



6-2002

Career Planning Needs of Students

Carol Nowakowski
Western Michigan University

Follow this and additional works at: <https://scholarworks.wmich.edu/dissertations>



Part of the Educational Assessment, Evaluation, and Research Commons, Scholarship of Teaching and Learning Commons, and the Student Counseling and Personnel Services Commons

Recommended Citation

Nowakowski, Carol, "Career Planning Needs of Students" (2002). *Dissertations*. 1296.
<https://scholarworks.wmich.edu/dissertations/1296>

This Dissertation-Open Access is brought to you for free and open access by the Graduate College at ScholarWorks at WMU. It has been accepted for inclusion in Dissertations by an authorized administrator of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.



CAREER PLANNING NEEDS OF STUDENTS

by

Carol Nowakowski

**A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Education
Department of Teaching, Learning and Leadership**

**Western Michigan University
Kalamazoo, Michigan
June 2002**

CAREER PLANNING NEEDS OF STUDENTS

Carol Nowakowski, Ed.D.

Western Michigan University, 2002

This study examines the perceived needs of college students in relationship to sex, employment, and academic rank. Specifically, factors that suggest the changing student population in higher education and the impact such changes have on providing career counseling services to meet student needs are presented. In addition, the differences between sex, employment status, and academic rank in relationship to perceived career planning needs is presented based on a review of literature.

Results of a survey to students attending Davenport University (formerly known as Davenport College) during the winter 1995 semester are summarized in terms of perceived career planning needs based on sex, employment status, and academic rank in relationship to services provided.

INFORMATION TO USERS

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

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

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

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI[®]

UMI Number: 3060696

UMI[®]

UMI Microform 3060696

Copyright 2002 by ProQuest Information and Learning Company.

All rights reserved. This microform edition is protected against
unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346

Copyright by
Carol Nowakowski
2002

ACKNOWLEDGEMENTS

The author wishes to extend appreciation to Dr. Joe Kretoivics for his guidance and support in assisting me in moving forward with my research project. Appreciation is also extended to Western Michigan University Educational Leadership professors who provided me with the knowledge and skills to produce this project, especially Dr. Charles Warfield and Dr. Robert Brinkerhoff.

This research project is dedicated to my parents, Aloysius and Frances Nowakowski, who provided me with the vision to continuously learn and to take on challenges that others dared not. I also want to thank all my sisters and brothers, who each in his or her individual way assisted me with words and actions of support, especially Joe, who once said to me, "The world is so vast and our time on it is too short". He was so right! Thanks to Carmen Wiegand, my daughter who will hopefully benefit as a female, on the research being done to address the career planning needs of women. Lastly, I would like to thank Dr. Patricia Dolly and Cindy Cole who have provided encouragement and friendship to me over the years.

Carol Nowakowski

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	ii
LIST OF TABLES.....	vi
CHAPTER	
I. THE PROBLEM.....	1
Importance of the Study.....	1
Enrollment of Students by Sex, Employment Status, and Academic Rank.....	3
Impact of Enrollment Trends at Davenport University.....	6
Statement of the Problem.....	7
Purpose of the Study.....	9
Research Questions.....	9
II. REVIEW OF RELATED LITERATURE.....	11
Overview.....	11
Career Planning Needs in Higher Education.....	11
Studies on the Career Planning Needs of Specific Subgroups in Higher Education.....	14
Davenport University Career Planning and Placement Services.....	23
Research Questions.....	24
III. METHODOLOGY.....	25
Introduction.....	25

Table of Contents—continued

CHAPTER	
Research Design	25
Sources of Data.....	27
Population.....	27
Instrumentation.....	29
Content of the Questionnaire.....	30
Data Collection.....	31
Administration of the Questionnaire	31
Data Analysis.....	32
Summary.....	34
IV. ANALYSIS OF THE RESULTS	36
Perceived Needs of Respondents.....	36
Perceived Needs by Sex.....	39
Perceived Needs by Employment Status	45
Perceived Needs by Academic Rank.....	50
Summary.....	54
V. DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS.....	56
Discussion of Results and Implications.....	56
Recommendations	67
Limits of the Study.....	69

Table of Contents—continued

CHAPTERS

Conclusion.....	70
-----------------	----

APPENDICES

A. Davenport College: Student Career Needs Assessment.....	73
--	----

B. Cover Letter.....	76
----------------------	----

C. Human Subjects Institutional Review Board Approval Letters	78
---	----

BIBLIOGRAPHY	82
--------------------	----

LIST OF TABLES

1. Numbers and Percentages of Students by Sex and Sample Total	28
2. Numbers and Percentages of Students by Employment Status and Sample Total	28
3. Numbers and Percentages of Students by Academic Rank and Sample Total	28
4. Ordered Ranking for Total Business Students Based on Mean Ratings	38
5. Ordered Ranking of Business Students Perceived Career Planning Needs by Sex.....	41
6. Comparison of Mean Scores for Career Planning Needs Based on Employment Status	47
7. Career Planning Needs of Students Based on Academic Rank.....	51
8. Davenport University's Career Planning Services in Relationship to Rank Ordered Needs of Students by Sex, Employment Status and Academic Rank	58

CHAPTER I

THE PROBLEM

Importance of the Study

Although career planning and placement services have been available on most college campuses for five decades (McBride & Muffo, 1994; Schneider, 1977), most colleges and universities continue to be locked in a paradigm of delivering student services based upon past professional experience or from past career development theory. The traditional models are not empirically derived (Kemper, 1980). Empirical study of population needs has been recommended as the first step in program planning and evaluation (Stufflebeam, 1986; Stufflebeam et al., 1971).

Current literature concurs that needs of students should be assessed periodically for staff to determine how to best serve their clientele. Indeed, the importance of assessing student needs before designing interventions has been underscored numerous times (e.g., Caffarella, 1978; Hadley & Harmon, 1999; Kuh, 1980; McBride & Muffo, 1994; Olson, 1995; Pace & Friedlander, 1978). Needs assessments have been used by Student Affairs professionals for decades in an effort to provide administrators with data in which to address the needs for services within limited organizational constraints.

Assessing student needs is one component of systemic thinking in education. Systemic change means working with systems to effect change. Failure to undergo

effective change is attributed to the lack of a systemic approach (Wheatley, 1999). Each unit should maintain a clear sense of its individual identity within a larger network of relationships that help shape its identity. Each being noticeable as a separate entity, yet it is simultaneously part of a whole system (Wheatley, 1999). With change, Ilya Prigogine's work noted that disorder can be the source of new order and that growth appears from disequilibrium, not balance (Wheatley, 1999). Wheatley suggests that this imbalance is a condition necessary to awaken creativity. Chaos theory shows that a system over time, will demonstrate an inherent orderliness. The lessons of systemic reform is to look for strategies that are most likely to mobilize large numbers of people in a new directions (Fullan, 1996). Systems reform promises to align the different parts of the system, focus on the right things and coordinate resources in agreed-upon direction (Fullan, 1996). Wheatley adds that change is prompted only when an organization decides that changing is the only way to maintain itself.

Since the early 1970's enrollment trends in higher education have reflected a more diverse and changing student population. Therefore, having an accurate assessment of needs increases the likelihood that activities and programs can be more efficiently mounted, that students' needs will be satisfied, and that subsequent improvement in students' degree of satisfaction will be evidenced (Kuh, 1980; Olson, 1995; Scriven, 1978). While there are many factors, which characterize the changing student population, the three central purposes of this study are to assess college students' perceived career planning needs in relationship to one's sex, employment status, and

academic rank, using a career planning needs assessment as a research framework. These factors begin to suggest that in order to meet the challenges that this changing student population demands, colleges and universities must seek ways to develop services that will meet the career planning needs of this growing and more diverse population (Kuh, 1980). As a practitioner interested in meeting the needs of all students, the researcher expected this study to link the needs of students to career planning services, thus enabling the researcher to effectively influence career planning and placement services at Davenport University. This new research adds to the existing research on career planning and job search needs and interests conducted by McBride and Muffo (1994), with the added dimension of analysis to subpopulations of students.

Enrollment of Students by Sex, Employment Status, and Academic Rank

College campuses have experienced rapid change in their student population. For example, women in 1979 stepped into the majority on college campuses, and the college gender gap has widened at virtually every type of school: large and small, public and private, two year and four-year (Koerner, 1999). From the 23,617-student, state-run University of New Mexico (57% female) to 2,032-student, Catholic affiliated Edgewood College in Wisconsin (73% female) to the mammoth University of California system (seven of the eight campuses have female majorities) women are flooding colleges and universities. Women make up 54% of college students 24 years of age and younger and 56% of college students in total (Pollitt, 1999). In 1999,

women earned just over 57% of all bachelor's degrees, compared with 43% in 1970 and under 24% in 1950 (Koerner, 1999). The United States Department of Education now projects that by 2008 women will outnumber men in undergraduate and graduate programs by 9.2 million to 6.9 million (National Center for Education Statistics, 1999). The trend is moving quickly and if it continues at this pace, "the graduation line in the year 2068 will be all females," says Tom Morenson, a higher-education policy analyst (Koerner, 1999, p. 47).

Women are making the decision to start or reenter colleges and universities for a number of reasons: many are divorced, which may bring on the reevaluation of self; often, their families have matured; and many are seeking a career change. Nancy Perry, executive director of the American School Counselor Association said, "When I was a high school counselor 20 years ago, I had many parents say that they thought their daughter should take home economics. Today, women believe they can achieve more and they go for it!" (Koerner, 1999, p. 47). Indeed, these are not the only reasons women are starting or reentering higher education, but they are among the most common. Whatever their reasons for entering college, women are the fastest growing student population (Glass & Rose, 1987; Koerner, 1999; Sillings, 1984).

The second area of concern of this study is the current employment status of college students. According to recent estimates, the majority of college students are working in full- or part-time capacity while classes are in session (Stern & Nakata, 1991). Aslanian and Brickell (1978) noted 40 million adults in America are in some kind of career transition, and 60% will seek further education. The adult student often

is found to have outside responsibilities, such as family and work, and therefore needs to understand career issues in a broader context of life planning. Because of the lack of useful data on older students, most campus policies have been developed from data collected from younger students (Joyce, 1997). Not only are nontraditional students working while attending college, so are the traditional students. Students report various reasons for working while attending college including the rapidly increasing costs of higher education, higher wages for part-time jobs, and getting a jump on the job market (Warrington, 1987; Warrington & Rives, 1980).

A third concern of this study is career planning needs based on students' academic rank. Enrollment trends for undergraduate programs increased rapidly during the 1970s, but dipped between 1983 and 1985. Since 1985, undergraduate enrollment has shown an increase every year except 1993, rising 16% between 1985 and 1993 (Digest of Education Statistics, 1995). One reason for the increase is due to the large influx of adult students and there seems to be no decrease in the adult population in the foreseeable future (Hamilton, 2000).

The shift in the number of women in higher education, the current trends in the employment status of students, and differing academic ranking of students, supports that fact that colleges and universities must attempt to accommodate the needs of all students. However, as stated in the Carnegie Foundation for the Advancement of Teaching (1986), the survival of many colleges and universities may rest in their ability to reorganize and take a first step in developing new ideas and concepts for all students. This becomes increasingly important as financial constraints become more

noted at institutions and administrators continue to turn to the growing diverse needs of all students as a source of revenue (Greenblatt 2001; Hamilton, 2000; Lawler, 1991). The problem, however, that most institutions of higher learning continue to develop and implement services designed to meet the needs of students as if they were all alike. Indeed, a needs analysis begins the systemic approach to the linking of all student needs to institutional services. More specifically, linking student needs and career planning is critical to planning new services and to adapting existing services if colleges and universities are to accommodate diverse populations (Kuh, 1980; McBride & Muffo (1994). Meeting the needs of all students is essential to the development of services designed to recruit and retain them.

Impact of Enrollment Trends at Davenport University

The national enrollment trends are reflected in Davenport University's student enrollment, with the average student being a 31-year-old employed female. An enrollment profile in Fall Semester, 1994 noted that 25% of the student population was male and 75% was female. In regards to employment, 53% were employed full-time, 39% were employed part-time, and 8% were unemployed. Upperclass (Juniors and Seniors) students accounted for approximately 60% of the students and 40% were underclass (Freshmen and Sophomores) (Davenport University Fall Enrollment Report Fall, 1994). Davenport University has always positioned itself on its successful career planning and placement rate of students, which is reflected in the college's motto "Make a Living, Make a Life, Make a Contribution." However, as was

discussed, providing services for all populations requires the institution to understand the needs of the population it is serving in the area of career planning and placement (Chickering & Kytle, 1999; Schlossberg, Lynch, & Chickering, 1989). To gain insights, institutions like Davenport University, should conduct a needs analysis to determine whether or not the needs of the population are linked to the services provided.

