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ABSTRACT

The project for the Columbia (Mississippi) School District was designed (1) to establish a model program of career counseling and placement which would lend itself to overall evaluation and have potential for replication and dissemination to other districts throughout the State and region, and (2) to determine the effects, if any, of this program on the vocational assurance and vocational anxiety of high school students, and on teacher attitudes towards career education. Project evaluation procedures involved the development and testing of hypotheses which would determine the accomplishment of the project objectives. Findings showed that the project was instrumental in reducing students' vocational anxiety and increasing their vocational assurance. There was also a positive increase in the teachers' attitude toward career education. This report is presented in four sections: Section I covers the project purpose, research hypotheses, definition of terms, procedures, experimental design, instruments, and statistical analysis of data; section II describes the Career Planning and Placement Program; section III contains results and findings as they relate to the research hypotheses; and a section IV includes the summary, conclusion, and recommendations. An 18-page career education and development bibliography, questionnaires, and other instruments used in the project are included in the appendixes. (WL)

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UNIVERSITY OF SOUTHERN MISSISSIPPI
Hattiesburg, Mississippi

FINAL REPORT

CAREER COUNSELING AND PLACEMENT
Columbia City Schools
Columbia, Mississippi

Submitted to: U.S. Office of Education
Department of Vocational Education
400 Maryland Avenue
Washington, D.C. 20202

Submitted by: Career Counseling and Placement
Project (Vool3VZ)
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June 1975

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IN COOPERATION WITH:

Columbia City Schools
Columbia, Mississippi

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SECTION I

INTRODUCTION

In July 1974, the University of Southern Mississippi was awarded a grant by the Department of Health, Education and Welfare, Washington, D.C. The grant called for the establishment of a model for a career counseling and placement program. The site selected for the project was in Marion County Mississippi. During the pre-planning phase, a steering committee from the University of Southern Mississippi and Marion County school officials met and worked out preliminary arrangements for implementation of the project. The following individuals were present at the initial meeting in July of 1974:

COLUMBIA SCHOOL SYSTEM REPRESENTATIVES

Dr. Hines Cronin, Superintendent of Schools, Columbia, Ms
Dr. Mel Buckley, Assistant Superintendent, Columbia, Ms
Mr. Bob Ferguson, Principal, Columbia High School, Columbia,
Ms
Mr. John Sapen, Principal, Jefferson Middle School
Mr. Fred Idom, Counselor, Columbia High School
Mrs. Barbara Blakeney, Counselor, Columbia High School
Mrs. Bea Bradley, Counselor, Jefferson Middle School

PROJECT STAFF

Dr. John D. Alcorn, Director, Career Counseling & Placement
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UNIVERSITY OF SOUTHERN MISSISSIPPI ADVISORY COMMITTEE

Dr. Jack Daniels, Director, Career Development Center, University of Southern Mississippi

Dr. Daniel Randolph, Associate Professor, Department of Counseling & Guidance, University of Southern Mississippi

Dr. Ben Hutton, Associate Professor, Department of Counseling & Guidance, University of Southern Mississippi

As a result of the initial planning meeting, the following conclusions and recommendations were made:

1. the main focus of the project would be in the Columbia City School System;
2. project staff would have regular meetings with the Columbia School personnel to discuss implementation of the career counseling program; and
3. broad aims and objectives of the project were discussed and clarified.

Statement of the Problem

The basic purpose of the project was in the following three areas:

1. To establish a model program of career counseling and placement which would (a) lend itself to overall evaluation, (b) provide a context within which methods of career counseling and placement could be developed and evaluated, and (c) have potential for replication and dissemination to other school districts throughout the state and region.

2. To determine the effects, if any, of a planned program of career counseling and placement on the vocational assurance and vocational anxiety of high school students.

3. To determine the effects, if any, of a planned program of career counseling and placement on the attitude of teachers towards career education.

Research Hypotheses

- H₁: A program of career counseling and placement will have differential effects upon the vocational anxiety of high school seniors.
- H₂: A program of career counseling and placement will have differential effects upon the vocational assurance of high school seniors.
- H₃: A program of career counseling and placement will have differential effects upon the vocational anxiety of high school freshmen.
- H₄: A program of career counseling and placement will have differential effects upon the vocational assurance of high school freshmen.
- H₅: A program of career counseling and placement will have differential effects upon the vocational anxiety of students who volunteer for career counseling.
- H₆: A program of career counseling and placement will have differential effects upon the vocational assurance of students who volunteer for career counseling.

- H₇: A program of career counseling and placement will have differential effects upon the vocational anxiety of students who participate in a "career group."
- H₈: A program of career counseling and placement will have differential effects upon the attitude of teachers toward career education.

Definition of Terms

Occupational Information. "Occupational information is valid and usable data about positions, jobs, and occupations, including duties, requirements for entrance, conditions of work, rewards offered, advancement pattern, existing and predicted supply of and for workers, and sources for further information." (Norris, Zernal and Hatch, 1966, p. 23)

Career. The sequence of occupations, jobs, and positions engaged in or occupied throughout the lifetime of a person.

