional design model, resulted in a product viable for main field testing.

7. The integration of a theology of work and leisure and career development theory was effectively accomplished.

Personal and Professional Insights

The results of this study as reflected in the pretest - posttest scores are not remarkable. What is stimulating is that there is a product available for use for research purposes. The workbook does require further refinement. While enthusiasm for the project has been temporarily tempered by the magnitude of the dissertation process, a vision remains.

The career-decision workbook provides the rallying point for the development of a full-blown career development program for Bible colleges. Each unit of the workbook could be expanded to encompass an integrated package of assessment, education, and counseling. The result, however, would be a textbook. For workshops or seminars, the workbook would need to be reduced from its current size.

Among the supplemental materials which could suppport the workbook would be the development of a computer-interactive program. Babbush (1983) recognized the popularity of computer programming and exaplained the central role such programs have in career counseling centers. The workbook developed in this study could be transformed into a computer program useful for practice in decision-making by students on an ongoing basis.

The development of other resources for career counseling centers could be systematically accomplished by finding supplemental materials which would support the basic concepts of the workbook. In addition, personnel could be trained to use the workbook more intelligently. Such training could stimulate additional research and serve to motivate Bible college personnel to seek additional professional training in this field of study.

Recommendations

The present study was designed to develop field tested career decision materials and to provide guidelines for their future use. This section identifies recommendations regarding (1) document revision, (2) operational field testing, and (3) summative evaluation.

Recommendations for Document Revision

A necessary step prior to any use of the workbook is the revision of the material to include the findings of the present study. Recommendations relative to this step are:

1. Any future activity should utilize the Research and Development model as it was used in this study. The last stage of the Research and Development process resulted in suggested changes by students and workshop facilitators. Preparation for future use of the workbook should include the incorporation of those changes.

Another review by a Critical Review Panel should follow for final preparation before Operational Field Testing.

2. Any further instructional design should continue to follow the Dick and Carey (1978) systems model. This model was found to be compatible with the Research and Development model for both input and output.

3. A number of formatting options should be generated and studied to determine the best possible format. The format adopted for the main field test is only one option and may or may not be the most appropriate for future use.

4. One of the most useful components of the work-book is the list of resources suggested as useful especially to Bible college students. For the benefit of highly motivated students, additional resources should be considered which might enhance the decision-making of students.

5. Consideration should be given to incorporating an occupational choices component such as found in the Career Planning and Decision Making Course. Williamson (1979) and Cooke (1982) both found that this could benefit students.

6. Recognizing the effect that decision-making styles has on student decision-making, future revisions should consider the incorporation of learning exercises

to assist students in understanding their own style.

7. Consideration should be given to the development of a computer-interactive version of the decision-making workbook. Conceptually, the program could support the workbook or stand on its own as a resource.

8. Recognizing the usefulness of a career decision making workbook to Bible college freshmen leads one to consider it's applicability to other populations. The author recommends that future attempts should be made to adapt the workbook content to populations in mental health settings, industrial settings, and other population-specific settings.

Recommendations for Operational Field Testing

The next step in the R & D process is the use of revised materials in operational settings. Recommendations relative to this step would be:

1. A facilitator's guide would provide a useful tool to supplement the workbook. The guide could form the basis for more formalized training of the facilitator. Another purpose for such a guide would be to provide more standardized presentations of the material in workshop or course formats.

2. A set of audio/visuals to accompany the workbook could also prove to be useful in maintaining interest during the presentation of the material.

3. Appropriate methods for supporting the use of the materials, including consultation services, must be identified.

4. A marketing plan should be developed for promoting the rationale and usefulness of the materials.

5. A plan should be developed which will provide effective distribution of the materials to appropriate Bible college personnel.

Recommendations for Summative Evaluation

A formal summative evaluation is critical to the completing of the Research and Devlopment process. It is an essential step toward making the results of field tests generalizable. Summative evaluation also ensures proper utilization of the material. Evaluation procedures should address the workbook's effectiveness in eliciting effective career decision-making by students. It is recommended that:

1. Formal research controls must be determined in order that future research will produce valid data. The researcher should include controls related to (a) college level, (b) age, (c) gender, (d) materials distribution patterns (timing, manner of presentation, and facilitator), and (d) the student's previous career decision-making training.

2. Baseline data should be gleaned by use of pretesting. The data should reflect which AABC regional the College is in and current student decision-making behavior.

3. Consideration should be given to the collection of both quantitative and qualitative data.

4. While the integration of theology and career development have been difficult, one futher step toward complexity may be helpful. Rubinton (1980) suggested that rational and intuitive decisions-makers might do better than dependent decision makers. Krumboltz et al. (1986) say that dependents will benefit more with career interventions than without interventions. A study of decision making styles could shed light on the effectiveness of specific student populations relative to decision-making styles (Reynolds, 1988; Reynolds & Gerstein, 1991).

It is vital that future research include careful consideration of these recommmendations. It will be an essential task of the researcher to ascertain an accurate assessment of the applicability of the workbook to other Bible college populations. This can occur only if the most rigorous research practices are applied by the researcher. The Bible college student will ultimately benefit and find direction for life and for career.