Statement of the Problem

Institutions of higher learning concerned with a changing student population and financial constraints, are seeking to develop student services that are specifically designed to meet the needs of the student population. Marshall (1995) noted that colleges must be viewed as dynamic, adaptive, self-organizing systems, not only capable but inherently designed to renew themselves and to grow and change. Peter Senge (1990) suggests five key components that will help organizations become learning organizations: (1) systems thinking, (2) personal mastery, (3) mental models, (4) building shared visions, and (5) team learning. Senge adds that through learning an organization becomes able to do something that they never were able to do before. The model of the “learning organization” offers ways to conceptualize organizational responsiveness, effectiveness, and efficiency in administering student services in education. It is not sufficient to make decisions regarding student services based upon assumptions about the needs of students. Colleges and universities must assess the needs of their particular student population in order to ensure that the services

provided are meeting the perceived needs of the students they are attempting to serve. The use of assessment and research can help alter the prevailing mental models. Wheatley (1999) adds that only when those mental models are dismantled can new ones emerge.

An example of out-of-date models is the career planning and placement services, which are designed to meet the needs of the student. Many universities and colleges have responded to the diversity of students on campuses by implementing specific career planning workshops and activities for them, but often without careful analysis and assessment of needs in relationship to services provided. When this occurs, it is possible that needs and services are not aligned. A specific example is the career planning and placement services at Davenport University; which was established when the institution was founded. The College conducts biannual student satisfaction surveys related to student services, (including career planning and placement services) but these surveys do not specifically assess the career planning needs of the subgroups in which it is serving. This, however, is not an unusual practice, as most career planning services on college campuses are based on past professional practice or career development theory (Ashcraft, 1975; Bachhuber, 1977; Blocher & Rogers, 1977; Hurst, 1978; Olson, 1995; Robb, 1976). Specifically, at the time of this study, the career planning services continued to operate with little consideration to this important step that would certainly assist in improving the services provided; consequently, it is possible that critical career planning needs of all students are not being adequately met by the services provided.

Purpose of the Study

This study addressed the following questions: What are the career planning needs of students? What are the career planning needs of female and male students? Is there a difference in the career planning needs of female and male students? What are the career planning needs of students employed full-time, part-time, and not employed? Is there a difference in the career planning needs of students that are employed full-time, part-time, or not employed? What are the career planning needs of upperclass (seniors and juniors) and underclass (sophomores and freshmen) students? Is there a difference in the career planning needs of upperclass and underclass students?

To address these questions, this study sought to identify needs expressed by these populations and to determine what career planning services can be offered to best meet the needs of students at Davenport University in particular. It is further hoped that this study will provide a useful approach for colleges and universities, in a similar setting, that are seeking to design or redesign career planning services that fit their specific student population. The study examined the issue of identifying needs by three specific characteristics; sex, employment status, and academic rank.

Research Questions

- 1. What are the career planning needs of students?**
- 2. What are the career planning needs of female and male students?**
- 3. How are the career planning needs of female and male students different?**

4. What are the career planning needs of students based upon their employment status (full-time, part-time, not employed)?
5. How are the career planning needs of students employed full-time, part-time, or not employed different?
6. What are the career planning needs of students based upon their academic rank (upperclass or underclass)?
7. How are the career planning needs of students in upperclass and underclass different?

CHAPTER II

REVIEW OF RELATED LITERATURE

Overview

Literature is scanty in the area of specific career planning needs of subgroups within a general population of students in higher education. Most of the literature reviewed here discusses the need for career planning services in higher education as it relates to needs assessment of the total student population. While literature is plentiful in the area of career planning and needs assessments, information specifically relevant to the career planning needs of subgroups within the general student population, is less abundant.

Career Planning Needs in Higher Education

Although it is difficult to gather data on the written history regarding organized career planning and placement services on college campuses, it is known that "from their inception American colleges have assumed a vocational advising function" (Blaska & Schmidt, 1977, p. 368). Over time various work by theorists such as Frank Parsons (1909), Super (1953), Tiedeman and O'Hara (1963), Bandura (1986), and Lent, Brown, and Hackett (1994) proposed theories to explain career decision-making. In 1973, the National Vocational Guidance Association and the American Vocational Associations recommended that career services be sensitive to students'

different rates of development and available to college freshman as well as college seniors. Many models used during the past decade for delivering career planning services on colleges and universities followed the development approach (Super, 1983). Because the approach by Donald E. Super (1983) is one of the most specific in defining career development stages, it has served as the bases for many of the models used to deliver college career planning services.

Career development models serve as guides in the effort to effectively design career planning services and programs. However, Stufflebeam et al. (1971) advocate the use of a needs assessment procedure to determine what needs are perceived by students before program planning begins. Warner (1975) has pointed out that all too often programs and services are designed to satisfy the program's needs rather than the needs of students. Adequately designed services cannot be developed until the specific needs of various groups within the college are identified. Brinkerhoff and Gill (1995) noted that the design and delivery of all services should not be viewed as a "one size fits all" approach. Morrill, Oetting, and Hurst (1974) and Kuh (1980) have emphasized the critical need for a systematic assessment of individual needs in order to plan appropriate and effective interventions.

Needs assessments have been employed on many colleges and universities to study student services in general and career planning services in particular (Ard & Hyder, 1978; Benedict, Apsler & Morrison, 1977; Fullerton & Potkay, 1973; Indrisano & Averbach, 1979; Kuh, 1980; McWhirter, Torres, & Rasheed, 1998; McBride & Muffo, 1994; Olson, 1995; Urbin, 1987; Walters & Saddlemire, 1979).

Typically, these procedures have included compiling a list of need statements, which are then rated for importance, or level of concern by a representative sample of students. Career planning needs assessment procedures employed on college campuses support the view that students want career assistance (Benedict et al., 1977; Carney & Barak, 1976; Carney, Savitz & Weiskott, 1979; Friedlander, 1978; McBride & Muffo, 1994; Urbin, 1987). In 1974, Yankelovich and Clark reported that in a national sample of college students the most important reason for attending college was to prepare for a career, thus making the need for career services invaluable. The 1978 American Council on Education Survey reported 77% of entering college students stated the reason for attending college was to get a better job (Astin, 1980). In 1991, Walter Nolte noted that most adult students expected to change jobs or careers as a result of higher education schooling. Since students are attending college with career preparation as one of their major goals, it is not surprising that survey results have indicated that college students expect career counseling and placement services to be provided while in college. In a national sample of high school juniors, Prediger, Roth, and Noeth (1974) found that 75 percent of the respondents expected to receive career planning assistance while in college. The University Placement Services Office at Virginia Tech (McBride & Muffo, 1994) conducted a needs assessment of 489 randomly selected students for the purpose of assessing students' perceptions regarding the degree of help needed from various career development services. A list of statements concerning aspects of career services noted that students were consistent in feeling they have a medium-to-strong need for information or assistance regarding the service areas

typically found in career planning and placement operations.

Even though there have been relatively consistent findings regarding the need for career planning services in higher education, the most troublesome aspect of the needs assessment methodology has been the lack of needs that focus on identifying the needs of subgroups within the overall student population. The problem being that a need profile for the general student population may not be a reliable indicator of a genuine area of need endorsed by a subpopulation (Barrow, Cox, Sepich, & Spivak, 1989; Koch, 1990; Urbin, 1987).

Studies on the Career Planning Needs of Specific Subgroups in Higher Education

The changes in the student population on college campuses today has heightened the awareness of the need to look beyond the general population to the specific needs of subgroups within the college environment. A review of literature on subgroup career planning needs is not as abundant as literature on the topic in general. However, the researcher attempted to locate published surveys carried out on other college campuses. The researcher was specifically interested in reviewing literature on career planning needs of students sub grouped in the following areas of higher education: sex, employment status and academic rank. Relatively few studies were found regarding the career planning needs of students based on sex, employment status, and academic rank.

In 1983, Osipow argued that many of the assumptions inherent in traditional theories of career development fall short in their application to women. Since that

time, numerous career counselors and vocational psychologists have echoed Osipow's claim (Diamond, 1987; Luzzo, McWhirter, & Hutcheson, 1997). Developing strategies to assist women and ethnic minorities as they engage in career exploration and planning process represents one of the most important challenges facing the career counseling profession (Hoyt, 1989; Jarmon, 1983).

One of the most thorough subgrouping career planning studies was conducted by Margaret Kemper (1980). Kemper surveyed 644 Duke University undergraduate students using the Career Development Questionnaire. The study assessed college students' perceived career development needs based upon ones sex and class ranking. The three major findings of the study include:

1. Female students expressed greater need than male students for relating self-knowledge to a career choice and greater need to understand how sociological influences like sex role stereotyping affect career decision-making.
2. Female upperclassmen expressed greater need for job implementation skills like resume writing, interviewing, and job search strategies than female underclassmen and a greater need than all male students.
3. Underclassmen expressed greater need for career information than upperclassmen.

Kemper recommended that further career needs assessment procedures be conducted on other college campuses for comparative purposes, up until her study there were few published career planning studies on these subgroups within the general higher education student population.

The Counseling and Testing Center, at the University of Georgia conducted a needs assessment of undergraduate students' academic, career and personal needs, during the winter quarter, 1980 (Weissberg, Beretsen, Cote, Cravey, & Heath, 1982). A total of 1,625 randomly selected students participated in the 65-item survey to assess needs in the personal, career, and academic areas. Students responded to each of the 65 items by marking one of the following responses: No Need, Weak Need, Moderate Need, or Strong Need. Of the nine items in the career development area, the highest needs centered on obtaining work experience, exploring job opportunities, developing job-seeking skills, and preparing for careers. These items were either a strong or moderate need for 72% to 80% of the sample. As a group, the career development needs were rated considerably stronger than either the personal or academic needs. On the average, the nine career development needs were rated as moderate or strong by 64% of the sample ($X=2.86$), as compared to 46% for the 16 academic needs ($X=2.41$), and 38% for the 40 personal needs ($X=2.20$). This finding is consistent with previous needs assessment research (i.e., Carney et al., 1979) and with numerous national surveys such as the 1978 American Council on Education Survey.

Most important to the researcher of this study, is the difference found in career development needs based on one's sex and one's academic ranking. Female students expressed a significantly stronger need on exploring job opportunities than did the male students. Secondly, upperclass students expressed a significantly stronger need on developing job-seeking skills, while underclass students expressed a stronger need on help in choosing a major.

Healy and Reilly (1989) conducted a career needs assessment of community college students. The study compared 405 older and younger college students enrolled at one of the ten California community colleges. The study, which primarily focused on age differences in relationship to career planning needs, found sex to be a distinguishing career planning need in two need areas. Women reported more need to become certain about their career plans, and men reported a greater need for obtaining a job (degree of significance less than .01). The researchers concluded that there was a need to further investigate issues related to the specific career needs of males and females. Rotberg, Brown, and Ware (1987) found that gender and sex-role orientation did predict self-efficacy in various traditional and nontraditional careers. Additional research by Fassinger (1990) found that career orientation and college major are determined by a combination of ability, personality characteristics, and attitudes toward sex roles. This finding was supported by Judith Sturnick, director of the American Council on Educator's Office of Women in Higher Education who stated, "we still find that women are more likely to be concentrated in female fields, which have lower pay, fewer opportunities for advancement and less prestige" (Koerner, 1999, p. 50). The California Institute of Technology, for example, is still 73% male, where computer science degrees result in high wage occupations. Friedman (2000) noted that the number of women graduating in computer sciences and information technology is decreasing despite the increased need for workers in these areas. Harrington (1998) suggests that career counselors become more open to the technological potential of all students, ensuring that they do not allow prejudicial thinking to

keep them from offering appropriate career guidance. Lent et al. (1994) found that the perception of barriers play a particularly instrumental role in the career development of women. A study by McWhirter et al. (1998) suggests that women face external barriers as well as individual/social barriers in career decision-making and adjustment. Researchers Darrell Anthony Luzzo and Ellen Hawley McWhirter (2001) surveyed 168 female and 118 male undergraduates on both their perceived educational and career-related barriers and their perceived ability to cope with such barriers. Luzzo and McWhirter found that, as expected, women perceived significantly greater career-related barriers than men did. They concluded that integrating interventions for coping with barriers into career counseling may be particularly salient for those persons who are likely to encounter numerous barriers during the career decision-making process.