Vocational Exploratory Behavior. Vocational exploratory behavior refers to activity, mental or physical, undertaken with the more or less conscious purpose or hope of eliciting information about one's self or one's environment, or of verifying or arriving at a basis for a conclusion or hypothesis which will aid one in choosing, preparing for, entering, adjusting to, or progressing in, an occupation.

Position. A position is defined as a group of activities, tasks, or duties performed by one person.

Job. A job refers to a group of similar positions in a business, industry, or other place of employment.

Occupation. An occupation is a definable work activity that occurs in many different settings.

Multimedia Career Orientation. Multimedia career orientation refers to career planning through the use of filmstrips, 16 mm films, tape recordings, and other printed materials with the counselor acting as a consultant.

Vocational Assurance. Vocational assurance is defined as the tendency to feel confident about earning a living. For purposes of this investigation, vocational assurance was operationally defined as scores on the vocational assurance category of the How Well Do you Know Yourself.

Career Counseling. Career counseling is a systematic program of guidance and informationally functional activities which are aimed at helping pupils make occupational and educational plans and decisions.

Vocational Anxiety. Vocational anxiety is defined as a heightened emotional state or condition of the human organism characterized by feelings of tension and apprehension concerning the area of vocation. For purposes of this study, vocational anxiety was operationally defined as scores on the Vocational Anxiety Scale (Fredrick, 1974).

Procedures

Sample

School Selection. The study was conducted in two schools located in the Columbia City School System. A planned program

of career counseling and placement was provided for students at the Jefferson Middle School and the Columbia High School. Selection of specific experimental classroom groups was by random design and required the cooperation of teachers.

Student Selection. Two hundred-three subjects, selected from a population of approximately six hundred, participated in this study. The experimental population included the following: (a) fifty-five twelfth grade subjects, (b) seventy ninth grade subjects, (c) forty volunteer subjects from grades nine through twelve, and (d) thirty-eight volunteer subjects from grades eleven and twelve.

Teacher Selection. All teachers at the Columbia High School were asked to participate in this study. The experimental teacher population consisted of thirty subjects. At the beginning of the school year all teachers were asked to complete a questionnaire regarding their attitude towards career education. The same questionnaire was administered at the end of the year to assess changes in attitude.

Design

The subjects for this study were a total of 203 students and thirty teachers, making up five different experimental groups. At the beginning of the school year, all subjects in the study were administered the following pretests in order to assess changes in vocational anxiety and vocational assurance: (a) Vocational Anxiety Scale and (b) How Well Do You Know Yourself. Following the treatment phase, all

subjects were again administered the instruments as post-tests. At the beginning of the school year, all teachers were administered an attitude questionnaire (Appendix A) and a posttest was administered during the last week of school.

Statistical analysis employed a one way analysis of variance for each dependent variable. These analyses allowed statistical effects of group differences to be examined. The general design is shown in Figure 1.

Instruments

Vocational Anxiety Scale (VAS). The Vocational Anxiety Scale, developed by David Fredrick, consists of twenty items which the subject is asked to respond to on a five point scale ranging from "strongly agree" through "strongly disagree." The instrument has two forms which are designed to measure vocational anxiety in both the student and adult population.

The test-retest reliability for the Vocational Anxiety Scale is reported to be in a range from .89 to .91 with a testing interval of sixty days. Measures of internal consistency (alternate item reliability) are reported to be .90. To assess the criterion validity, the VAS was administered to four groups of subjects, each of whom theoretically represented varying degrees of vocational anxiety. The four groups consisted of (a) high school seniors, (b) undergraduate college students, (c) an unemployed group, and (d) an employed

FIGURE 1
EXPERIMENTAL DESIGN

	PRETEST	TREATMENT	POSTTEST
GROUP E ₁	(VAS) (HWDYKY)	Classroom Career Counseling Grcup(f)	(VAS) (HWDYKY)
	"	CONTROL-GROUP	"

	PRETEST	TREATMENT	POSTTEST
GROUP E ₂	(VAS) (HWDYKY)	Classroom Career Counseling Group(s)	(VAS) (HWDYKY)
	"	CONTROL	"

	PRETEST	TREATMENT	POSTTEST
GROUP E ₃	(HWDYKY) (VAS)	Career Counseling Volunteer Group	(HWDYKY) (VAS)
	"	CONTROL	"

	PRETEST	TREATMENT	POSTTEST
GROUP E ₄	(VAS)	Career Counseling "Career Group"	(VAS)
	"	CONTROL	"

	PRETEST	TREATMENT	POSTTEST
GROUP E ₅	Teacher Attitude Questionn.	Career Counseling & Placement Proj.	Teacher Attitude Questionn.

group. Analysis of variance between groups was significant at .001. As was predicted, vocational anxiety was highest for the unemployed group, followed by the high school seniors, undergraduate college students, and the employed group. At the present time, additional validity and norms are being established.