References

AABC. (1990). AABC Newsletter. Fayetteville, AR: American Association of Bible Colleges.

AABC. (1984). AABC Manual. Fayetteville, AR: American Association of Bible Colleges.

AABC. (1989) Statistical report for accredited colleges: Fall 1989/fiscal year 1988-1989. Fayetteville AR: American Association of Bible Colleges.

AABC Research Commission. List of research topics that may be suitable for a Ph.D. dissertation suggested by the AABC Research Commission. Fayetteville, AR: American Association of Bible Colleges.

Amatea, E. S., Cross, E. G., Clark, J. E., & Bobby, C. L. (1986). Assessing the work and family role expectations of career-oriented men and women: The Life Role Salience Scales. Journal of Marriage and the Family, 48, 832-838.

Arnold, J. (1989). Career decidedness and psychological well-being: A two-cohort longitudinal study of undergraduate students and recent graduates. Journal of Occupational Psychology, 62, 163-176.

Atlas, M. (1980). Cognitive psychology. In D. B. Felker (Ed.), Document design: A review of the relevant research (pp. 7-25). Washington, DC: American Institutes for Research.

Babbush, H. E. (1983). Career planning and placement. In P. J. Gallagher and G. D. Demos (Eds.), Handbook of counseling in higher education (pp. 210-221). New York: Praeger.

Barnette, H. H. (1965). Christian calling and vocation. Grand Rapids: Baker.

Bell, R. (1988, Winter). AABC Newsletter, 32. Fayetteville, AR: American Association of Bible Colleges.

Bernbaum, J. A., & Steer, S. M. (1986). Why Work? Careers and employment in Biblical perspective. Grand Rapids, MI: Baker.

Blevins, B. A. (1984). The effects of career decision-making skills intervention on locus of control and career maturity of adolescent deaf students. Unpublished doctoral dissertation. Virginia Polytechnic Institute and State University.

Bloland, P. A. (1984). Leisures and career development: For collge students. Journal of Career Development, 11, 119-128.

Bloom, J., Gerstein, L., Tarvydas, V., Conaster, J., Davis, E., Kater, D., Sherrard, P., & Esposito, R. (1990). Model legislation for licensed professional counselors. Journal of Counseling and Development, 68, 511-523.

Bordin, E. S., Nachmann, B., & Segal, S. J. (1963). An articulated framework for vocational development. Journal of Counseling Psychology, 10, 107-116.

Borg, W. R., & Gall, M D. (1989). Educational research: An introduction (5th ed.). New York: Longman.

Bosma, K., & O'Rear, M. (1981). Educational experiences and career patterns of Bible college graduates. Fayetteville, AR: American Association of Bible Colleges.

Boulle-Lauria, E., Sedlacek, W. E., & Waldo, M. (1985). A longitudinal comparison of students' traditional and non-traditional career choices by sex. College and University, 60, 253-256.

Braswell, O. (1988, May). ACSP Newsletter. Fort Wayne, IN: Association of Christian Service Personnel.

Brereton, V. L. (1987). The Bible schools and conservative evangelical higher education, 1880-1940. In J. A. Carpenter & K. W. shipps (Eds.), Making higher education Christian. Grand Rapids, MI: Christian University Press,

Brock, S. B., & Davis, E. M. (1987). Adapting career services for the adult student. Journal of College Student Personnel, 28, 87-89.

Brooks, L. W., & Dansereau, D. F. (1983). Effects of structural schema training and text organization of expository prose processing. Journal of Educational Psychology, 75, 811-820.

Bross, I. D. (1953). Design for decision. New York: MacMillan.

Brown, D. (1981). Emerging models of career development groups for persons at midlife. The Vocational Guidance Quarterly, 332-340.

Burck, H. D. (1984). Facilitating career development. In H. D. Burck and R. C. Reardon (Eds.), Career development interventions. Springfield, IL: Thomas.

Burck, H. D., & Reardon, R. C. (1984). Career development interventions. Springfield, IL: Thomas.

Burka, J. B., & Yuen, L. M. (1982, January). Mind games procrastinators play. Psychology Today, 32-34.

Calhoun, C. (1981). The political economy of work. In S. G. McNall (Ed.), Political economy: Critique of American society. Glenview, IL: Scott, Foresman.

Cardwell, S. W. (1982). Why women fail/succeed in ministry: Psychological factors. Pastoral Psychology, 30, 153-170.

Carney, C. G., & Savitz, C. J. (1980). Student and faculty perceptions of student needs and the services of a university counseling center: Differences that make a difference. Journal of Counseling Psychology, 27, 597-604.

Carney, C. G., Savitz, C. J., & Weiskatt, G. N. (1979). Students' evaluations of a university counseling center and their intention to use its programs. Journal of Counseling Psychology, 26, 242-249.

Carpenter, J. A., & Shipps, K. W. (Eds.). (1987). Making higher education Christian. Grand Rapids, MI: Christian University Press.

Carver, D. S., & Smart, D. W. (1985). The effects of a career and self-exploration course for undecided freshmen. Journal of College student Personnel, 26, 37-43.

Catalyst. (1984). Catalyst campus resource. New York: Catalyst.