Haviland and Gohn (1983), conducted a needs assessment at Montana State University to determine the career planning needs of students by class ranking (freshmen, sophomore, junior, and senior). A total of 261 students completed the questionnaire during spring quarter, 1980. Respondents were asked to indicate the degree to which they viewed each of the eight items on a Likert scale, with 1 (no need) to 3 (great need) as being necessary for their career planning. It was assumed by the researchers that the career planning needs of students at Montana State University would differ by class and that these differences should be analyzed accordingly. When comparing mean scores for the eight need items, students in general, indicated their greatest needs were for information on occupations for which their chosen

majors prepared them, and for more direct experiences in occupations they were considering. It was noted that freshmen, sophomores, and juniors rated these needs highest, whereas seniors felt greatest needs for knowledge of the job market and of people and places on campus that can help with career planning. Statistically significant differences were found to exist in the following areas:

1. Freshmen reported a significantly greater need for "better understanding of myself to choose an occupation that closely fits my values, goals and lifestyle preferences" than did juniors ($t=2.72$, $p<.01$).
2. Freshmen reported a significantly greater need for "Evaluation of my interests and abilities by vocational testing" than did seniors ($t=3.15$, $p<.05$).
3. Freshmen and sophomores reported a significantly greater need for "Information on technical vocations including apprenticeships and technical schools as alternatives to the four-year college" than did seniors ($t=3.08$ $p<.01$ and $t=2.13$, $p=.05$, respectively).
4. Freshmen and sophomores reported a significantly greater need for "Information on the occupations for which my chosen major will prepare me" than did seniors ($t=2.77$, $p<.01$ and $t=2.51$, $p<.05$, respectively).
5. Freshmen, sophomores, and juniors reported a significantly greater need for "More direct experience such as part-time work or job visit in occupations I am considering" than did seniors ($t=2.80$, $p<.01$, $t=3.42$, $p<.001$, and $t=2.29$, $p<.05$, respectively).

Generally, freshmen and sophomores indicated a greater need for career

planning information than did either juniors or seniors. The researchers noted the limitations of the study as the findings being specific to Montana State University. However, the researcher hoped that the findings would generate a basis for investigation for other institutions.

Retta Poe (1991) conducted a needs assessment at Western Kentucky University to determine the development changes in vocational identity among college students. Poe utilized the "My Vocational Situation" instrument designed by Holland, Daiger and Power (1980) to assess three aspects of career decision making: clarity and stability of vocational identity, need for information about occupations, and perception of obstacles to realizing one's career goals. The study respondents were full-time undergraduate psychology majors at Western Kentucky University (N=451). Completed questionnaires resulted in a response rate of 152 students (34% of the population). Poe's study found:

1. Lower-division students reported a greater need for career information than did upper-division students. This finding supports earlier findings by Haviland and Gohn (1983), Walters and Saddlemire (1979), and Weissberg et al. (1982).

2. Women expressed significantly more need for information about careers than did men ($F= 5.5583$, $df\ 1$, $p=.0197$). This finding differed from Lucas (1988), who reported no sex difference in Occupational Information scores.

Poe concludes in the study that further efforts should be directed toward identifying subgroup career planning needs and the critical courses or experiences that contribute to the clarification of vocational identity among students of different

majors (not just psychology majors).

Walters and Saddlemire (1979) surveyed entering freshmen to determine their perception of needs for career information and for their awareness and understanding of career planning. The study involved 3,134 entering freshmen at Bowling Green State University (Ohio) in the fall of 1975. A total of 2,507 students (75% of the entering freshmen class) participated in the study. The questionnaire asked students to rate eight career information items on a 3-point scale, with 1(no need) to 3 (great need). The findings of the study found that overall, the career information with the greatest need for the freshmen students was "Information on the occupations that my chosen major will prepare me for" (68% of the total sample indicated a "great need" in this area). Vocational testing and technical vocations as alternatives to the four year college stood out as being lower in need than the eight others career information areas. Subgroup differences based on one's sex were evaluated by the t-test. Comparisons of responses by sex, to the eight career information areas, found few significant differences in career information needs between men and women. Out of the eight items listed, one revealed a significant difference. The item "More direct experiences such as part-time work or job visits in occupations I am considering" revealed a significant difference between the men and women respondents ($t=5.13$, $p < .01$). Based upon the conclusions from the study, the researchers suggest that by developing an awareness of the career planning skills of subgroups, career planning and placement offices will better motivate students to participate in career planning programs. The relationship between a college student's employment status and career

planning needs has not been the focus of career planning needs assessment studies despite the fact that most students work long hours while they are enrolled (King, 1999). A study in 1999 by Hadley and Harmon noted that 69% of students at Washington State worked during the 1996/97 academic year. A study by Cuccaro-Alamin and Choy (1998) noted that in 1992/93, 72% of undergraduates worked intensively, averaging 31 hours a week. The lack of published literature regarding this relationship between employment status and career planning needs is evident in the review of literature. One study by Luzzo (1995) researched student employment. Luzzo's research analyzed 305 first-year college students attending a medium sized public university in the South. The study looked at the impact of college student employment on the career decision-making process. He found that students who are employed in occupations that are congruent with their interests were more likely to possess the belief that they have a significant amount of control over the career decision-making process than other students who were either unemployed or working in jobs that are incongruent with their career interests. Further research by Luzzo (1995) analyzed additional career decision-making benefits associated with college student employment, especially when such employment offers students the opportunity to obtain job experience in areas related to their career interests. First year college student's career interests were measured by Holland's Self-Directed Search – Form CP. The data from this investigation provide evidence that students who are employed in occupations that are congruent with their career interests possess more of an internal locus of control than other students. In 1997, Luzzo et al. surveyed 305

traditional-aged first-year college students who were employed in occupations congruent with their career interests. The survey found that these students were more likely than other students to believe that career decision-making was a process over which they had personal control. Luzzo et al. conclude that there is a need for additional research to be conducted to forward our understanding and awareness of the role that employment plays in college student career development.

Davenport University Career Planning and Placement Services

The focus of this study is Career Planning and Placement Services at Davenport University. Davenport University has four main campuses located in Grand Rapids, Lansing, Holland, and Kalamazoo. From the College's inception, the Career Planning and Placement Office has played a critical role in the recruitment and retention of students. The Career Planning and Placement office offers a variety of student services to include: an employment databank within geographic regions, a referral system, internship options, resume databank, and career fairs.

Despite the many services provided by the office, many specific needs of sub-populations of students may not be met. This, in part, is what makes this study compelling, not only for the researcher but also for Davenport University. Specifically, if administrators and faculty expect to recruit and retain students based upon this service, then they must examine the needs of this heterogeneous population that they serve. Once the career planning needs have been determined, the career planning and placement services and student needs must become aligned so that the "gap" between

needs and services is closed. Therefore, the research questions that make up this study include an attempt to determine the needs of the various subgroups that make up the students that are served.

Research Questions

1. What are the career planning needs of students?
2. What are the career planning needs of female and male students?
3. How are the career planning needs of female and male students different?
4. What are the career planning needs of students based upon their employment status?
5. How are the career planning needs of students employed full-time, part-time, or not employed different?
6. What are the career planning needs of students based upon their academic rank?
7. How are the career planning needs of students in upperclass and underclass different?

CHAPTER III

METHODOLOGY

Introduction

The purpose of this study was: first, to seek a better understanding of the needs of students in regards to career planning at Davenport University; to determine how these needs differ based on sex, employment status, and academic rank (upper-class and underclass), and third to compare the findings to services provided by Davenport University in the Career Planning and Placement Office. This chapter contains descriptions of the methodology and procedures used in the study under the following subsections of research design, sources of data, population, instrumentation, content of the questionnaire, data analysis, and summary.

Research Design

This is a survey of the career planning and job search needs of business students attending Davenport University. The researcher has focused on the business students enrolled at Davenport University. This choice has been made in large part because the career planning and job search needs of a given population can provide insights into career planning and job search services that need to be provided within a given context (Brinkerhoff, 1987; Isaac & Michael, 1981).

In addition, although the survey may not be defensible in terms of making

generalizations about all career planning needs of students, its major strength lies in its recognition of the importance of context and thus evidence in dealing with a process like assessing and analyzing needs of students by sex, employment status, and academic rank. Further, the researcher understands that when several studies of career planning needs in a variety of settings have been conducted, it is possible to make generalizations about career planning needs of students by sex, employment status, and academic rank. In fact, it is hoped that this study will become part of the process of accumulating the necessary survey studies to support generalizations. Equally important, this study will better inform administrators and career planning counselors of Davenport University about critical factors that will enable them to better meet the needs of their students and assure effective recruitment, retention, and job placement of all of its student population.

The framework for the study was based upon the Student Assessment of Career Goals and Service Needs study conducted by James McBride and John Muffo at Virginia Polytechnic Institute and State University (Virginia Tech) in 1989. This study was designed to discover the importance students place on their career goals, the expectations students have concerning their career planning and job search needs, and the most effective and efficient ways of delivering career services to them. The students in this study were asked to evaluate the importance or appropriateness of a number of statements, rating each on a four-point Likert-type scale ranging from none or low to high. Findings were reported using mean scores for items listed and displaying a rank order by means in descending order.

The researcher of this study was primarily concerned with one segment of McBride and Muffo's research which dealt with the expectations students have concerning their career planning and job search needs. This study aimed to look at sub-populations within the educational setting versus reporting out findings based on the total student population.

Sources of Data

The data for this study was a survey of all participants enrolled in the business curriculum at four campuses of Davenport University (Grand Rapids, Lansing, Holland, and Kalamazoo) during winter term, 1995. Davenport University serves the Great Lakes region as an independent, multi-campus institution providing business and related careers. The main campus is located in Grand Rapids, Michigan. The survey enabled the researcher to address the career planning needs of students and the demographic questions that followed.

Population

The subjects used in this research were 507 college business students attending Davenport University. The students were enrolled in the business curriculum. A random cluster sample of business classes (19% from the four campuses) was chosen to complete the needs assessment survey instrument, which proportionately represented all students. The survey had a response rate of 79%, with a representative sample proportional to the business student enrollments at each campus. A

description of the sample in terms of sex, employment, and academic rank is contained in Tables 1-3, respectively.

Table 1

Numbers and Percentages of Students by Sex and Sample Total

Sex	Number	Percentage Total
Male	153	38%
Female	248	62%
Total	401	100%

Table 2

Numbers and Percentages of Students by Employment Status and Sample Totals

Status	Number	Percentage Total
Full-time	239	60%
Part-time	121	30%
Not Employed	41	10%
Total	401	100%

Table 3

Numbers and Percentage of Students by Academic Rank and Sample Totals

Class Status	Number	Percentage Total
Upperclass	258	64%
Underclass	143	36%
Total	401	100%

Instrumentation

There was one instrument designed for this study: A survey instrument or questionnaire. The questionnaire, Davenport College Student Career Needs Assessment (SCNA) (Appendix A) consisted of two sections. The first section seeks information related to career planning needs. The second section seeks demographic information.

Specifically, the first section is essentially a Likert-type 7-point scale that seeks to solicit information about the respondent's perceived career planning needs. The questionnaire was based on the review of literature, interviews with career planning and placement professionals, and from an examination of previous needs assessment surveys, specifically the Student Career Needs Assessment designed and tested by McBride and Muffo (1994) at Virginia Polytechnic Institute and State University. James McBride in two personal interviews (1995 and 2002) confirmed that the research questions asked in Section II: Career Planning and Job Search Needs of the survey instrument were valid and reliable. McBride and Muffo based the career planning needs questions on previous research conducted by George Kuh (1980) and others. Kuh, is a leading theorist in the area of needs assessments in student affairs (McBride, 2002). John Muffo, the second author of the Virginia Polytechnic Institute and State University study and President of the Association for Institutional Research, validated the career planning needs questions by employing field testing, test/retesting, and factor analysis. Each item related to career planning needs on the survey instrument was held up to be independent from another. McBride added that

throughout the process of validating the survey questions, questions were deleted or modified if found to be too close in relationship to another question (McBride, 2002). The first draft of this research study was reviewed by the Vice President of Administration, the Vice President of Academics, and the Davenport University Management Team which included the Dean of Kalamazoo Campus/Senior Vice-President, Dean of Student Services, Academic Dean, and Director of Admissions. Secondly, it was reviewed by the Directors of Career Planning and Placement at all four Davenport University campuses. In addition, advice on the design of the instrument was sought from Dr. Brinkerhoff, Educational Leadership professor at Western Michigan University, and expert on needs assessments. As a result of these reviews, slight modifications were made to the questionnaire; format layout, age, and color-coding for campus attended were added.

Following these changes, a second draft instrument was prepared. Field-testing was done prior to the final revision of the SCNA to further refine the instrument. Twenty students from two business classes were requested to complete the questionnaire and to comment on misleading phraseology or unclear instructions. The few comments made were not substantive, and, thus, did not result in changes in the questionnaire.

Content of the Questionnaire

The first 24 items (Items 1- 24) sought information on the perceived career planning needs of the respondents. The respondents were instructed to respond by

"circling the number that best describes the level of need for information or interest to participate in activities that will assist you in developing your career plans." A seven-point rating scale was provided for each item. A high rating of 7 indicated that a significant need/interests exists, and a low rating of 1 indicated that no need or interest exists. In addition, subjects were given the opportunity to respond to the following open-ended item, "Please use the reverse side of this form to share with us any additional thoughts you may have regarding your career needs." This open-ended item was intended to capture any emerging needs not previously identified in Items 1-24.