How Well Do You Know Yourself (HWDYKY). This instrument, developed by Thomas Jenkins, John Coleman, and Harold Fagin (1959), consists of 120 items. On each item, the subject is asked to respond to each statement in terms of how he sees himself. The subject is to choose one of six possible answers ranging from "always" to "never." The instrument yields nineteen scores, seventeen of which are used to represent trait estimates of personality characteristics "which have been found, from general experience in guidance and personnel functions, to be important for a wide range of the work, career, and interpersonal activities in which normal individuals are commonly involved."

The test-retest reliability is reported to be in a range from .32 to .96 with a median of .76. There were no measures of internal consistency reported. Not a great deal of information was provided by the authors concerning validity, but it was reported that validity was determined by factor analysis. The manual provided normative data on high school students and college undergraduate students.

Treatment Procedures

Group I - Classroom Career Counseling Group (Freshmen).

For purposes of convenience, Group I was recognized as Experimental Group I and was abbreviated as E_1 throughout the study. The group was composed of fifty freshmen students from two randomly selected classrooms in the Columbia High School. Subjects assigned to Group E_1 , received a one hour session per week for a period of five weeks. During each of the five sessions, subjects were exposed to prepared occupational information which was disseminated by the following methods:

1. through the use of audio visual aids such as tape recorders, films, books, and slide presentations;
2. through the use of a guest speaker (the guest speaker was a community volunteer who agreed to discuss his specific career field with interested students);
3. through a lecture type discussion of career opportunities by the guidance counselor and/or instructor; and
4. through the administration and interpretation of interest, ability, and personality tests.

Group II - Classroom Career Counseling Group (Seniors).

For purposes of convenience, Group II was recognized as Experimental Group II and was abbreviated as E_2 throughout the study. This group was comprised of thirty-five senior students from one randomly selected classroom at the Columbia High School. Subjects assigned to Group E_2 received a

one hour session per week for a period of five weeks. During each of the five sessions, subjects were exposed to prepared occupational information which was disseminated in the same manner as in Group E₁. A control group of twenty subjects selected at random from the Columbia High School did not receive any experimental treatment.

Group III - Career Counseling Volunteer Group (Mixed Grades). For purposes of convenience, Group III was recognized as Experimental Group III and was abbreviated as E₃ throughout the study. This group was comprised of forty students from mixed grade levels who volunteered for career counseling during the time period from October 1, 1974 to February 15, 1975. The career counseling which each subject received varied depending upon individual needs, but generally the subjects were encouraged to make use of all the materials available in the Career Information Center. All subjects in Group E₃ received career counseling by a project staff member.

Group IV - Career Counseling via a Career Group (Mixed Grades). For purposes of convenience, Group IV was recognized as Experimental Group IV and was abbreviated as E₄ throughout the study. This group was comprised of eighteen students from mixed grade levels who volunteered to join a career group at the Columbia High School. Subjects assigned to Group E₄ received a one hour session per week for a period of six weeks. During each of the six sessions subjects were

exposed to prepared occupational information which was disseminated in the same manner as in Group E₁. Treatment in Group E₄ varied somewhat from other experimental groups as subjects were given more of an opportunity to interact and receive feedback from other subjects in the group. The sessions took on a more "informal" nature than the other groups.

Group V - Teacher Attitude Group. For purposes of convenience, Group V was recognized as Experimental Group V and was abbreviated as E₅ throughout the study. The group was composed of thirty teachers from the Columbia High School. Subjects in Group E₅ were exposed to the treatment described in this report under "Activities Related to School Orientation to Career Education." All subjects were administered a "teacher attitude questionnaire" at the beginning of the school year. Posttests were administered during the last week of the school year.

Statistical Analysis of Data

Statistical analysis employed a one-way analysis of variance for each dependent variable (VAS and HWDYKY). The analysis allowed statistical effects of group difference to be explained. All statistical analyses in this study were carried out using a Xerox Sigma Nine computer and available programs for analysis of variance (Veldman, 1967). The .05 confidence level was used to determine significance.

Where applicable, a Scheffe test was used to make multiple comparisons between groups.

SECTION II

SECTION II

CAREER COUNSELING AND PLACEMENT

Program Description

The University of Southern Mississippi, in cooperation with the Columbia City School System, Columbia, Mississippi, developed a program of Career Counseling and Placement which was implemented during the period from August 1, 1974 to May 31, 1975. This was the first project of this type conducted within the Columbia City School System.

Outline of the Project and Schedule

The emphasis of this project was to not only establish a working model of career counseling and placement, but also to systematically examine the effects of a program of career education on teacher attitudes and student behavior. The following activities describe the career counseling and placement program:

I. ACTIVITIES RELATED TO THE SCHOOL ORIENTATION TO CAREER EDUCATION

Knowledge of the need for career education within the schools is not equally distributed. A survey of school personnel (Appendix A) showed that some individuals were quite aware of the need for increasing emphases on careers and had some definite ideas and plans about how to implement the career concept into their curriculum; other school

personnel were very unfamiliar with even the most general aims and objectives of career education. The activities listed below were an attempt to equalize the knowledge concerning career education and to develop school wide support/commitment to the project in career counseling and placement:

1. Information concerning different models of career education, definitions of career education, and articles on the career concept were mimeographed and distributed to all teachers in the Columbia City Schools.