Chapados, J. T., Rentfrow, D., & Hochheiser, L. I. (1987). Four principles of training. Training and Development Journal, 41, 63-66.

Chickering, A. W. & Havinghurst, R. J. (1981). The life cycle. In A. W. Chickering (Ed.), The modern American college (pp. 16-50). San Francisco: Jossey-Bass.

Christianity Today. (1982, February 5). To build a better Bible college. Christianity Today, 14-16. Wheaton, IL: Christianity Today.

Clark, M. (1981). Choosing your career: The Christian's decision manual. Philadelphia: Presbyterian & Reformed.

Collins, J. R., Hurst, J. C., & Jacobson, J. K. (1987). The blind spot extended: Sprituality. Journal of College Student Personnel, 28 . 274-276.

Columbia Bible College. (1989-90). Academic Catalog. Columbia, SC: Columbia Bible College.

Cooke, D. C. (1982). The impact of a career planning and decision-making course on first year community college students. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University.

Crites, J. O. (1969). Vocational psychology. New York: McGraw-Hill Book Company.

Cronbach, L., & Gleser, G. C. (1957). Psychological tests and personal decisions. Urbana: University of Illinois Press.

Crymes, C. E. (1987). Freshman retention in the Bible college: The application of a structural model in prediction. Unpublished doctoral dissertation, University of Oregon.

Daniluk, J. C. & Herman, A. (1983). Children: Yes or no? A decision making program for women. Personnel and Guidance Journal, 61, 240-243.

Davis, L. N. (1974). Planning, conducting, & evaluating workshops. San Diego, CA: Universtiy Associates.

Davison, A., & Kantor, R. N. (1982). On the failure of readabbility formulas to define readable texts: A case study from adaptations. Reading Research Quarterly, 17, 187-209.

Demos, G. D., & Mead, T. M. (1983). Handbook of counseling in higher education. New York: Praeger.

Dick, W. & Carey, L. (1978). The systematic design of instruction. Glenview, IL: Scott, Foresman and Company.

DiStefano, P., & Valencia, S. (1980). The effects of syntactic maturity on comprehension of graded reading passages. Journal of Educational Research, 73, 247-251.

Downing, K. R., & Dowd, E. T. (1988). Career indecision: A summary of the research and implications for counseling. British Journal of Guidance and Counselling, 16, 145-156.

Doyle, L. A. (1963). A study of personnel services in Bible colleges. Unpublished doctoral dissertation. Boston University, Boston, MA.

Dubin, R. (1976). Work in modern society. In R. Dubin (Ed.), Handbook of work, organization, and society. Chicago: Rand McNally.

Duffy, T. M., & Kabance, P. (1982). Testing a readable writing approach to text revision. Journal of Educational Psychology, 74, 733-748.

Dunphy, P. W. (1969). Anatomy of a career decision. In P. W. Dunphy (Ed.), Career development for the college student (pp. 14-36). Cranston, RI: The Carroll Press.

Easley, R. R. (1987). Assessment of student outcomes in the Bible college: Identification of important outcomes and current practices. Unpublished doctoral dissertaion. University of Arkansas.

Edwards, P. B. (1984). Leisure counseling: The practice. Journal of Career Development, 11, 90-100.

Egner, J. R., & Jackson, D. T. (1978). Effectiveness of a counseling intervention program for teaching career decision-making skills. Journal of Counseling Psychology, 25, 45-52.

Eitington, J. E. (1984). The winning trainer. Houston: Gulf Publishing.

Enlow, R. (1987). Student outcomes in general education: A comparative assessment of Bible college quality. Unpublished doctoral dissertation. Vanderbuilt University.

Felker, D. (1980). Instructional research. In D. B. Felker (Ed.), Document design: A review of the relevant research (pp. 41-68). Washington, DC: American Institutes for Research.

Felker, D. B., Pickering, F., Charrow, V. R., Holland, V. M., & Redish, J. C. (1981). Guidelines for document designers. Washington, DC: American Institutes for Research.

Gagne, R. M., & Briggs, L. J. (1979). Principles of instructional design (2nd ed.). New York: Holt, Rinehart and Winston.

Gangel, K. (1980). The Bible college: Past, present, and future. Christianity Today, 34, 1324-1326.

Gangel, K. (1983). Unwrap your spiritual gifts. Wheaton, IL: Victor Books.

Gelatt, H. B. (1962). Decision making: A conceptual framework for counseling. Journal of Counseling Psychology, 9, 240-245.

Gelatt, H. B. (1989). Positive uncertainty: A new decision-making framework for counseling. Journal of Counseling Psychology, 36, 252-256.

Gelatt, H. B., Varenhorst, B., & Carey, R. (1972). Deciding: A leader's guide. New York: College Entrance Examination Board.

Gelatt, H. B., Varenhorst, B., Carey, R., & Miller, G. P. (1973). Decisions and outcomes. New York: College Entrance Examination Board.

Gerig, J., & Baxter (1983). ACSP Newsletter. Fort Wayne, IN: Association of Christian Service Personnel.

Gerken, D., Reardon, R., & Bash, R. (1988). Revitalizing a career course: The gender roles infusion. Journal of Career Development, 14, 269-279.