Data Collection

Administration of the Questionnaire

Information was obtained from Davenport University Office of the Registrar to provide a proportional breakdown by campus of business students that was consistent with the total college business student population. A total of 2,602 business students were enrolled at Davenport University. A random cluster sample of business classes (19% from the four campuses) were chosen to complete the needs assessment survey instrument. The percentage used provided for the survey size to be proportionately representative of the student population.

The SCNA was color-coded (by campus for follow-up purposes) and was distributed by the researcher to respondents attending a randomly selected business class the four campuses (Grand Rapids, Holland, Lansing, Kalamazoo) of Davenport University, during the winter term of 1995. A second visit to each campus classroom

was made to gather responses from students who were absent during the first round of data collection.

A cover letter (see Appendix B) was read to all respondents prior to the start of the completion of the survey. The cover letter explained the purpose of the study, guaranteed confidentiality, and specified the time requirements. Students were asked to read all survey directions before responding. A total of 401 respondents filled out the questionnaire, resulting in a 79% response rate.

Data Analysis

As a first step in the process of data analysis, all items on the questionnaire were tallied and descriptive statistics were computed. These procedures in part enabled the researcher to detect any outliers in the data procedures. The SPSS/PC+ Studentware Plus™ (Norusis, SPSS Inc., 1991) was used for the statistical procedures. The researcher also explored various tests to respond to the research questions.

The first research question was: What are the career planning needs of students? This research question required frequency tabulations of the Items 1-24 of the questionnaire and rank ordering of these variables to show the order of the perceived significant need or interest by respondents. For rank ordering the needs, mean scores were used. The rationale for using rank order was to provide the data in a manner that would fit the context in which the study was done. Rank ordering was also employed in the McBride and Muffo study (1994).

The second research question was: What are the career planning needs of

female and male students? This research question required frequency tabulations of the Items 1-24 of the questionnaire based on sex and rank ordering of these variables to show the order of the perceived significant need or interest by respondents by sex. For rank ordering the needs, mean scores were used. Rank ordering of the needs was supported by the earlier research conducted by McBride and Muffo (1994).

The third research question was: How are the career planning needs of female and male students different? This research question required the t-test for each of the Items 1-24 of the questionnaire based on sex to determine whether or not there was a significant difference in the means of the items measuring the perceived career planning needs that could be explained by sex differences, at the .05 level of significance. The rationale for using the t-tests is based on similar research studies conducted by McBride and Muffo (1994) and Kemper(1980).

The fourth research question was: What are the career planning needs of students based upon their employment status? This question like the second research question required frequency tabulations of the Items 1-24 of the questionnaire based on employment status and rank ordering of these variables to show the order of the perceived significant need or interest by respondents' employment status. For rank ordering the needs, mean scores were used. Rank ordering was supported by earlier research conducted by McBride and Muffo (1994).

The fifth research question was: How are the career planning needs of students employed full-time, part-time, or not employed different? An analysis of variance (ANOVA) was run to compute the F statistic to establish whether or not

there was a significant difference in the means of the items measuring the perceived needs that could be explained by different employment status at the .05 level of significance. The Tukey post hoc comparisons for pairs of means was used to identify pairs of means that appear to be different from each other.

The sixth research question was: What are the career planning needs of students based upon their academic rank? This question required frequency tabulations of the Items 1-24 of the questionnaire based on class status and rank ordering of these variables to show the order of the perceived significant need or interest by respondents' academic rank. For rank ordering the needs, mean scores were used. Rank ordering was supported by earlier research conducted by McBride and Muffo (1994).

The final research question was: How are the career planning needs of students in upperclass and underclass different? This question required the t-test to be computed for each Item 1-24 of the questionnaire based on academic rank to establish whether or not there was a significant difference in the means of the items measuring the perceived career planning needs that could be explained by academic rank at the .05 level of significance.

Summary

In this chapter, the purpose of the study was restated. The research design adopted in this study, a survey, was described and the rationale was explained and the sources of information identified. Then information of the population and where the data was collected were provided. Next there was a discussion on the development of

the instrument, which was given to the subjects; a brief overview of the questionnaire, and the distribution of the questionnaire. The last part of the chapter was data analysis used to organize data obtained and to produce results for this study. Mainly descriptive statistics (mean and frequency) and inferential statistics (t-tests and ANOVAS) were employed to analyze the data.

CHAPTER IV

ANALYSIS OF THE RESULTS

In this chapter, the quantitative results of the analysis for the research questions are presented. These questions are consistent with the purpose of this study, which is to seek a better understanding of the career planning and job search needs of business students attending Davenport University, and second, to determine how these needs differ based on sex, employment, and academic rank. The chapter itself is divided into 5 sections: (1) perceived needs of respondents (2) perceived needs by sex (3) perceived needs by employment status (4) perceived needs by academic rank, and (5) summary.

Perceived Needs of Respondents

Questions 1: What are the career planning needs of business students attending Davenport University? To respond to this question descriptive statistics were used to establish the order of the perceived career planning needs. More specifically, the mean scores for responses to Questionnaire Items 1 through 24 were computed to determine the perceived order of significant need or interest in the career planning needs of business students attending Davenport University. The means were subsequently rank-ordered in a descending manner (McBride and Muffo, 1994). Table 4 shows that the mean response relating to the perceived need of "developing skills that

will help me negotiate an employment salary and benefit" is 5.83 (sd 1.40), thereby rendering it as the most perceived significant career planning need. The researcher chose to list the top five rank ordered needs for each subpopulation in an effort to draw attention to the top rank ordered priority career planning needs. The listing of the top five rank ordered career planning needs does not indicate that the other needs are not important, rather it is meant to help the researcher prioritize the listing of the 24 items. Also included in the top five rank ordered mean responses pertaining to the perceived career planning needs are: "including my resume in a file that is made available to employers" (Mean 5.81 sd 1.51), "receiving information about specific jobs that match my interests" (Mean 5.78 sd 1.55), "being referred to employers who are seeking students with my qualifications" (Mean 5.75 sd 1.76), and "gaining work experience in career areas in which I have employment interest" (Mean 5.57 sd 1.82). The implication here is that the higher the mean score on significant need or interest the higher the priority should be given to meeting that need through services within the context of the study. On the other hand, the mean scores at the bottom of Table 4 reveal that the mean responses relating to the least perceived career planning needs are: "finding jobs with the federal government" (mean 3.47 sd 2.02) and, "learning how to select and apply to graduate schools" (Mean 4.01 sd 2.06). This implies that the results should be taken into consideration when constraints exist within the context of the organization in which the study was conducted. It should be noted that all Items 1-24 had a mean response score above 4.0, except "help finding a job with the federal government." This implies business students, in general, felt a perceived need

Table 4

Ordered Ranking for Total Business Students Based on Mean Ratings

ITEM	MEAN	SD
Developing skills that will help me negotiate an employment salary & benefits	5.83	1.40
Including my resume in a file that is available to employers	5.81	1.51
Receiving information about specific jobs that match my interests	5.78	1.55
Being referred to employers who are seeking students with my qualifications	5.75	1.76
Gaining work experience in career areas in which I have employment interests	5.57	1.82
Identifying an appropriate salary range that I can expect to earn	5.46	1.64
Learning how to develop a network of employment contacts	5.44	1.59
Identifying career areas that fit my current skills and interests	5.36	1.67
Gaining confidence in my ability to communicate and interact with employers	5.29	1.75
Developing a credentials file or professional portfolio	5.25	1.66
Deciding which job offer to accept when faced with several alternatives	5.19	1.75
Hearing a panel of employers discuss why they hire people with my major	5.14	1.83
Talking with employers at their work sites regarding employment opportunities	4.97	1.79
Improving my job interviewing skills by practicing with a counselor or employer	4.93	1.84
Learning how to access jobs in specific geographic locations	4.90	1.88

Table 4--Continued

ITEM	MEAN	SD
Attending a career fair to talk to employers about careers in my academic major	4.81	1.88
Learning to enhance my qualifications via non-career related employment	4.31	1.85
Arranging to discuss my career interests with alumni or others working in the field	4.30	1.87
Finding out how living costs can have an impact on my employment plans	4.30	1.86
Learning how to make the transition from student to employee	4.28	2.20
Locating a summer job or internship related to my major and career interests	4.28	2.37
Attending series of workshops about various aspects of the job-search process	4.20	1.84
Learning how to select and apply to graduate school	4.01	2.06
Finding jobs with the federal government	3.47	2.02

for career planning services.

Perceived Needs by Sex

Question 2: What are the career planning needs of female and male students?

To respond to Question 2, the mean scores for responses were computed to determine the perceived order of significance or interest of career planning needs for Items 1 through 24. The means were subsequently rank ordered in a descending manner in an

effort to prioritize the listing of the 24 items. Table 5 shows that the mean response related to the perceived need of, "receiving information about specific jobs that match my interests" (Mean 5.91, sd 1.50), thereby rendering it the most perceived need or interest by female students, while the male students perceived "developing skills that will help me negotiate an employment salary and benefits" (Mean 5.37, sd 1.28), as the highest need or interest. It should be noted that both female and male students rated the next three career planning needs along with the two previously stated among the top five perceived rank ordered needs or interests, these include: including my resume in a file that is made available to employers (females = 5.90, males = 5.67), being referred to employers who are seeking students with my qualifications (females = 5.87, males = 5.56), and gaining work experience in career areas in which I have employment interests (females = 5.69, males = 5.37). On the other hand, the mean scores at the bottom of Table 5 shows that the mean responses relating to the least perceived career planning needs by females, "learning how to select and apply to graduate schools" (Mean 3.98, sd 2.08), and "finding a job with the federal government" (Mean 3.56, sd 2.13). This implies that the needs for these services are the least needed among the 24 items listed by female business students attending Davenport University. The mean scores at the bottom of Table 5 also reveals that the mean responses relating to the least perceived career planning needs by male business students as, "finding jobs with the federal government" (Mean 3.33, sd 2.02), and "learning how to make the transition from student to employee" (Mean 3.88, sd 2.13). This implies that the perceived needs for these services are the least perceived needed

among the 24 items listed by male business students attending Davenport University. Overall, the total mean score for Items 1 through 24 showed that female business students (Mean 5.02, sd 0.65) had an overall higher perceived level of need or interest for career planning than did male business students (Mean 4.80, sd 0.64). This finding is consistent with research conducted by Luzzo and McWhirter (2001) and Hoyt (1989).

Table 5
**Ordered Ranking of Business Students Perceived
Career Planning Needs by Sex**

FEMALES		
Item	Mean	SD
Receiving information about specific jobs that match my interests	5.91*	1.50
Including my resume in a file that is available to employers	5.90	1.52
Being referred to employers who are seeking students with my qualifications	5.87	1.73
Developing skills that will help me negotiate an employment salary & benefits	5.86	1.48
Gaining work experience in career areas which I have employment interests	5.69	1.75
Identifying an appropriate salary range that I can expect to earn	5.59*	1.61
Gaining confidence in my ability to communicate and interact with employers	5.54*	1.67
Learning how to develop a network of employment contacts	5.52	1.62
Identifying career areas that fit my current skills and interests	5.41	1.77

Table 5-- Continued

FEMALES		
Item	Mean	SD
Deciding which job offer to accept when faced with several alternatives	5.32	1.74
Developing a credentials file or professional portfolio	5.29	1.67
Hearing a panel of employers discuss why they hire people with my major	5.25	1.80
Talking with employers at their work sites regarding employment opportunities	4.98	1.81
Improving my job interviewing skills by practicing with a counselor or employer	4.94	1.92
Learning how to access jobs in specific geographic locations	4.92	1.86
Attending a career fair to talk with employers about careers in my academic major	4.85	1.87
Learning how to make the transition from student to employee	4.53*	2.22
Learning to enhance my qualifications via non-career related employment	4.48*	1.87
Locating a summer job or internship related to my major and career interests	4.43	2.37
Finding out how living costs can have an impact on my employment plans	4.35	1.95
Attending series of workshops about various aspects of the job-search process	4.28	1.84
Arranging to discuss my career interests with alumni or others working in the field	4.27	1.93
Learning how to select and apply to graduate school	3.98	2.08
Finding jobs with the federal government	3.56	2.02

Table 5--Continued

MALES		
Item	Mean	SD
Developing skills that will help me negotiate an employment salary & benefits	5.76	1.28
Including my resume in a file that is made available to employers	5.67	1.50
Receiving information about specific jobs that match my interests	5.57	1.61
Being referred to employers who are seeking students with my major	5.56	1.79
Gaining work experience in career areas in which I have employment interests	5.37	1.90
Learning how to develop a network of employment contacts	5.33	1.55
Identifying career areas that fit my current skills and interests	5.27	1.51
Identifying an appropriate salary range that I can expect to earn	5.25	1.68
Developing a credentials file or professional portfolio	5.20	1.66
Deciding which job offer to accept when faced with several alternatives	4.99	1.74
Hearing a panel of employers who are seeking students with my qualifications	4.97	1.87
Talking with employers at their work sites regarding employment opportunities	4.95	1.77
Improving my job interviewing skills by practicing with a counselor or employer	4.92	1.71
Gaining confidence in my ability to communicate and interact with employers	4.88	1.81
Learning how to access jobs in specific geographic locations	4.86	1.93

Table 5-- Continued

MALES		
Item	Mean	SD
Attending a career fair to talk to employers about careers in my academic major	4.76	1.89
Arranging to discuss my career interests with alumni or others working in the field	4.35	1.78
Finding out how living costs can have an impact on my employment plans	4.23	1.71
Attending series of workshops about various aspects of the job-search process	4.07	1.85
Learning how to select and apply to graduate school	4.06	2.02
Locating a summer job or internship related to my major and career interests	4.03	2.36
Learning to enhance my qualifications via non-career related employment	4.03	1.81
Learning how to make the transition from student to employee	3.88	2.13
Finding jobs with the federal government	3.33	2.02

* indicates a difference (.05 level of significance) in perceptions of career planning needs of females and males using t-tests.