2. All teachers were given a "Career Education Folder" in which to keep their materials pertaining directly to career education.

3. Project staff personnel met with all teachers either individually or in small groups to discuss the project and career education. Regular meetings with the teachers were conducted throughout the school year.

4. Project staff met with the school superintendent, principals, and guidance counselors on a regular basis. Initial meetings concerned the organization of project activities concurrent with school activities and later meetings were to discuss the progress being made on the project.

5. The University of Southern Mississippi through the USM Center for Career Development and in cooperation with the Marion County School District and the Columbia City

School District, conducted a National Alliance of Businessmen Career Guidance Institute from January 21, 1975 to May 16, 1975. This Institute included classroom teachers, elementary, secondary and vocational, administrators, supervisory personnel, and others. Participants in the workshop were given the option of receiving university credit.

Career Counseling and Placement staff contributed to the workshop by presenting a program on career education and supplying career information related specifically to the Marion County and Columbia City School System. In addition, project staff worked to secure the cooperation from industrial and business personnel from the surrounding area. The workshop was designed to help teachers revise their curriculum so as to include more career education materials. It was also hoped that the workshop would help to develop school wide support for the Career Counseling and Placement Project.

The thrust of the Institute was to increase awareness of educators, in cooperation with employers, of the career preparation needed by students. Another objective was to improve the career guidance provided by both teachers and counselors, to help disadvantaged students by increasing their awareness of job opportunities, increasing their knowledge of available jobs within the area, and by increasing their ability to prepare for these jobs.

Another objective was to enhance the contact between industry and business personnel, and therefore, increase

the knowledge of each concerning the other so they might be able to arrive at mutual goals for the youth of their community. A major focus of the Institute was devoted to developing a better understanding, on the part of the educators, of ways in which disadvantaged youth could be prepared to enter existing or future job markets.

Perhaps one of the most important objectives of the Institute was to cause educators to examine the existing curriculum and determine ways it could be improved to better enable the disadvantaged youth to enter the job market. Not only were the participants asked to examine the curriculum, but they were also asked to rewrite that part of the curriculum for which they were responsible, develop lesson plans for each of the units to be taught and include goals, objectives, methods, media, and how the goals and objectives could be evaluated in behavioral terms. The end result was a curriculum within which each unit contained career education concepts.

II. ACTIVITIES RELATED TO THE DEVELOPMENT OF COMMUNITY SUPPORT FOR THE PROJECT

Most of the placement activities conducted through a program were centered on developing a high degree of community involvement and support. The project staff worked very closely with leaders in the community in order to solicit support in hiring students whenever a position became available. In addition, it was recognized that the community was a large source of valuable information

concerning careers. The following activities were an attempt to involve the community in the project:

1. Community volunteers were invited to participate in as many school activities as possible. From the beginning of the project to the end of the school year, approximately 125 members of the community were invited to talk with students concerning their particular career interests.

2. The project staff, working in conjunction with the guidance counselors in the Columbia City Schools, established a "Career Day" on April 29, 1975. Approximately fifty different careers were on display and individuals from the community were encouraged to work with students on their selected career areas.

3. Community Resource Questionnaire Cards (Appendix B) were developed and given to community members on an individual basis, passed out to groups at club meetings, and sent through the mail. Approximately 400 cards were sent to community members. Upon return of the cards, they were used to:

- a. aid teachers and other school personnel in obtaining volunteers to discuss particular career areas;
- b. generate community interest and support in school activities;
- c. help develop career day activities;
- d. provide students with a source of potential job opportunities when they approach graduation;

e. give the school system a guide to community leaders willing to give students part-time job experiences before graduation; and

f. develop a Marion County Community Resource Guide.

4. Articles describing the Career Counseling and Placement Project were placed in the Columbia Herald and the Hattiesburg American newspapers. In addition to a project description, the community at large was provided an opportunity to submit suggestions and volunteer for career related activities within the schools.

5. A program outlining the Career Counseling and Placement Project was presented to the Mississippi Personnel and Guidance Association Convention in Jackson, Mississippi on November 20, 1974. The program was titled "A Step-by-Step Guide on How to Develop a Program of Career Counseling and Placement on a Minimum Budget."

6. Project staff met with representatives of the State Employment Security Commission, State Department of Vocational Rehabilitation, Community Technical Institute, and the local colleges to establish good working relationships. Throughout the year these representatives made regular visits to the Columbia City Schools to discuss career objectives with the students.

7. Project staff made presentations concerning the project to the Rotary Club and Lions Club in Columbia,

Mississippi. Nearly everyone in both clubs offered their services in support of the project.