Gerlach, M. E. (1983). Academic advising centers. In P. J. Gallagher and G. D. Demos (Eds.). Handbook of counseling in higher education, pp. 180-189. New York: Praeger.

Gilliland, J. (1976). Readability. London: Hodder and Stoughton.

Glynn, S. M., & DiVesta, F. J. (1983). Conterol of prose processing via instructional and typographical cues. Journal of Educational Psychology, 71, 595-603.

Griff, N. (1987). Meeting the career development needs of returning students. Journal of College Student Personnel, 28, 469-470.

Grossman, B. J. (1979). The effects of decision-making skill instruction on locus of control, career choice competency, and occupational information-seeking behavior. Unpublished doctoral dissertation. Boston University.

Hale, L. L. (1974). A bold new blueprint for career planning and placement: Part L. Journal of College Placement, 35, 34-40.

Hardy, L. (1990). The fabric of this world. Grand Rapids: Eerdmans.

Harren, V. A. (1979). A model of career decision making for college students. Journal of Vocational Behavior, 14, 119-133.

Haviland, M. G., Horswill, R. K., O'Connell, J. J., & Dynneson, V. V. (1983). Native-American college students' preference for counselor race and sex and the likelihood of their use of a counseling center. Journal of Counseling Psychology, 30, 267-270.

Healy, C. C., & Mourton, D. L. (1987). The relationship of career exploration, college jobs, and grade point average. Journal of College Student Personnel, 28, 28-33.

Heer, K. B. (1986). Career interest testing, psychological congruence and the undecided student: A follow-up. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University.

Henning, L. H., & Tirrell, F. J. (1982). Counselor resistance to spiritual exploration. The Personnel and Guidance Journal, 61, 92-95.

Herr, E. L., & Cramer, S. H. (1987). Career guidance and counseling through the life span. Boston: Little, Brown & Company.

Higgerson, M. L. (1985). Understanding why students voluntarily withdraw from college. NASPA Journal, 22, 28-33.

Hofmeister, A. (1978). Models for educational research and development (mimeogrphed report). Provo, UT: Utah State University, Exceptional Children's Center.

Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills, CA: Sage.

Holland, J. L. (1973). Making vocational choices: A theory of careers. Englewood Cliffs, N.J: Prentice-Hall.

Hood, P. D., & Banathy, B. H. (1973). Design of a functional competence training program for development, dissemination and evaluation personnel at professional and paraprofessional levels in education. Berkeley, CA: Far West Consortium for Development, Dissemination and Training. (ERIC Document Reproduction Service No. ED 071624).

Horan, J. J. (1979). Counseling for effective decision making. North Scituate, MA: Duxbury.

Isaac, S., & Michael, W. B. (1981). Handbook in research and evaluation. (2nd ed.). San Diego, CA: EdITS.

Johnson, C. A., & Figler, H. E. (1984). Career development and placement services in postsecondary institutions. In N. C. Gysbers and Associates (Eds.), Designing careers (pp. 458-481). San Francisco: Jossey-Bass.

Johnson, R. W., & Hoese, J. (1988). Career planning concerns of SCII clients. The Career Development Quarterly, 36, 251-258.

Johnson, L. L., & Otto, W. (1982). Effect of alterations in prose style on the readability of college texts. Journal of Education Research, 75, 222-229.

Jones, L. K., & Chenery, M. F. (1980). Multiple subtypes among vocationally undecided college students: A model and assessment instrument. Journal of Counseling Psychology, 27, 469-477.

Jordaan, J. P., & Heyde, M. B. (1979). Vocational maturity during the high school years. New York: Teachers College Press.

Kaufman, N., Marin B., & Stoker, P. (1982). Health education for Hispanic parents: Facilitating health decision making. Unpublished mimeo. University of California, Los Angeles Medical Center.

Kello, J. E. (1986). Developing training step-by-step. Training and Development Journal, 40, 50-52.

Kelly, J. R. (1981). Leisure interaction and the social dialectic. Social Forces, 60, 304-322.

Kemp, J. E. (1978). Instructional design (2nd ed.). Belmont, CA: Fearon-Pitman.

Kemper, S. (1983). Measuring the inference load of a text. Journal of Educational Psychology, 75, 391-401.

Klare, G. R. (1976). A second look at the validity of readability of readability formulas. Journal of School Psychology, 14, 129-152.

Krannich, R. L. (1983). Re-careering in turbulent times. Manassas, VA: Impact Publications.

Krumboltz, J. D., & Hamel, D. A., & Scherba, D. S. (1977). Guide to career decision-making skills. New York: College Entrance Examination Board.

Krumboltz, J. D., Kinnier, R. T., Rude, S. S., Scherba, D. S., & Hamel, D. A. (1986). Teaching a rational approach to career decision making: Who benefits most? Journal of Vocational Behavior, 29, 1-6.

Lancaster Bible College. (1990-92). Academic catalog. Lancaster, PA: Lancaster Bible College.

Lander, V. L. (1981). Counseling in an educational setting. NASPA Journal, 18, 37-44.

Larsen, E. L., & Shopshire, J. M. (1988). A profile of contemporary seminarians. ATS Theological Education, 24, 10-97.