Question 3: How are the career planning needs of female and male students different?

To respond to Question 3, the t-test was used to detect differences between the career planning needs by sex for Items 1 through 24. The differences are indicated in Table 5 next to the questions followed by an *. The following difference in career

planning needs, using .05 level of significance included: Identifying an appropriate salary range that I can expect to earn (p .05); Receiving information about specific jobs that match my interests (p.036); Learning to enhance my qualifications via non-career related employment (p .018); Gaining confidence in my ability to communicate and interact with employers (p .000); and Learning how to make the transition from student to employee (p .004). These differences suggest that females and males do have career planning needs that are different. It should also be noted that in the areas of differences, female students in all Items 1 through 24, perceived a higher career planning need or interest mean score than did the male students.

Perceived Needs by Employment Status

Question 4: What are the career planning needs of students based upon their employment status?

To respond to this question the mean scores for responses to Questionnaire Items 1 through 24 were computed to determine the perceived order of significant need or interest of career planning needs based upon the student's employment status while attending Davenport University. The overall career planning mean score for students employed full-time is 4.68 (sd 0.67), for part-time students the mean score is 5.18 (sd 0.71), and for not employed the mean score is 5.69 (sd 1.22). The students that are not employed have the greatest need for career planning than do students employed part-time or full-time. Full-time employed students have the lowest career planning needs.

The highest ranked career planning need for students employed full-time is "developing skills that will help me negotiate an employment salary and benefits", while part-time and not employed students indicated that "being referred to employers who are seeking students with my qualifications" as the highest ranked need. All three employment status groups stated that "receiving information about specific jobs that match my interests", "having my resume in a file that is made available to employers", and "being referred to employers who are seeking students with my qualifications" among the top five ordered rankings. Full and part-time employed groups also stated that, "developing skills that will help me negotiate an employment salary and benefits" as one of the top ranked needs. All groups indicated, "finding a job with the federal government" was the lowest ranked ordered career planning need. Full-time students ranked locating a summer job or internship related to his/her major and career interests, in low rank order of needs. Part-time students ranked learning how to select and apply to graduate schools as a low rank ordered need, and not-employed rated arranging to discuss his/her career interests with alumni or others working in field, as a low rank ordered need (see Table 6). It should be noted that a low rank ordered need can be a need with some student interest, however, considerations may need to be given to higher rank ordered needs based on the constraints within the organization to provide all services listed in items 1-24.

Question 5: How are the career planning needs of students different based upon their employment status?

In this study differences between employment status and career planning

Table 6

**Comparison of Mean Scores for Career Planning
Needs Based on Employment Status**

Item	Full-Time mean/sd/(rank)	Part-Time mean/sd/(rank)	Not Employed mean/sd/(rank)	ANOVA
Gaining work experience in career areas in which I have employment interests	5.24/2.00/(5)	5.98/1.40/(4)	6.24/1.32/(4)	FT<PT FT<NE
Developing a credentials file or professional portfolio	5.11/1.81/(9)	5.30/1.42/(14)	5.93 /1.25/(11)	FT<NE
Learning how to access jobs in specific geographic locations	4.68/1.99/(14)	4.98/ 1.71/(18)	5.98/1.27/(9)	FT<NE PT<NE
Learning how to select and apply to graduate school	3.96 /2.08/(21)	3.83/ 2.02/(23)	4.83/1.88/(22)	PT<NE FT<NE
Finding jobs with the federal government	3.49 /2.08/(24)	3.30/1.84/(24)	3.85/ 2.14/(24)	-----
Being referred to employers who are seeking students with my qualifications	5.40/1.98/(4)	6.17/1.28/(1)	6.59/.77/(1)	FT<PT FT<NE
Hearing a panel of employers discuss why they hire people with my major	4.93/1.96/(11)	5.38/ 1.61/(11)	5.63/1.48/(18)	FT<PT
Locating a summer job or internship related to my major and career interests	3.52 /2.34/(23)	5.31 /1.99/(13)	5.68 /1.77/(16)	FT<PT FT<NE
Identifying an appropriate salary range that I can expect to earn	5.20/ 1.78/(8)	5.68/ 1.42/(6)	6.37 / .83/(2)	FT<PT PT<NE FT<NE
Deciding which job offer to accept when faced with several alternatives	4.85/ 1.89/(12)	5.55/ 1.47/(8)	6.17/ .89/(7)	FT<PT FT<NE

Table 6--Continued

Item	Full-Time mean/sd/(rank)	Part-Time mean/sd/(rank)	Not Employed mean/sd/(rank)	ANOVA
Receiving information about specific jobs that match my interests	5.51/ 1.75/(3)	6.14/ 1.07/(2)	6.29/ 1.05/(3)	FT<PT FT<NE
Developing skills that will help me negotiate an employment salary & benefits	5.68 /1.54/(1)	6.00/ 1.20/(3)	6.20 / .90/(6)	-----
Including a resume in a file that is made available to employers	5.66/1.67/(2)	5.97/1.26/(5)	6.22/1.08/(5)	-----
Improving my job interviewing skills by practicing with a counselor or employer	4.74/1.94/(13)	5.02/1.68/(17)	5.76/1.37/(15)	FT<NE PT<NE
Identifying career areas that fit my current skills and interests	5.23/ 1.84/(7)	5.46/1.68/(10)	5.80/1.35/(14)	-----
Learning how to develop a network of employment contracts	5.27/ 1.74/(6)	5.63/1.25/(7)	5.90/1.48/(13)	-----
Arranging to discuss my career interests with alumni or others working in the field	4.17/ 1.93/(17)	4.40/1.84/(21)	4.78/ 1.57/(23)	-----
Finding out how living costs have an impact on my employment plans	3.97/1.86/(20)	4.64/1.83/(19)	5.22/ 1.48/(19)	FT<PT FT<NE
Attending series of workshops about various aspects of the job-search process	4.02 /1.91/(19)	4.31 /1.69/(22)	4.88/1.72/(20)	FT<NE
Talking with employers at their work sites regarding employment opportunities	4.67 /1.91/(15)	5.32/ 1.59/(12)	5.67/ 1.23/(17)	FT<PT FT<NE

Table 6--Continued

Item	Full-Time mean/sd/(rank)	Part-Time mean/sd/(rank)	Not Employed mean/sd/(rank)	ANOVA
Attending a career fair to talk to employers about career in my academic field	4.52/ 1.98/(16)	5.02/ 1.69/(16)	5.91/ 1.14/(12)	FT<PT FT<NE PT<NE
Learning to enhance my qualifications via non-career related employment	4.12/1.93/(18)	4.50/1.76/(20)	4.85/1.51/(21)	-----
Gaining confidence in my ability to communicate and interact with employers	5.05/1.86/(10)	5.51/1.64/(9)	6.02/1.04/(8)	FT<PT FT<NE
Learning how to make the transition from student to employee	3.54/ 2.17/(22)	5.17/1.82/(15)	5.93/ 1.51/(10)	FT<PT FT<NE

Notes:

a) Mean based on scale of need ranging in value from 1 (No Need) to 7 (Significant Need). All differences reported at $p < .05$.

b) Employment Status: FT = Full-time PT=Part-time NE= Not Employed

c) ----- = Not Significant

needs were examined using ANOVA (means, standard deviations, and F ratio at the .05 level of significance). The analysis of variance (ANOVA) was run for Items 1 through 24 to compute the F statistic to establish whether or not there was a difference in the means of the items measuring the perceived needs that could be explained by a different employment status. The ANOVA was used by Kemper (1980) and McBride and Muffo (1994) in similar studies in which the relationships between career planning needs and academic rank were examined. When using the ANOVA to compare the mean responses for 401 respondents and their need for career planning, 17 of the

24 items revealed that a difference existed. The differences were noted in Table 6 under the heading ANOVA.

Perceived Needs by Academic Rank

Question 6: What are the career planning needs of students based on academic rank?

To respond to Question 6, the mean scores for responses were computed to determine the perceived order of significance or interest of career planning needs for Items 1 through 24. The means were subsequently rank ordered in a descending manner.

Table 7 shows that overall the total mean score for Items 1 through 24 was 5.02 (sd 0.62) for underclass students and 4.94 (sd 0.67) for upperclass students. This finding is similar to earlier studies done by Haviland and Gohn (1983), Poe (1991), and Walters and Saddlemire (1979).

Underclass students ranked the top five rank ordered perceived career planning needs as: (1) gaining work experience in career areas in which I have employment interest, (2) developing skills that will help me negotiate an employment salary and benefits, (3) receiving information about specific jobs that match my interests, (4) including my resume in a file that is made available to employers, and (5) being referred to employers who are seeking students with my qualifications.

The upperclass students ranked the top five rank ordered perceived career planning needs as: (1) including my resume in a file that is made available to

Table 7

Career Planning Needs of Students Based on Academic Rank

Items	Class Status					
	Underclass			Upperclass		
	Mean	SD	Rank	Mean	SD	Rank
Gaining work experience in career area in which I have employment interests	5.91	1.55	1	5.38	1.92	7
Developing a credentials file or professional portfolio	5.20	1.58	12	5.28	1.71	9
Learning how to access jobs in specific geographic locations	4.69	1.89	18	5.02	1.87	13
Learning how to select and apply to graduate school	3.92	2.09	23	4.06	2.04	22
Finding jobs with the federal government	3.43	2.09	24	3.49	1.98	24
Being referred to employers who are seeking students with my qualifications	5.72	1.79	5	5.77	1.74	3
Hearing a panel of employers discuss why they hire people with my major	5.28	1.77	11	5.06	1.86	12
Locating a summer job or internship related to my major and career interests	4.80	2.25	15	3.99	2.39	23
Identifying an appropriate salary range that I can expect to earn	5.45	1.62	7	5.47	1.66	6
Deciding which job offer to accept when faced with several alternatives	5.29	1.66	10	5.14	1.79	11
Receiving information about specific jobs that match my interests	5.84	1.39	3	5.74	1.63	4
Developing skills that will help me negotiate an employment salary & benefits	5.89	1.32	2	5.79	1.45	2

Table 7--Continued

Items	Class Status					
	Underclass			Upperclass		
	Mean	SD	Rank	Mean	SD	Rank
Including my resume in a file that is made available to employers	5.83	1.45	4	5.80	1.55	1
Improving my job interviewing skills by practicing with a counselor or employer	5.02	1.82	13	4.88	1.85	16
Identifying career areas that fit my current skills and interests	5.36	1.47	8	5.36	1.77	8
Learning how to develop a network of employment contacts	5.34	1.48	9	5.50	1.65	5
Arranging to discuss my career interests with alumni or others working in the field	4.35	1.87	21	4.28	1.87	17
Finding out how living costs can have an impact on my employment plans	4.75	1.76	16	4.06	1.87	21
Attending series of workshops about various aspects of the job-search process	4.31	1.84	22	4.13	1.84	19
Talking with employers at their work sites regarding employment opportunities	4.99	1.87	14	4.96	1.75	14
Attending a career fair to talk to employers about careers in my academic major	4.73	1.85	17	4.86	1.89	15
Learning to enhance my qualifications via non-career related employment	4.51	1.74	20	4.20	1.91	18
Gaining confidence in my ability to communicate and interact with employers	5.48	1.59	6	5.18	1.83	10
Learning how to make the transition from student to employee	4.59	2.12	19	4.10	2.23	20

employers, (2) developing skills that will help me negotiate an employment salary and benefits, (3) being referred to employers who are seeking students with my qualifications, (4) receiving information about specific jobs that match my interests, and (5) learning how to develop a network of employment contacts (see Table 7). It should be noted that the listing of the top five rank ordered needs does not indicate that the other needs are not of significance to the students, what it does provide is a listing of needs that help the researcher to prioritize the needs from highest mean scores to the lowest.

Question 7: How are the career planning needs of business students different based upon academic rank?