III. ACTIVITIES RELATED TO THE DEVELOPMENT OF A CAREER INFORMATION CENTER

1. Two offices, one at the Columbia High School and one at the Jefferson Middle School were converted into Career Information Centers. The Career Information Centers were operated by the project staff and the guidance counselors in the schools. Informal training sessions were conducted to assist counselors in becoming familiar with the materials available, career counseling procedures, testing materials and methods of interpretation, sources of additional career information, and methods of career counseling with groups. Materials such as desks, file cabinets, telephones, typewriters, etc., were supplied by the local school system.

2. Career information from every conceivable source was collected by project staff, teachers, community members, and students. School announcements were made to help students become aware of the availability of the center.

3. Project staff met with personnel from the state labor relations office to discuss the legal issues involved with occupational placement of high school students on a part-time and full-time basis. Legal information was made available to all students.

IV. ACTIVITIES RELATED TO THE DISSEMINATION AND DISPLAY OF CAREER INFORMATION

1. Display racks were built and/or purchased for the display of career information and placed in the Career Information Centers.

2. Career bulletin boards were utilized in all the schools. Information related to job vacancies, legal information, employment statistics, labor market trends, and other career materials were displayed on the bulletin boards in the halls.

3. Small "career groups" of approximately 15-25 students each were organized on a volunteer basis. During these group sessions, different methods of presenting career information were examined to assess their impact in terms of career development and student behavior-interest. Some groups were administered a battery of interest, personality, and ability tests. Interpretation of the tests corresponded with the presentation of career information in the form of films, printed matter, slides, field trips, and guest speakers. Approximately 125 students were reached in the small career group presentations.

4. Career counseling on an individual basis was also conducted by project staff and school guidance counselors. Approximately 200 students were seen on an individual basis. Measures of vocational anxiety and vocational assurance were used to determine the short term effects of counseling.

5. Project staff served in a consultant capacity to assist teachers in their classes with the presentation of career information. The school guidance counselors also assisted the project staff. Approximately 400 students were reached in this manner.

6. Video taped interviews were conducted with representatives of the Mississippi State Employment Security Commission, community employers, local community employees, and past high school graduates. These video tapes were used with career counseling groups and with classes in which staff made presentations.

7. Project staff conducted career counseling sessions with two groups of approximately thirty special education students.

8. A "Student Career Center" was set up by the students in the Columbia High School and was maintained by students in the "career club."

9. A follow-up study (Appendix C) was conducted at the Columbia High School to determine the employment status of past graduates. The follow-up results (Appendix D) were distributed and interpreted to all teachers and students in the Columbia City Schools being served by the project.

10. The Ohio Vocational Interest Scale (OVIS) was administered to approximately 100 senior high students and 150 junior high students. Machine scored results comparing the two groups was discussed with local school personnel and

curriculum advisors. Interpretation of the results was on both a group and individual basis. Students were encouraged to follow-up on the test information and some teachers combined the test results with career information related to each student's specific career interests.

11. Career films were shown at scheduled times throughout the week. Students were informed of the career area a week in advance and could attend the films during their activity period. Approximately 400 students signed up to see the films, however, it should be noted that some students signed up for more than one film.

12. A Career Education Bibliography (Appendix H) was compiled and made available to teachers, counselors, and other interested individuals. The Career Education Bibliography was also included as part of the program on career education presented at the Mississippi Personnel and Guidance Association Convention in Jackson, Mississippi.

V. ACTIVITIES RELATED TO CAREER PLACEMENT AND ASSESSMENT OF COMMUNITY NEEDS

1. In order to determine factors related to placement of students within their desired career area, a questionnaire (Appendix E) was sent to employers in a five county area of Columbia, Mississippi. The questionnaire attempted to answer the following questions:

a. What types of job opportunities can students expect to find in the near future?

b. What specific skills, training, and/or education do employers require for new future employees?

c. What new skills or training can our schools offer students that will help them find and hold the job of their choice?

d. Can our students find satisfactory employment with the skills and training they are now receiving in our schools?

The questionnaire was mailed to approximately 600 employers. Results were given to school personnel in the hopes that they would be used in the near future to revise current programs and/or help establish new programs based on the future employment needs of the community.

2. All students interested in securing employment on either a full-time or part-time basis were asked to complete an "employment card" (Appendix F). An Employer Prospectus was then compiled and organized according to occupational areas. The manual was distributed to large employers in the Marion County region, Mississippi State Employment Security Commission, and school personnel.

SECTION III
RESULTS AND FINDINGS

This section presents an overview of the data and all significant findings revealed by the several statistical analyses. The hypotheses of the study were tested by data obtained from the measures of (1) teacher attitude regarding career education, (2) vocational anxiety of students, and (3) degree of vocational assurance of students.

Hypotheses (H_1 and H_2): Classroom Career Counseling Group (E_1). The subjects in Group E_1 were composed of seventy freshmen students randomly selected from the Columbia High School. Fifty subjects were assigned to treatment groups and twenty were designated as control subjects. At the beginning of the school year (September), all seventy subjects were administered pretests in the form of the VAS and HWDYKY. In the middle of the academic year, a second administration of the VAS was performed. A final posttest was given near the end of the school year (May).