Leclair, S. W. (1982). The dignity of leisure. The School Counselor, 29, 289-296.

Lent, R. W., Larkin, D. C., & Hasegawa, C. S. (1986). Effects of a 'focused interest' career course approach for college students. The Vocational Guidance Quarterly, 34, 151-159.

Lent, R. W., Schmidt, & Larkin, D. C. (1985). A course in science and technology careers for returning adult students. Journal of College Student Personnel, 26, 248-249.

Lewis, K. N., & Lewis, D. A. (1982). A biblical analysis of values clarification. Journal of Theology and Psycholgy, 10, 40-46.

Loesch, L. (1981a). Leisure counseling with youth. The Counseling Psychologist, 9, 55-67.

Loesch, L. (1981b). Leisure counseling for disabled older persons. Journal of Rehabilitation, 47, 58-63.

Malmberg, P. A. (1984). Development of field tested special education placement committee parent education materials, Unpublished doctoral dissertation, Virginia Polyytechnic Institute and State University.

Manese, J. E., & Sedlacek, W. E. (1986). Religious dimensions of college students: A model for counseling and student programming. Journal of College Student Personnel, 27, 82-84.

Mann, L., Beswick, G., Allouache, P., & Ivey, M. (1989). Decision workshops for the improvement of decision-making skills and confidence. Journal of Counseling and Development, 67, 478-481.

Martin, J., & Hiebert, B. A. (1985). Instructional counseling: A method for counselors. Pittsburgh: University of Pittsburgh Press.

Martinez, A. C., Sedlacek, W. E.;, & Bachhuber, T. D. (1985). Male and female college graduates -- 7 months later. The Vocational Guidance Quaterly, 34, 77-84.

Mason-Sowell, M., & Sedlacek, W. E. (1984). Changes in campus subcultures by sex over thirteen years. College and University, 60, 63-67.

Mattison, E. K. (1986). Bible colleges in the 80s: Viable or valueless? The Baptist Bulletin, 52, 15.

Mattson, R., & Miller, A. (1982). Finding a job you can love. New York: Thomas Nelson.

McAuliffe, G. J., & Fredrickson, R. (1990). The effects of program length and participant characteristics on group career-counseling outcomes. Journal of Employment Counseling, 27, 19-23.

McDaniels, C. (1965). Vocation: A religious search for meaning. Vocational Guidance Quarterly, 14, 31-35.

McDaniels, C. (1977). Leisure and career development at mid-life: A rationale. Vocational Guidance Quarterly, 25, 356-363.

McDaniels, C. (1982). Career services for adult workers at Virginia Tech. Career Planning and Adult Development Newsletter, 4, 1-2.

McDaniels, C. (1984a). The role of leisure in career development. Journal of career development, 11, 64-71.

McDaniels, C. (1984b). Work and leisure in the career span. In N. C. Gysbers and Associates (Eds.), Designing careers: Counseling to enhance education, work, and leisure. San Francisco: Jossey-Bass.

McDaniels, C. (1989). The changing workplace. San Francisco: Jossey-Bass.

McDaniels, C., & Watts, G. (1987). Cooperation: Key to employee career development program. Career Development Quarterly, 36, 170-177.

McLaughlin, C. (1987). The effects of systematic training on paraprofessionals' problem-solving competence in counseling interactions. Unpublished doctoral dissertation. Virginia Polytechnic Institute and State University.

McRae, W. (1976). Dynamics of spiritual gifts. Grand Rapids: Zondervan.

Minor, C. W. (1984). Developing a career resource center. In H. D. Burck and R. C. Reardon (Eds.), Career development interventions (pp. 169-190). Springfield, IL: Charles C. Thomas.

Mitchell, L. K., & Krumboltz, J. D. (1987). The effects of cognitive restructuring and decision-making training on career indecision. Journal of Counseling and Development, 66, 171-174.

Moody, W. R. (1900). The life of Dwight L. Moody. New York: Fleming H. Revell.

Noble, V. N., Preston, L., & Reyna, H. (1983). The counseling needs of minority students. In P. J. Gallagher and G. D. Demos (Eds.), Handbook of counseling in higher education (pp. 190-209). New York: Praeger.

Nollen, S. D. (1982). New work schedules in practice. New York: Van Nostrand.

O'Neil, J. M., Ohlde, C., Tollefson, N., Barke, Piggot, T., & Watts, D. (1980). Factors, correlates, and problem areas affecting career decision-making of a cross-sectional sample of students. Journal of Counseling Psychology, 27, 571-680.

Osipow, S. H., Carney, C. G., & Barak, A. (1976). A scale of educational-vocational undecidedness. Journal of Vocational Behavior, 9, 33-243.

O'Toole, J. (1981). Making America work. New York: Continuum.

O'Toole, J. (1981). Work in America. In J. O'Toole, J. S. Schiber & L. C. Wood (Eds.), Working: Changes and choices (pp. 12-17). New York: Human Services Press.

Packer, J. I. (1986, June). True guidance. Eternity, 36-39.

Parks, S. (1988). The critical years: The young adult search for a faith to live by. San Francisco: Harper & Row.