To respond to Question 7, the t-test was used to detect differences between career planning needs by academic rank for Items 1 through 24. The following differences in needs, using .05 level of significance included: Gaining work experience in career areas in which I have employment interests (underclass mean score 5.91, sd 1.56; upperclass mean score 5.38, sd 1.92, $p = .003$); Locating a summer job or internship related to my major and career interests (underclass mean score 4.80, sd 2.25; upperclass mean score 3.99, sd 2.40, $p = .001$); Finding out how living costs can have an impact on my employment plans (underclass mean score 4.75, sd 1.76; upperclass mean score 4.06, sd 1.87, $p = .000$); and Learning how to make the transition from student to employee (underclass mean score 4.59, sd 2.12; upperclass 4.10, sd 2.23, $p = .030$). In all cases where a mean score difference was noted, the underclass respondents had a greater need for career planning than did the upperclass respondents. This

is supported by Haviland and Gohn (1983), Poe (1991), and Walters and Saddlemire (1979).

Summary

First, the findings of the present study reveals that using the mean rank order, business students attending Davenport University perceived the greatest significant need or interest on the need for “developing skills that will help me negotiate an employment salary and benefit”, with the least significant need or interest being “finding jobs with the federal government” and “learning how to select and apply to graduate schools.” The mean score was also used to determine the perceived needs by sex. Female students perceived the need to “receive information about specific jobs that match my interest” as their greatest need, while the male students perceived their greatest need to “developing skills that will help me negotiate an employment salary and benefits.” The t-test was used to detect differences between the career planning needs by sex. The following differences in career planning needs, using .05 level of significance included: Identifying an appropriate salary range that I can expect to earn; receiving information about specific jobs that match my interests; Learning to enhance my qualifications via non-career related employment; Gaining confidence in my ability to communicate and interact with employers; and Learning how to make the transition from student to employee. Overall, female business students perceived a higher career planning need or interest mean score than did the male business students.

Second, the perceived career planning needs of business students based on their employment status was also analyzed using the mean rank order. The students that were not employed have the greatest need for career planning than did students that are employed part-time or full-time. Second, using the ANOVA the study found in some cases that there is a significant relationship between the employment status of a student and the perceived career planning needs or interests. Significant relationships were found in 17 of the 24 items.

And last, the perceived career planning need of business students based on their academic rank was also analyzed using the mean rank order. Underclass business students have a higher perceived need or interest for career planning than do upperclass students. The t-test was used to detect differences between career planning needs by academic rank. Four of the 24 items listed were cited as showing a difference at a .05 level of significance.

CHAPTER V

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

A synthesis of the study is presented in this chapter. The following sections are included: discussion of the results and implications, recommendations, limits of the study, and conclusions. The discussion of results and implications as well as the recommendations will center around the seven research questions and their findings in relationship to the career planning and job search services provided by Davenport University. The practical value of this study was: (a) to seek a better understanding of the needs of students in regards to career planning at Davenport University, (b) to determine how these needs differ based on one's sex, employment status, and academic rank, and (c) to compare the findings to existing services provided by Davenport University.

Discussion of Results and Implications

The career planning and job search needs identified by McBride and Muffo (1994) provide the conceptual framework for determining the needs of students based on sex, employment status and academic rank at Davenport University. Career planning and job search needs are compared to existing services provided by the Career Planning and Placement Center at Davenport University. These career planning needs in relationship to the services provided provide the bases for the discussion of the

results and implications of the research questions which are discussed in detail in the section that follows. The sections are divided by the seven research questions.

Question 1: What are the career planning needs of students?

Davenport University students ranked “Developing skills that will help me negotiate an employment salary and benefits” as the highest mean score among the career planning needs. Of the 24 items, the range of mean scores was from 5.83 to 3.47, with “7” representing a significant need or interest and “1” representing no need or interest. Like McBride and Muffo’s study, no item was noted by students to have no need or interest (1994). Davenport University provides 8 of the 24 career planning and job search services identified on the survey (see Table 8). However, the top rank ordered needs, which include: Including my resume in a file that is made available to employers, Receiving information about specific jobs that match my interests, Being referred to employers who are seeing students with my qualifications, and Gaining work experience in career area in which I have employment interests, are all services presently provided by the university. It appears that the top rank ordered needs when looked at from the total population seem to desire services that have traditionally been offered by the university. This may be due to the fact that Davenport University has prided itself with customer service and may have designed programs and services through some informal feedback from students rather than a formal needs assessment.

Question 2: What are the career planning needs of female and male students?

The results with regard to this question indicated that overall, female students had a higher perceived career planning and job search need than did male students.

Table 8

**Davenport University's Career Planning Services in Relationship to Rank Ordered
Needs of Students by Sex, Employment Status and Academic Rank**

Questions 1-24	Davenport University's Career Planning Services	All Stu- dents Rank Order	Female Rank Order	Male Rank Order	Em- ployed Full-Time Rank Order	Em- ployee Part-Time Rank Order	Not Em- ployed Rank Order	Under- class Rank Order	Upper- class Rank Order
1. Gaining work experience in career areas in which I have employment interests	Yes	5	5	5	5	4	4	1	7
2. Developing a credentials file or professional portfolio	No	10	11	9	9	14	11	12	9
3. Learning how to access jobs in specific geographic locations	Yes	15	15	15	14	18	9	18	13
4. Learning how to select and apply to graduate schools	No	23	23	20	21	23	22	23	22
5. Finding jobs with the federal government	No	24	24	24	24	24	24	24	24
6. Being referred to employers who are seeking students with my qualifications	Yes	4	3	4	4	1	1	5	3
7. Hearing a panel of employers discuss why they hire people with my major	No	12	12	11	11	11	18	11	12

Table 8--Continued

Questions 1-24	Davenport University's Career Planning Services	All Stu- dents Rank Order	Female Rank Order	Male Rank Order	Em- ployed Full-Time Rank Order	Em- ployee Part-Time Rank Order	Not Em- ployed Rank Order	Under- class Rank Order	Upper- class Rank Order
8. Locating a summer job or internship related to my major and career interests	Yes	21	19	21	23	13	16	15	23
9. Identifying an appropriate salary range that I can expect to earn	Yes	6	6	8	8	6	2	7	6
10. Deciding which job offer to accept when faced with several alternatives	No	11	10	10	12	8	7	10	11
11. Receiving information about specific jobs that match my interests	Yes	3	1	3	3	2	3	3	4
12. Developing skills that will help me negotiate an employment salary and benefits	No	1	4	1	1	3	6	2	2
13. Including my resume in a file that is made available to employers	Yes	2	2	2	2	5	5	4	1
14. Improving my job interviewing skills by practicing with a counselor or employer	No	14	14	13	13	17	15	13	16
15. Identifying career areas that fit my current skills and interests	No	8	9	7	7	10	14	8	8

Table 8--Continued

Questions 1-24	Davenport University's Career Planning Services	All Stu- dents Rank Order	Female Rank Order	Male Rank Order	Em- ployed Full-Time Rank Order	Em- ployee Part-Time Rank Order	Not Em- ployed Rank Order	Under- class Rank Order	Upper- class Rank Order
16. Learning how to develop a network of employment contacts	No	7	8	6	6	7	13	9	5
17. Arranging to discuss my career interests with alumni or others working in the field	No	18	22	17	17	21	23	21	17
18. Finding out how living costs can have an impact on my employment plans	No	19	20	18	20	19	19	16	21
19. Attending a series of workshops about various aspects of the job-search process	No	22	21	19	19	22	20	22	19
20. Talking with employers at their work sites regarding employment opportunities	No	13	13	12	15	12	17	14	14
21. Attending a career fair to talk to employers about careers in my academic major	Yes	16	16	16	16	16	12	17	15
22. Learning to enhance my qualifications via non-career related employment	No	17	18	22	18	20	21	20	18

Table 8--Continued

Questions 1-24	Davenport University's Career Planning Services	All Stu- dents Rank Order	Female Rank Order	Male Rank Order	Em- ployed Full-Time Rank Order	Em- ployee Part-Time Rank Order	Not Em- ployed Rank Order	Under- class Rank Order	Upper- class Rank Order
23. Gaining confidence in my ability to communicate and interact with employers	No	9	7	14	10	9	8	6	10
24. Learning how to make the transition from student to employee	No	20	17	23	22	15	10	19	20

This finding is consistent with research conducted by Hoyt (1989) and Luzzo and McWhirter (2001). This research would indicate that female students are needier in regards to career planning programs and services. Perhaps this is due in part to the increase of women in higher education pursuing traditional and nontraditional occupations that require not only an academic foundation, but a connection to career information related to that occupation (Hoyt, 1989; Jarmon, 1983; Luzzo & McWhirter, 2001). It may also be due to the socialization process that is different for females than males, whereby males may receive more mentoring and career development information prior to even entering college than do females. Interesting to this researcher, is the fact that the top rank ordered needs listed by female and male students are the same. These needs include the following: Gaining work experience in career areas in which I have employment interests, Being referred to employers who are seeking students with my qualifications, Receiving information about specific jobs that match my interests, Developing skills that will help me negotiate an employment salary and benefits, and Including my resume in a file that is made available to employers. Davenport University provides services to address four of the five top ranked career planning needs listed. The university does not provide for the “Development of skills that help me negotiate an employment salary and benefits”. Davenport University may choose based on the context of their organization, to provide this service in the future as it has been identified as a top rank ordered need by both female and male students.

Question 3: How are the career planning needs of female and male students

different?

The results of the study to this question indicate that of the 24 career planning and job search needs listed, 5 items were identified as being significantly different by the female and male students. The University of Georgia (1980) study along with a study by Healy and Rielly (1989) also noted differences between female and male career planning needs. This difference could be related to the different socialization process that female and male students go through in regards to career development. What males make take for granted as career development information, females may have to seek services to gather the information. The researchers suggest that future studies be conducted to analyze these differences. Specifically, Davenport University offers two of the five identified services: (1) Identifying an acceptable salary range that I can expect to earn, and (2) Receiving information about specific jobs that match my interests. Davenport University does not provide services related to: Learning to enhance my qualifications via non-career related employment, Gaining confidence in my ability to communicate and interact with employers, and Learning how to make the transition from student to employer. The implications of this finding suggests to Davenport University administrators and practitioners the need to consider the characteristic of sex as a variable in determining what services might be perceived to be of different need to female or male students.

Question 4: What are the career planning needs of students based upon their employment status?

The findings suggest that overall students that are not employed have the

greatest perceived need for career planning services than those employed part-time or full-time. Full-time employed students have the lowest perceived career planning needs. This finding is consistent with Luzzo's (1995) research that found additional career decision making benefits associated with college student employment. Furthermore, it is possible that students who work full-time are gathering career planning information while on the job versus relying on the college to provide them with the services. Students that are not employed would have to rely more upon the college to gather career planning information.

Davenport University presently provides services that address four of the top five rank ordered needs of full-time and part-time employed students. The services provided include: Gaining work experience in career areas in which I have employment interests, Being referred to employers who are seeking students with my qualifications, Receiving information about specific jobs that match my interests, and Including my resume in a file that is made available to employers. Not presently provided is: Developing skills that will help me negotiate an employment salary and benefits. Students that are not employed have four of the same listed above services that Davenport University provides as the top rank ordered career planning needs. The remaining need, "To identify an appropriate range that I can expect to earn" is also a service provided by the university.

Question 5: How are the career planning needs of students different based upon their employment status?

The findings suggest that one's employment status does provide for difference

in the perceived need for career planning services. Of the 24 career planning items listed, differences were found in 17 items. Luzzo et al. (1997) concluded that the need for additional research was required to forward the understanding and awareness of the role employment plays in college student career planning needs. Perhaps these differences are related to the number of contacts a student has in which to gather career planning information. A student that is employed full-time would have the ability to tap into their employer for some career planning information, while a student that is not employed would have to rely upon the college to provide this information. Davenport University administrators and practitioners, should consider these differences when evaluating the 24 items to determine which services to offer within the context of the organization. Decisions should be made that meet the needs of students that are employed full-time, part-time or not employed.

Question 6: What are the career planning needs of students based on academic rank?

The findings suggest that underclass students have a higher perceived need or interest in career planning services than do upperclass students. This finding is similar to findings by Kemper (1980). The researcher would suggest that perhaps upperclass students need less career planning services because as they mature in their educational pursuit, careers become more solidified and more narrowly focused. This would align with Super's (1953) Career Development Theory, that supports the solidification of career decision making as a person matures. Of the top five rank ordered career planning needs for underclass students, Davenport University provides services

for the following: Gaining work experience in careers in which I have employment interests, Being referred to employers who are seeking students with my qualifications, Receiving information about specific jobs that match my interests, and Including my resume in a file that is made available to employers. Davenport University does not provide services to meet the career planning need of: Developing skills that will help me negotiate an employment salary and benefits.