When subjected to an analysis of variance, the mean group scores for both level of vocational anxiety and vocational assurance indicated a significant difference

between the groups at the .05 level as shown in Table 1 and Table 2. In view of the findings, the original statistical hypothesis was rejected at the .05 level of significance and the research hypothesis was supported.

TABLE 1
SUMMARY OF ANALYSIS OF VARIANCE ON POSTTEST
SCORES OF VOCATIONAL ANXIETY
FOR GROUP E₁

Source	Mean Square	d.f.	F-ratio	p
Total	79.7029	69.0		
Groups	444.8125	1.0	5.984	.0162
Error	74.3336	68.0		

Experimental Treatment Group Mean = 58.9200
Control Group Mean = 64.5000

TABLE 2
SUMMARY OF ANALYSIS OF VARIANCE ON POSTTEST
SCORES OF VOCATIONAL ASSURANCE
FOR GROUP E₁

Source	Mean Square	d.f.	F-ratio	p
Total	13.9677	69.0		
Groups	50.4922	1.0	3.759	.0536
Error	13.4306	68.0		

Experimental Treatment Group Mean = 20.88
Control Group Mean = 19.00

Figure 2 and Figure 3 show a graphic presentation of the test results. The posttest findings clearly indicate that the treatment, which consisted of a planned program of career counseling administered as a classroom presentation, was significant in reducing vocational anxiety and increasing the level of vocational assurance as compared to subjects in the control group.

FIGURE 2

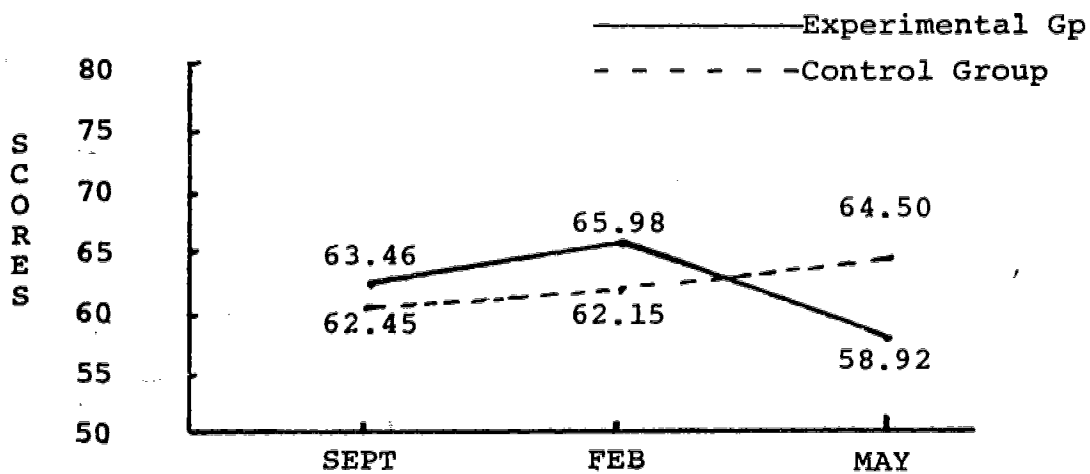
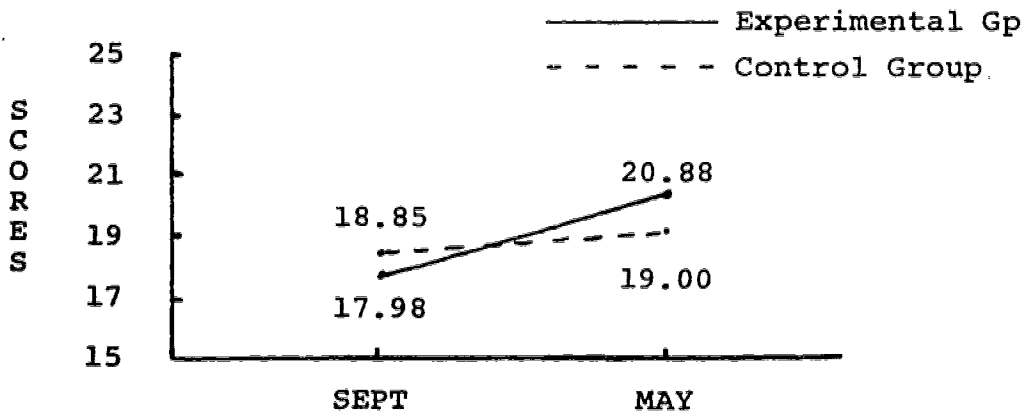
SUMMARY OF VOCATIONAL ANXIETY TEST SCORES FOR GROUP E₁

FIGURE 3

SUMMARY OF VOCATIONAL ASSURANCE TEST SCORES FOR GROUP E₁

It is interesting to note that at the second testing while treatment was being implemented, there was an increase in the level of vocational anxiety for both the experimental and control group subjects. Although there was a higher level of vocational anxiety for the experimental group, the differences at this point were not significant. It is hypothesized that the experimental treatment may cause initial increases in vocational anxiety before any significant reductions occur. Basically, it can be seen in Figure 1 that from the first testing period in September 1974, to the final posttest in May 1975, the control group subjects tended to continually increase in vocational anxiety while the experimental group subjects had an initial increase but then experienced a significant reduction later in the year.