Peevy, E. S. (1981). Leisure counseling: A life cycle approach. Unpublished doctoral dissertation, Virginia Polytechnic and State University, Blacksburg, VA.

Peevy, E. S. (1984). Leisure counseling: Some emerging approaches. Journal of Career Development, 11, 81-89.

Phillips, S. D. (1982). Career exploration in adulthood. Journal of Vocational Behavior, 20, 129-140.

Phillips, S. D., & Strohmer, D. C. (1982). Decision-making style and vocational maturity. Journal of Vocational Behavior, 20, 215-222.

Pickering, J. W, & Vacc, N. A. (1984). Effectiveness of career development interventions for college students: A review of published research. Vocational Guidance Quarterly, 32, 149-159.

Pike, R. W. (1989). Creative training techniques handbook. Minneapolis, MN: Lakewood Books.

Pitz, G. F. & Sachs, N. J. (1984). Judgment and decision: Theory and application. In M. Rosenzweig and L. Porter (Eds.), Annual Review of Psychology, 35, 139-163.

Powell, C. R., & Kirst, D. K. (1980). Career services today: A dynamic college profession. Bethelehem, PA: College Placement Council.

Rayman, J. R., Bernard, C. B., Holland, J. L., & Barnett, D. C. (1983). The effects of a career course on undecided college students. Journal of Vocational Behavior, 23, 346-355.

Redish, J. C. (1980). Readability. In D. B. Felker (Ed.), Document design: A review of the relevant research (pp. 69-94). Washington, DC: American Institutes for Research.

Remer, P., & O'Neill, C. (1980). Clients as change agents: What color can my parachute be? Personnel and Guidance Journal, 58, 425-429.

Remer, P., O'Neill, C. D., & Gohs, D. E. (1984). Multiple outcome evaluation of a life-career development course. Journal of Counseling Psychology, 31, 532-540.

Reynolds, J. (1988). A study of the pattern of learning style characteristics for adult dependent decision-makers. Unpublished doctoral dissertation. Virginia Polytechnic Institute and State University.

Reynolds, J., & Gerstein, M. (1991). Learning style characteristics of adult dependent decision makers: Counseling and instructional implications. The Career Development Quarterly, 40, 145-154.

Richardson, B. K., Seim, D., Eddy, J. P., & Brindley, M. (1985). Delivery of counseling and psychological services in small colleges: A national study. Journal of College Student Personnel, 26, 508-512.

Rimmer, S. M., & Kahnweiler, W. M. (1981). The relationship among work, leisure, education, future, and self: An empirical investigation. The Vocational Guidance Quarterly, 30, 109-116.

Roach, D., Reardon, R., Alexander, J., and Cloudman, D. (1983). Career counseling by phone. Journal of College Student Personnel, 24, 71-76.

Robinson, J. P. (1987). Where's the boom. American Demographics, 9, 34-37.

Roe, A. (1956). The psychology of occupations. New York: Wiley.

Rosow, J. W. (1980). Personnel policies for the 1980's. In C. S. Sheppard and D. C. Carroll (Eds.), Working in the 21st Century. New York: Wiley.

Rubinton, N. (1980). Instruction in career decision-making and decision-making styles. Journal of Counseling Psychology, 27, 581-588.

Ryken, L. (1987). Work and leisure in Christian perspective. Portland, OR: Multnomah.

Saunders, T. F., & Decker, C. (1973). Double think. Tucson: Farmington Press.

Savickas, M. L. (1990). The career decision-making course: Description and field test. The Career Development Quarterly, 38, 275-284.

Scherer, J. J. (1984). How people learn: Assumptions for design. Training and Development Journal, 38, 64-66.

Schroer, A. C. P., & Dorn, F. J. (1986). Enhancing the career and personal development of gifted college students. Journal of Counselig and Development, 64, 567-571.

Sears, S. (1982). A definition of career guidance terms: A National Vocational Guidance Association perspective. Vocational Guidance Quarterly, 31, 137-143.

Shaver, D. G. (1987). Moral development of students attending a Christian, liberal arts college and a Bible college. Journal of College Student Personnel, 28, 211-218.

Sherman, D., & Hendricks, W. (1987). Your work matters to God. Colorado Springs, CO: Navpress.

Slaney, F. M. (1986). Career indecision in reentry and undergraduate women. Journal of College Student Personnel, 27, 114-119.

Slaney, R. B. (1988). The assessment of career decision making. In W. B. Walsh & S. H. Osipow (Eds.), Career decision making (pp. 33-76). Hillsdale, NJ: Erlbaum.

Smith, D. (1980). The impact of world views on professional life-styling. The Personnel and Guidance Journal, 58, 584-587.

Sobosan, J. G. (1985). A voice within: The prophetic experience of vocation. Journal of Religion and Health, 24, 125-132.

Solomon, J. B. (1989, April 21). Working at relaxation. Wall Street Journal, 424.

Spence, A. E. (1968). A study of student personnel services in accredited Bible colleges and attitudes of presidents toward these services. Unpublished doctoral dissertation. University of Southern Mississippi.

Stinchcombe, A. L. (1983). Economic sociology. New York: Academic Press.