Upperclass students at Davenport University ranked the need to: Include my resume in a file that is made available to employers, Receiving information about specific jobs that match my interests, and Being referred to employers who are seeking students with my qualifications, as the top rank ordered needs, all of which Davenport University presently provides as services. However, upperclass students also indicated as a top rank ordered need: Developing skills that help me negotiate an employment salary and benefits, and Learning how to develop a network of employment contracts, as needs, which at the present time Davenport University does not provide as services. Davenport University administrators and practitioners should review the need for these services in light of their organizational context to determine the ability to provide these services to students.

Question 7: How are the career planning needs of students different based upon academic rank?

The findings indicated that 4 of the 24 career planning and job search needs listed represent a difference of career planning needs based upon academic rank. The University of Georgia study conducted in 1980 by Weissberg et al. support this

finding that a difference does exist in upperclass and underclass students need for career planning. These differences may be related to the maturing that a student experiences as he/she moves through a program of study. As the student moves from one academic class to the next, the Career Development Theory by Super (1953) would suggest that career decision making becomes more solidified. Of these noted differences, Davenport University provides services to meet the needs of the following: Gaining work experience in career areas in which I have employment interests, and Locating a summer job or internship related to my major or career interests. Davenport University does not provide services for: Finding out how living costs can have an impact on my employment plans, and Learning how to make the transition from student to employee. In an effort to meet the differences noted, Davenport University should assess the needs in the context of their organization to determine how to best provide services that meet the needs of both under and upperclass students.

Recommendations

To better align the needs of students based on one's sex, employment status, and academic rank at Davenport University to the career planning services provided, the following recommendations should be considered by administrators and practitioners. In addition, this alignment will improve the quality of services perceived by these subpopulations within the Davenport University system.

1. Expand career planning services to best meet the needs of these

subpopulations within the university, with attention given to organizational constraints. The research found that there are differences in career planning needs based on one's sex, employment status, and academic rank. For example, females have a higher career planning need for services than do males, students that are not employed have a higher need for career planning services than do students employed full-time, and underclass students have a higher career planning need for services than do upperclass students. Davenport University should be especially concerned about the female population and the employed population of students because the majority of their students fit these characteristics.

2. Address the need for "Developing skills that will help me negotiate an employment salary and benefits." This need was identified by all groups as being a high rank ordered need and is not a service presently provided by Davenport University.

3. Assess student characteristics in relationship to needs and services regularly. As the findings suggest, the need for services may change as the characteristics of the student population change.

4. Expand the study to include the career planning goals of students based on subpopulations and the best mode of delivery of the services provided to meet the career planning needs of these subpopulations. This expansion of information would provide a more thorough assessment of how the university could best meet the needs of all students it is attempting to serve.

These recommendations will ensure the success of the career planning

services. In particular, the ongoing assessment of the student population, the third recommendation, will certainly influence future recommendations and directions of the services. In fact, future studies should include more attention to the relationship between perceived career planning needs of students and their characteristics.

Limits of the Study

This study examined the career planning needs of business students at Davenport University and not samples of students in college generally. Therefore, findings may not be generalized to include students at other colleges and universities. Furthermore, the group of students were at a particular type of college, that is, Davenport is a private university that prides itself with student services and provides a narrow focus of study in the areas of business, healthcare, and technology. Also it should be noted that the study is limited to responses from only subpopulations of students. Non-students who were not a part of the study, might have had very different or very similar responses to the career planning needs based on their sex, employment status, and educational background. However, this same fact is strength, because the success of any career planning program hinges largely upon the characteristics and needs of the population that a particular institution is attempting to serve.

As mentioned earlier, future research should focus on the relationship between the characteristics of a population and their perceived career planning needs for services. Additional research on the needs of students based on other characteristics such as race, age, degree seeking level, major, and students with disabilities should be

explored. Furthermore, the interaction between these characteristics, such as sex, employment status, and race may prove to offer more insight into very specific populations of students.

Future studies on career planning needs may be expanded to include not only the career planning needs of students, but also the importance students place on their career goals and the most effective and efficient ways of delivering career services to them. This would provide the researcher with a more thorough analysis in which to base programs and services. Furthermore, this would allow the researcher to more closely compare to other studies done using the full Student Career Needs Assessment developed by McBride and Muffo (1994).

The McBride and Muffo (1994) instrument is now over ten years old and it is might be possible that over this period of time, some items that should not be listed are and some that are not listed might be missing. It is also suggested that some open ended questions on the survey might enable the researcher to gather responses that might not otherwise be gathered through a forced-choice type questionnaire.

Lastly, since the study was conducted in the winter of 1995, new research on the use of systems thinking in learning organizations was not examined to the fullest extent possible.

Conclusion

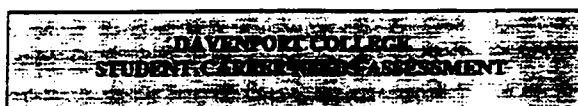
Chapter II introduces administrators and practitioners to the career planning needs assessment, which provided the bases for which the 7 research questions were

developed. The findings from these questions address the perceived differences in career planning needs of students in relationship to one's sex, employment status, and academic rank. The findings served to validate the need for career planning practitioners to take into consideration the needs of various students in designing and implementing career planning services and programs. The identification of these needs should enable administrators and practitioners at colleges to design programs to better meet the individualized needs of specifically designated subgroups. The planning of such interventions must be followed by systematic evaluations of the effects of the programs that are developed.

It is the hope of this researcher that other institutions of similar setting will seek to match the needs of students with the programs and services offered. McBride and Muffo (1994) in an effort to discuss the importance of assessing student needs and matching these needs with programs and services stated, "heightening customer satisfaction comes through quality improvements which are derived from improved processes and systems" (p. 63). Furthermore, the work of Margaret Wheatley (1999) encourages leaders to understand whole systems and give attention to the relationships within these networks. Disorder of these networks can provoke a system to self-organize into new forms of being. When the demographics of educational institutions change so should the organizations systems and methods of service delivery. As suggested, if career planning practitioners are genuinely committed to leading systemic reform, then they must focus on the needs of the customers. Finally, when the time comes for career planning practitioners to measure where they have achieved the

desired outcomes of these services in terms of students' needs, the needs assessment will serve as one of the most important measures—an essential reference point for continuous process improvement and systemic change.

Appendix A
Davenport College: Student Career
Needs Assessment



This questionnaire seeks to address student career planning needs/interests. We would appreciate you taking a few minutes to share with us your opinions by responding to the items in this survey. Your responses will be kept confidential. You may choose to withdraw from the study at any point. Thank you.

INSTRUCTIONS: Please respond to the following statements by circling the number that best describes the level of need for information or interest to participate in activities that will assist you in developing your career plans. The scale point **1** on the left side indicates you have "No Need/Interest". The scale point **7** on the right side indicates you have a "Significant Need/Interest." For each item, circle the number that best responds to your degree of need or interest.

		No Need/ or Interest					Significant Need/ or Interest	
		1	2	3	4	5	6	7
1.	Gaining work experience in career areas in which I have employment interests.	1	2	3	4	5	6	7
2.	Developing a credentials file or professional portfolio.	1	2	3	4	5	6	7
3.	Learning how to access jobs in specific geographic locations.	1	2	3	4	5	6	7
4.	Learning how to select and apply to graduate schools.	1	2	3	4	5	6	7
5.	Finding jobs with the federal government.	1	2	3	4	5	6	7
6.	Being referred to employers who are seeking students with my qualifications.	1	2	3	4	5	6	7
7.	Hearing a panel of employers discuss why they hire people with my major.	1	2	3	4	5	6	7
8.	Locating a summer job or internship related to my major and career interests.	1	2	3	4	5	6	7
9.	Identifying an appropriate salary range that I can expect to earn.	1	2	3	4	5	6	7
10.	Deciding which job offer to accept when faced with several alternatives.	1	2	3	4	5	6	7
11.	Receiving information about specific jobs that match my interests.	1	2	3	4	5	6	7
12.	Developing skills that will help me negotiate an employment salary and benefits.	1	2	3	4	5	6	7
13.	Including my resume in a file that is made available to employers.	1	2	3	4	5	6	7
14.	Improving my job interviewing skills by practicing with a counselor or employer.	1	2	3	4	5	6	7
15.	Identifying career areas that fit my current skills and interests.	1	2	3	4	5	6	7
16.	Learning how to develop a network of employment contacts.	1	2	3	4	5	6	7

		No Need/ or Interest					Significant Need/ or Interest	
		1	2	3	4	5	6	7
17.	Arranging to discuss my career interests with alumni or others working in the field.	1	2	3	4	5	6	7
18.	Finding out how living costs can have an impact on my employment plans.	1	2	3	4	5	6	7
19.	Attending series of workshops about various aspects of the job-search process.	1	2	3	4	5	6	7
20.	Talking with employers at their work sites regarding employment opportunities.	1	2	3	4	5	6	7
21.	Attending a career fair to talk to employers about careers in my academic major.	1	2	3	4	5	6	7
22.	Learning to enhance my qualifications via non-career related employment.	1	2	3	4	5	6	7
23.	Gaining confidence in my ability to communicate and interact with employers.	1	2	3	4	5	6	7
24.	Learning how to make the transition from student to employee.	1	2	3	4	5	6	7

BACKGROUND INFORMATION

Class Status? (please check one) Freshman___ Sophomore___ Junior___ Senior___

Sex? Male___ Female___

Age? _____

Racial/Ethnic Group? _____ White, Non-Hispanic _____ African American, Non-Hispanic _____ Native American _____ Hispanic (optional) _____ Asian/Pacific Islander _____ Other (please specify _____)

Employed? _____ Full-time _____ Part-time _____ Not employed

What degree are you seeking? (please check one)

___ An Associate ___ A Bachelor ___ No Degree

Your Major? (please check one)

___ Accounting	___ Paralegal
___ General Business	___ Hotel/Restaurant Mgt.
___ Computer Info. Sys.	___ Administrative Services
___ Sales/Marketing	___ Office Administration
___ Medical Assistant	___ International Business
___ Business Management	___ Retail Management
___ Emergency Medical Services	___ Fashion Merchandising
___ Travel and Tourism	___ Business Information Specialist
___ Other: (Major) _____	

Please use the reverse side of this form to share with us any additional thoughts you have regarding your career needs/interests.

Many of the items on this survey are based upon items from Virginia Polytechnic Institute and State University's Student Career Needs Assessment.

Appendix B

Cover Letter

INSTRUCTOR: _____

COURSE: _____

PLEASE READ THE FOLLOWING DIRECTIONS TO THE STUDENTS
PRIOR TO ADMINISTERING THE CAREER NEEDS ASSESSMENT.

Davenport College is currently conducting a questionnaire to determine the career planning needs and interests of students. The information received from the survey will help identify student career planning needs and interests, with the ultimate goal of providing services that meet these needs and interests.

The survey takes approximately 10 minutes to complete. Please read the directions on the survey before beginning to answer the questions. Read each question thoroughly before responding. Finished surveys should be returned immediately to the instructor.

Thank you for participating in this study.

Appendix C
Human Subjects Institutional Review
Board Approval Letters

Human Subjects Institutional Review Board


 Kalamazoo, Michigan 49008-3896
 616 387-8293

 WESTERN MICHIGAN UNIVERSITY

Date: December 5, 1994

To: Carol Weigand

From: Richard Wright, Interim Chair *for R Wright*

Re: HSIRB Project Number 94-11-35

This letter will serve as confirmation that your research project entitled "Career planning needs of college students in the management and marketing curriculum" has been approved under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you must seek specific approval for any changes in this design. You must also seek reapproval if the project extends beyond the termination date. In addition if there are any unanticipated adverse or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: Dec. 5, 1995

cc: Brinkerhoff, EDLD

TO: HSIRB

FROM: Carol Wiegand

DATE: January 16, 1995

RE: Revision to survey based on Pilot Study results

Please note the following cosmetic changes to the attached survey. These changes were done based upon feedback received from the pilot study.

Changes include:

- 1) Verbiage changed in the title and directions to allow for ease of reading and understanding.
- 2) Lines added and survey reduced to two pages.
- 3) College you attended question deleted. Surveys will be color coded to gather this information.
- 4) Reference given to Virginia Polytechnic Institute and State University. Letter attached.
- 5) The number participating in the study will be increased from 200 to 350 per information received from the student enrollment report, Fall Term, 1994.

pc: Dr. Brinkerhoff

RECEIVED

JAN 20 1995

H.S.I.R.B.

1/26/95
Times Approved as listed
Richard A. Wright

Human Subjects Institutional Review Board

Kalamazoo, Michigan 49008-3899
616 387-8293

WESTERN MICHIGAN UNIVERSITY

Date: January 30 1995

To: Carol Weigand

From: Richard Wright, Chair

for R Wright

Re: HSIRB Project Number 94-11-35

Thank you for your memo dated Jan. 16, 1995 to request changes to your research project "Career planning needs of college students in the management and marketing curriculum". This letter will serve as confirmation that the five changes requested in that memo have been approved by the Human Subjects Institutional Review Board. The conditions and the duration of this approval are specified in the Policies of Western Michigan University.