Hypotheses (H_3 and H_4): Senior Classroom Presentation Group (E_2). The subjects in Group E_2 were composed of fifty-five senior students randomly selected from the Columbia High School. Thirty-five subjects were assigned to treatment groups and twenty were designated as control subjects. At the beginning of the school year all subjects were administered pretests in the form of the VAS and HWDYKY. A final posttest was given near the end of the school year (May).

When subjected to an analysis of variance, the mean group scores for both level of vocational anxiety and vocational assurance indicated a significant difference between the groups at the .01 level as shown in Table 3 and Table 4. In view of the findings then, it appears that the original statistical hypothesis is rejected at the .01 level of significance and the research hypothesis is supported.

TABLE 3

SUMMARY OF ANALYSIS OF VARIANCE OF POSTTEST
SCORES OF VOCATIONAL ANXIETY
FOR GROUP E_2

Source	Mean Square	d.f.	F-ratio	p
Total	43.3287	54.0		
Groups	662.3750	1.0	20.929	.0001
Error	31.6486	53.0		

Experimental Group Mean = 62.88
Control Group Mean = 70.10

TABLE 4
 SUMMARY OF ANALYSIS OF VARIANCE ON POSTTEST
 SCORES OF VOCATIONAL ASSURANCE
 FOR GROUP E₂

Source	Mean Square	d.f.	F-ratio	p
Total	17.0283	54.0		
Groups	168.2305	1.0	11.868	.0015
Error	14.1754	53.0		

Experimental Treatment Group Mean = 20.48
 Control Group Mean = 16.85

Figures 4 and 5 show a graphic presentation of the test results. These findings indicate that the treatment was significant in reducing vocational anxiety and increasing the level of vocational assurance as compared to subjects in the control group.

As was found with Group E₁, the initial level of vocational anxiety increased for both the experimental and control group. Posttest results indicate that the control group anxiety scores continued to increase while the anxiety scores for the experimental treatment group decreased significantly. Again, it appears that a planned program of career counseling will tend to increase the levels of vocational anxiety will be significantly reduced as compared to a control group.

FIGURE 4

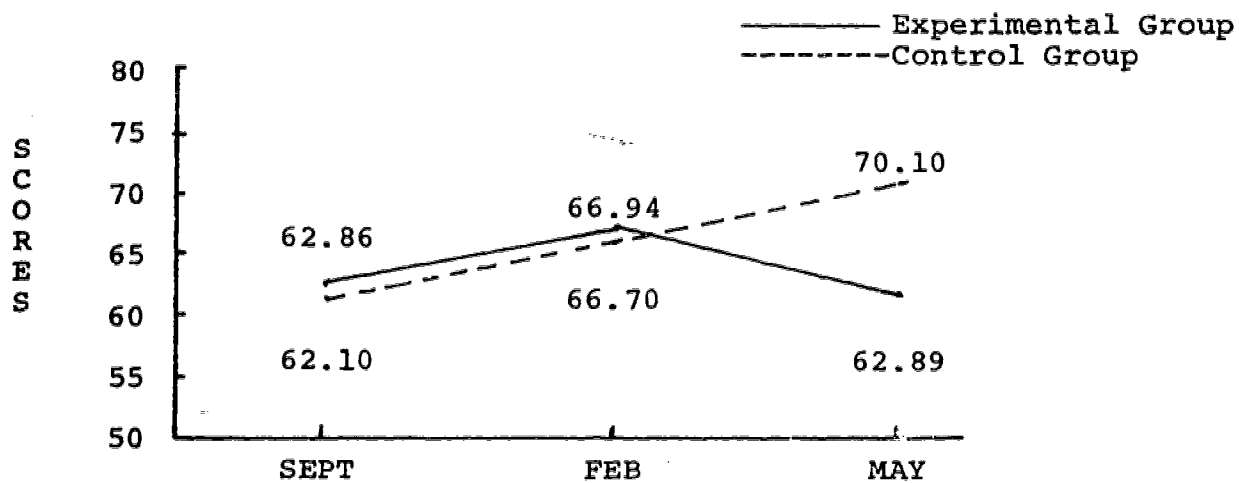
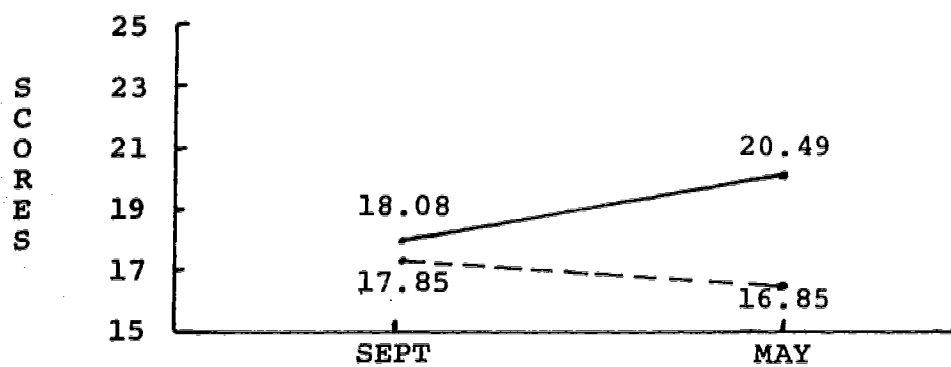
SUMMARY OF VOCATIONAL ANXIETY TEST SCORES FOR GROUP E₂