Stonewater, J. K., & Daniels, M. H. (1983). Psychosocial and cognitive development in a career decision-making course. Journal of College Student Personnel, 403-410.

Sue, D. W., & Kirk, B. A. (1975). Asian Americans: Use of counseling and psychiatric services on a college campus. Journal of Counseling Psychology, 22, 84-86.

Super, D. E. (1955). The dimensions and measurement of vocational maturity. Teachers College Record, 57, 151-163.

Super, D. E. (1957). The psychology or careers. New York: Harper & Row, Publishers.

Super, D. E. (1969). Vocational development theory: Persons, positions, and processes. The Counseling Psychologist, 1, 2-9.

Super, D. E. (1976). Career education and the meaning of work. Monographs on career education. Washington, DC: The Office of Career Education, U. W. Office of Education.

Super, D. E. (1980). A life-span, life-space approach to career development. Journal of Vocational Behavior, 16, 282-298.

Super, D. E. (1981). A developmental theory: Implementing a self-concept. In D. H. Montross, and C. J. Shinkman (Eds.), Career development in the 1980's: Theory and practice. Springfield, IL: Charles C. Thomas.

Super, D. E. (1982). The relative importance of work: Models and measures for meaningful data. The Couneling Psychologist, 10, 95-103.

Super, D. E. (1983). Assesment in career guidance: Toward truly developmental counseling. The Personnel and Guidance Journal, 61, 555-562.

Super, D. E. (1984a). Perspectives on the meaning and value of work. In N. C. Gysbers and Associates (Eds.), Designing careers, pp. 27-53. San Francisco: Jossey-Bass.

Super, D. E. (1984b). Leisure: What it is and might be. Journal of Career Development, 11, 70-80.

Super, D. E. (1986). Life career roles: Self realization in work and leisure. In D. T. Hall & Associates (Eds.), Career development in organiztions, p. 107. San Francisco, CA: Jossey-Bass.

Super, D. E. (1990). Career and life development. In D. Brown, L. Brooks, and Associates (Eds.), A life-span, life-space approach to career development. Career choice and development, pp. 261. San Francisco: Jossey-Bass.

Super, D. E., Crites, J. O., Hummel, R. C., Mosser, H. P., Overstreet, P. L., & Warnath, C. F. (1957). Vocational development: A framework for research. New York: Teachers College, Columbia University.

Super, D. E., & Nevill, D. D. (1985a). The salience inventory manual (research edition). Palo Alto, CA: Consulting Psychologists Press.

Super, D. E., & Nevill, D. D. (1985b). The values scale manual (reserach edition). Palo Alto, CA: Consulting Psychologists Press.

Super, D. E., Starishevsky, R., Matlin, N., & Jordaan, J. P. (1963). Career development: Self-concept theory. New York: College Entrance Examination Board.

Super, D. E., Thompson, A. S., & Lindeman, R. H. (1988). Adult career concerns inventory manual for research and exploratory use in counseling. Palo Alto, CA: Consulting Psychologists Press.

Super, D. E., & Overstreet, P. L. (1960). The vocational maturity of ninth grade boys. New York: Teachers College Press.

Sweeney, T. J., Navin, S. L., & Myers, J. E. (1984). School counselor education: shipping water or shaping up? The School Counselor, 31.

Sweeting, G. (1984, March). Understanding America's Bible school movement. Moody Monthly, 100-102.

Swift, J. S., Colvin, C., & Mills, D. (1987). Displaced homemakers: Adults returning to college with different characteristics and needs. Journal of College Student Personnel, 28, 343-350.

Swanson, J. L., & Tokar, D. M. (1991). College students' perceptions of barriers to career development. Journal of Vocational Behavior, 38, 92-106.

Tango, R. A., & Dziuban, C. D. (1984). The use of personality components in the interpretation of career indecision. Journal of College Student Personnel, 25, 509-512.

Tate, G. L., & Barker, N. C. (1978). Ethnic variations in the presentation of psychological concerns to the university counseling center. College Student Journal, 12, 12-18.

Tausky, C. (1984). Work and society: An introduction to industrial sociology. Itasca, IL: F. E. Peacock.

Thompson, A. S., Lindeman, R. H., Super, D. E., Jordaan, J. P., & Myers, R. A. (1981). Career development inventory users manual (volume 1). Palo Alto, CA: Consulting Psychologists Press.

Tiedeman, D. V., & Miller-Tiedeman, A. (1990). Career decision making: An individualistic perspective. In D. Brown & Brooks (Eds.), Career choice and develop-pment, pp. 308-337. (2nd ed.). San Francisco: Jossey Jossey-Bass.

Tracy, T. J., Sherry, P., Bauer, G. P., Robbins, T. H., Todarao, L., & Briggs, S. (1984). Help seeking as a function of student characteristics and program description: a logit-loglinear analysis. Journal of Counseling Psychology, 31, 54-62.

Tryon, G. S. (1980). A review of the literature concerning perceptions of and preferences for counseling center services. Journal of College Student Personnel, 21, 304-310.

Tyler, S. W., Delaney, H., & Kincunnan, M. (1982). Specifying the nature of reading ability differences and advance organizer effects. Journal of Educational Psychology, 75, 359-373.