You must seek reapproval for any changes in this design. You must also seek reapproval if the project extends beyond the termination date.

The Board wishes you success in the pursuit of your research goals.

Approval/Termination Dec. 5 1995

cc: Brinkerhoff, EDLD

BIBLIOGRAPHY

American Council on Education (ACE) and Laboratory for Research in Higher Education at the University of California at Los Angeles. (1978). The American freshmen: National norms for fall 1978. Los Angeles: Cooperative Institutional Research Program,

Ard, A.F., & Hyder, L.L. (1978). Career planning objectives of college students and activity perceived as instrumental in their achievement. Journal of College Student Personnel, 19, 48-54.

Ashcraft, C.W. (1975). A career development model in a university setting. In R.C. Reardon & H.D. Burck (Eds.), Facilitating career development. Springfield, IL: Charles C. Thomas Publisher.

Aslanian, C., & Brickell, H. (1978). Adults in transition. New York: College Entrance Examination Board.

Astin, A.W. (1980). The American freshman: National norms for fall, 1980. Washington, DC: American Council on Education.

Bachhuber, T.D. (1977). Career development in higher education: Process program or problem? Journal of Employment Counseling, 14, 31-38.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.

Barrow, J., Cox, P., Sepich, R., & Spivak, R. (January 1989). Student needs assessment surveys: Do they predict student use of services? Journal of College Student Development, 30, 77-82.

Benedict, A.R., Apsler, R., & Morrison, S. (1977). Student views of their counseling needs and counseling services. Journal of College Student Personnel, 18, 110-114.

Blaska, B. & Schmidt, M.R. (1977). Placement. In W. Packwood (Ed.), College student personnel services. Springfield, IL: Charles C. Thomas Publisher.

Blocher, K.M., & Rogers, J.L. (1977). Career development for the majority. Journal of College Placement, 38, 69-72.

Brinkerhoff, R. (1987). Achieving results from training. San Francisco: Jossey-Bass.

Brinkerhoff, R., & Gill, S. (March 1995). The learning alliance (book review). Training, 32, 101.

Caffarella, R.S. (1978). Needs assessment. Orono, ME: College of Education, University of Maine.

Carnegie Foundation for the Advancement of Teaching. (1986). Carnegie survey of undergraduates. Washington, DC: Author.

Carney, C.G., & Barak, A. (1976). A survey of student needs and student personnel services. Journal of College Student Personnel, 17, 280-284.

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

Chickering, A.W., & Kyle, J. (Spring 1999). The Collegiate ideal in the twenty-first century. New Directions in Higher Education, 27(1), 109-20.

Cuccaro-Alamin, S. & Choy, S. (1998). U.S. District of Columbia; Post-secondary financing strategies: How undergraduates combine work, borrowing, and attendance. Statistical Analysis Report. Postsecondary Education Descriptive Analysis Reports. Report No: NCES-98-088.

Davenport University Fall Enrollment Report Fall. (1994). Internal report.

Diamond, E. (1987). Theories of career development and the reality of women at work. In B.A. Gulek & L. Larwood (Eds.), Women's career development (pp. 15-27). Newbury Park, CA: Sage.

Digest of Education Statistics. (1995). National Center for Education Statistics, U.S. Department of Education, 6th ed. Sponsored by the American Educational Research Association, 1. New York: Macmillan Publishing Company, 167-180.

Fassinger, R. E. (April 1990). Causal models of career choice in two samples of college women. Journal of Vocational Behavior, 36(2), 225-48.

Friedlander, J. (1978). Student ratings of co-curricular services and their intent to use them. Journal of College Student Personnel, 19, 195-201.

Friedman, M. (September 1, 2000) Women take to internet while avoiding IT. Computing Canada, 26(18), 9.

Fullan, M.G. (February 1996). Turning systemic thinking on its head. Phi Delta Kappan, 420-423.

Fullerton, J. S., & Potkay, C.R. (1973). Student perceptions of pressures, helps, and psychological services. Journal of College Student Personnel, 14, 355-361.

Glass, J.C., & Rose, A.R. (1987). Reentry women: A growing and unique college population. NASPA Journal, 25(2), 110-119.

Greenblatt, A. (Sept 2001). The campus crowd. Governing, 14(12), 30-33.

Hadley, E., & Harmon, L. (1999). Higher education students' off-campus work patterns. U.S. Washington. Report No. WSIPP-999-01-2301.

Hamilton, K. (Sept 14, 2000). The new academic year. Black Issues in Higher Education, 17(15), 24-27.

Harrington, S. (November 4-6, 1998). The factors affecting the career choices of African Americans and three career counseling suggestions. Paper presented at the Annual Meeting of the Mid-South Educational Research Association, New Orleans, LA.

Haviland, M., & Gohn, L. (Spring 1983). Career planning needs of college students. NASPA Journal, 20(4), 28-33.

Healy, C., & Reilly, K. (November 1989). Career needs of community college students: Implications for services and theory. Journal of College Student Development, 30, 541-545.

Holland, J.K., Daiger, D.C., & Power, P.G. (1980). My vocational situation. Palo Alto, CA: Consulting Psychologists Press.

Hoyt, K.B. (1989). The career status of women and minority persons: A 20-year retrospective. Career Development Quarterly, 37, 202-212.

Hurst, J.C. (1978). Chickering's vectors of development and student affairs programming. In C.A. Parker (Ed.), Encouraging development in college students. Minneapolis: University of Minnesota Press.

Indrisano, V. E., & Averback, S.M. (1979). Mental health needs assessment of a major urban university. Journal of the American College Health Association, 27, 205-209.

Isaac, S. & Michael, W.B. (1981). Handbook in research and evaluation. San Diego, CA: Ed ITS.

Jarmon, A. (1983). Perceptions and expectations as measures of satisfaction with the freshman advising program at the College of William and Mary (Virginia). Unpublished doctoral dissertation, College of William and Mary, Williamsbury, VA.

Joyce, E. (1997). Non-traditional students at a regional state university (adult students). Unpublished doctoral dissertation, University of Connecticut, Storrs-Mansfield, CT.

Kemper, M.G. (1980). An assessment of the perceived career development needs of college students: Differences by academic year and sex. Unpublished doctoral dissertation, Duke University, Durham, NC.

King, J. (1999). Money matters: The impact of race, ethnicity, and gender on how students pay for college. Washington, DC: American Council on Education (ED 443364).

Koch, J. (1990). Analysis of freshmen students' characteristics, goals, and needs at Northern Arizona University (Arizona). Unpublished doctoral dissertation, Northern Arizona University, Flagstaff, AZ.

Koerner, B. (Feb. 8, 1999). Where the boys aren't. U.S. News & World Report 126(5), 46-50.

Kuh, G.D. (1980). A comprehensive overview of needs assessment in student affairs. Bloomington, IN: School of Education, Indiana University.

Lawler, P. (1991). The key to adult learning: Theory and practical strategies. Philadelphia: Research for Better Schools.

Lent, R.W., Brown, S.D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. Journal of Vocational Behavior, 45, 79-122.

Lucas, E. (Jan 1988). My vocational situation: Normative, psychometric, and comparative data. Measurement and Evaluation in Counseling and Development, 20(4) 162-70.

Luzzo, D.A. (November 1995). The impact of college student employment on the career decision making process. Texas A & M University-Corpus Christi TX. Paper presented at the NASEA Annual Convention in San Francisco.

Luzzo, D.A., & McWhirter, E. H. (Winter 2001). Sex and ethnic differences in the perception of educational and career-related barriers and levels of coping efficacy. Journal of Counseling and Development, 79(1), 61-7.

Luzzo, D.A., McWhirter, E.H., & Hutcheson, K.G. (March-April 1997). Evaluating career decision-making factors associated with employment among first-year college students. Journal of College Student Development, 38(2), 166-72.

Marshall, S. P. (January 1995). The vision, meaning, and language of educational transformation. The School Administrator, 8-15.

McBride, J., & Muffo, J. (1991). Student needs assessment. Journal of Career Planning and Employment, 5(2), 63-67.

McBride, J., & Muffo, J. (March 1994). Students assess their own career goals and services needs. Journal of Career Planning and Employment, 54(3), 26-28, 30-31, 61-63.

McWhirter, E.H, Torres, D.M., & Rasheed, S. (1998). Assessing barriers to women's career adjustment. Journal of Career Assessment, 6(4), 449-479.

Morrill, W.H., Oetting, E.R., & Hurst, J.C. (1974). Dimensions of counselor functioning. Personnel and Guidance Journal, 52, 354-359.

National Center for Education Statistical Data Analysis System, 1999.

National Vocational Guidance Association and American Vocational Association. (1973). Career development and career guidance. NVGA Newsletter, 13, 5-8.

Nolte, W. (1991). The impact of working adult students on the Washington State Community College System: Job upgrade training. Unpublished doctoral dissertation, The University of Texas in Austin, TX.

Norusis, SPSS Inc., 1991.

Olson, M. (1995). Perceived importance of student services: A comparison of traditional and nontraditional college students perceptions. Unpublished doctoral dissertation, University of Idaho, Moscow, ID.

Osipow, S.H. (1983). Theories of Career Development (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Pace, C.R., & Friedlander, J. (1978). Approaches to evaluation: Models and perspectives. In G. Hanson (Ed.), Evaluating program effectiveness. New Directions for Student Services (No 1). San Francisco: Jossey-Bass.

Parsons, F. (1909). Choosing a vocation. Boston: Houghton Mifflin.

Poe, R. (May 1991). Developmental changes in vocational identity among college students. Journal of College Student Development, 32, 249-252.

Pollitt, K. (Dec 27, 1999). Affirmative action for men? The Nation, 269(22), 10.

Prediger, D.J., Roth, J.D., & Noeth, R.J. (1974). Career development of youth: A nationwide study. Personnel and Guidance Journal, 53, 97-104.

Robb, F.C. (1976). Fall back, regroup and charge! Journal of College Placement, 37, 38-41.

Rotberg, H.L., Brown, D., & Ware, W.B. (1987). Career self-efficacy expectations and perceived range of career options in community college students. Journal of Counseling Psychology, 34, 164-170.

Schlossberg, N.K., Lynch, A.Q., & Chickering, A.W. (1989). Improving higher education environments for adults. San Francisco: Jossey-Bass.

Schneider, L.D. (1977). Counseling. In W. Packwood (Ed.), College student personnel services. Springfield, IL: Charles C. Thomas.

Scriven, M. (November 1978). How to do a needs assessment. Workshop sponsored by Capitol Publications, Chicago.

Senge, P. (1990). The fifth discipline: The art and practice of the learning organization. New York: Doubleday.

Sillings, M. (1984). Student services for adult learners. Paper presented to Midwest Region Academic Affairs Administrators Conferences, Dayton, OH.

Stern, D., & Nakata, Y. (1991). Paid employment among U.S. college students: Trends, effects, and possible causes. Journal of Higher Education, 62, 25-43.

Stufflebeam, D.I. (April 16-20, 1986). Standards of Practice for Evaluators. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.

Stufflebeam, D.I., Foley, W.J., Gephart, W.J., Guba, E.G., Hammond, R.I., Merriman, H.O., & Provus, M.M. (1971). Educational evaluation and decision making. Itasca, IL: F.E. Peacock.

Super, D.E. (1953). A theory of vocational development. American Psychologist, 8, 185-190.

Super, D.E. (May 1983). Assessment in career guidance: Toward truly developmental counseling. Personnel and Guidance Journal, 61(9), 555-62.

Tiedeman, D.V., & O'Hara, R.P. (1963). Career development: Choice and adjustment. New York: College Entrance Examination Board.

Urbini, T. (1987). In search of parsimony in career development theory: A theoretical and empirical integration of the theories of James Marcia, Vincent Harren, and William Perry. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign, IL.

Walters, L., & Saddlemire, G. (1979). Career planning needs of college freshmen and their perceptions of career planning. Journal of College Student Personnel, 20, 224-230.

Warner, R.W., Jr. (1975). Planning for research and evaluation: Necessary conditions. Personnel and Guidance Journal, 54, 10-11.

Warrington, D. (Feb. 1987). Job locator and development: A model program. Journal of Student Financial Aid, 11(1), 10-17.

Warrington, D., & Rives, J. (Spring 1980). The authors report on the mutual advantages to student-employer work relationships and urge colleges to act as catalysts between the two. Journal of College Placement, 37-39.

Weissberg, M., Beretsen, M., Cote, A., Cravey, B., & Heath, K. (March 1982). An assessment of the personal, career, and academic needs of undergraduate students. Journal of College Student Personnel, 115-122.

Wheatley, M.J. (1999). Leadership and the new science: Discovering order in a chaotic world. San Francisco: Berrett-Koehler.

Yankelovich, D., & Clark, R. (Sept 1974). Research: College and non-college youth values. Change, 6(7), 45-46.