Vander Zanden, J. W. (1988). The social experience. New York: Random House.

Virginia Tech Counselor Education Department. Some definitions. Handout of the Career Counseling & Student Personnel Department at Virginia Tech, Blacksburg, VA.

Vondracek, F. W., & Hostetler, M. (1990). Dimensions of career indecision. Journal of Counseling Psychology, 37, 98-106.

Ward, P. A., & Stout, M. G. (1981). Christian women at work. Grand Rapids: Zondervan.

Weissberg, M., Berentsen, M., Copte, A., Cravey, B., & Heath, K. (1982). An assessment of the personal, career, and academic needs of undergraduate students. Journal of College Student Personnel, 23, 115-122.

White, S. W. (1982). Leisure as a social issue. National Forum, 62, 2.

White, J., & White, M. (1988). On the job: Survival or satisfaction. Colorado Springs, CO: Navpress.

Williamson, V. N. (1979). 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.

Winters, C. J. (1990). A competency based model for student assessment at Appalachian Bible College. Unpublished master's thesis. University of West Virginia College of Graduate Studies.

Winters, R. W. (1985). Metamorphosis of a dream: A history of Appalachian Bible College. Unpublished doctoral dissertation. Virginia Polytechnic Institute and State University.

Witmer, S. A. (1955). Address given to the Commission on Research in Christian Education at the National Sunday School Association on October 24, 1955, at Providence Rhode Island. In S. A. Witmer...Beloved Educator. Wheaton, IL: American Association of Bible Colleges.

Worthington, E. L. (1988). Understanding the values of religious clients: A model and its application to counseling. Journal of Counseling Psychology, 35, 166-174.

Wright, G. L. (1984). Spirituality and creative leisure. Pastoral Psychology, 32, 192-203.

Yankelovich, D. (1981). New Rules: Searching for self-fulfillment in a world turned upside down. New York: Random House.

Yankelovich, D., & Lefkowitz, B. (1982a). American ambivalence and the psychology of growth. National Forum, 62, 12-15.

Yankelovich, D., & Lefkowitz, B. (1982b). Work and American expectations. National Forum, 62, 3-5.

Zunker, V. G. (1981). Career counseling: Applied concepts of life planning. Monterey, CA: Brooks/Cole.

Appendices

Due to the length of this document, my doctoral Committee has recommended that the Appendices not be included in this copy of the dissertation. The following appendices are available upon request from:

William Bartlett
304 Ridge Park Drive
Beckley, WV 25818

APPENDIX A: Document Design Guidelines

Appendix B: Critical Review Panel Vitae

Appendix C: Critical Review Form

Appendix D: Critical Reveiw Panel Responses

Appendix E: Product Content Objectives Checklist

Appendix F: Preliminary Field Test Pretest - Posttest

Appendix G: Preliminary and Main Field Test Interview Form

Appendix H: Preliminary Field Test Student Interview Responses

Appendix I: Main Field Test Pretest - Posttest Instrument

Appendix J: Main Field Test Edition of the Workshop Workbook

Appendix K: Main Field Test Student Interview Responses

VITA

William D. Bartlett, Jr.
304 Ridge Park Drive
Beckley, WV 25818
Date of Birth: 10-12-50

Educational Background

1982	Counselor Education, (Ed.D), Virginia Polytechnic Institute & State University, Blacksburg, VA.
1984 - 1985	Graduate Study, Grand Rapids Baptist Seminary, Grand Rapids, MI.
1984	Secondary Education/Counseling (M.A.), University of West Virginia College of Graduate Studies, Insitute, WV.
1973	Psychology (B.A.), Cedarville College, Cedarville, OH.
1971	Bible and Theology (3-yr. Diploma), Appalachian Bible College, Bradley, WV.
1968	Diploma, Ravenswood High School, Ravenswood, WV.

Work Experience

1991 - present	Inpatient Therapist and Crisis Specialist, River Park Hospital, Huntington, WV.
	Part-Time Outpatient Therapist, New Hope Christian Counseling Center, Hurricane, WV.
1986 - 1991	Director of Christian Service/Assistant Professor, Appalachian Bible College, Bradley, WV.
1983 - 1986	Registrar and Director of Christian Service/Instructor, Appalachian Bible College.
1978 - 1983	Director of Public Relations and Alumni Affairs, Appalachian Bible College.

1978 Interim Pastor, Second Baptist Church, Ravenswood, WV.

1977 - 1978 Pastor, Bethany Baptist Church, St. Albans, WV.

1973 - 1977 Pastor, First Baptist Church, Mantua, NJ.

Memberships and Honors

Appalachian Bible College Alumni Association (President, 1977-79)

American Association for Counseling and Development

American Mental Health Counselors Association

Association for Religious and Value Issues in Counseling

Delta Epsilon Chi (American Association of Bible Colleges Award for Outstanding Achievement)

National Career Development Association

Listed in Marquis Who's Who in Religion, Third Edition

Listed in the International Biographical Committee's Men of Achievement, Twelfth Edition

Ordained Minister, Second Baptist Church, Ravenswood, WV, May 26, 1973

Signed, William D. Bartlett, Jr.
William D. Bartlett, Jr.