FIGURE 5

SUMMARY OF VOCATIONAL ASSURANCE TEST SCORES FOR GROUP E₂

Hypotheses (H_5 and H_6): Volunteer Career Counseling Group (E_3). The subjects in Group E_3 were composed of sixty students from mixed grade levels at the Columbia High School. The experimental treatment group was composed of forty subjects who volunteered for career counseling during the school year. The control group was composed of twenty randomly selected subjects from mixed grade levels. It should be noted that initial analysis of variance on the pretest measures of vocational anxiety (Table 5) indicated that the groups differed at the .01 level of significance BEFORE treatment. The analysis showed that the volunteer subjects had significantly higher levels of vocational anxiety than did the twenty randomly selected subjects. Analysis of posttest vocational anxiety scores indicate that the mean group scores differ at the .05 level as shown in Table 6. An examination of mean group scores further indicates that the experimental treatment group had a significantly reduced level of vocational anxiety as compared to the control group. Figure 6 shows a graphic presentation of the vocational anxiety test results.

When subjected to analysis of variance, the mean group scores for the level of vocational assurance indicated a significant difference between the groups at the .01 level as shown in Table 7. The findings support the research hypothesis that treatment will have differential effects

upon the vocational assurance of high school subjects who volunteer for career counseling. Figure 7 shows a graphic presentation of the vocational assurance test results.

TABLE 5
SUMMARY OF ANALYSIS OF VARIANCE ON PRETEST
SCORES OF VOCATIONAL ANXIETY
FOR GROUP E₃

Source	Mean Square	d.f.	F-ratio	p
Total	72.5530	59.0		
Groups	952.0000	1.0	16.588	.0003
Error	57.3901	58.0		

Experimental Treatment Group Mean = 71.90
Control Group Mean = 63.45

TABLE 6
SUMMARY OF ANALYSIS OF VARIANCE ON POSTTEST
SCORES OF VOCATIONAL ANXIETY
FOR GROUP E₃

Source	Mean Square	d.f.	F-ratio	p
Total	50.9640	59.0		
Groups	221.3750	1.0	4.609	
Error	48.0269	58.0		

Experimental Treatment Group Mean = 61.7750
Control Group Mean = 65.85

TABLE 7

SUMMARY OF ANALYSIS OF VARIANCE ON POSTTEST
SCORES OF VOCATIONAL ASSURANCE
FOR GROUP E₃

Source	Mean Square	d.f.	F-ratio	p
Total	14.0031	59.0		
Groups	122.0078	1.0	10.049	.0028
Error	12.1410	58.0		

Experimental Treatment Group Mean = 20.6250
Control Group Mean = 17.6000

FIGURE 6

SUMMARY OF VOCATIONAL ANXIETY TEST
SCORES FOR GROUP E₃

————— Experimental Group
----- Control Group

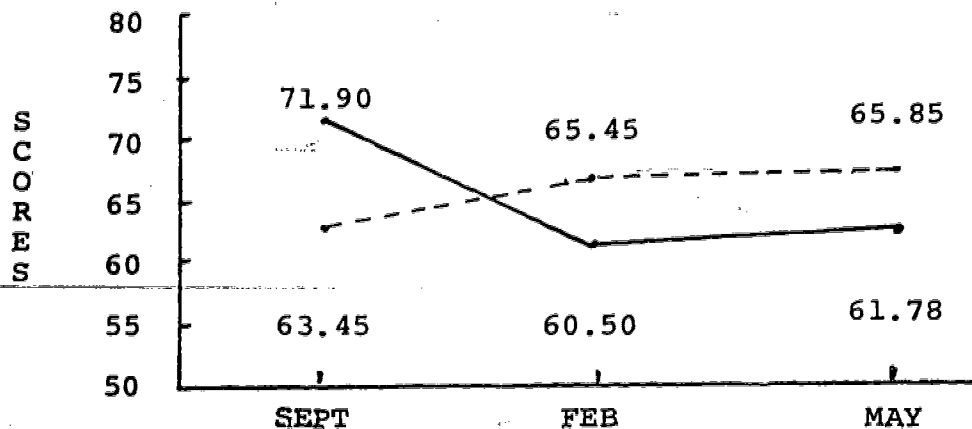
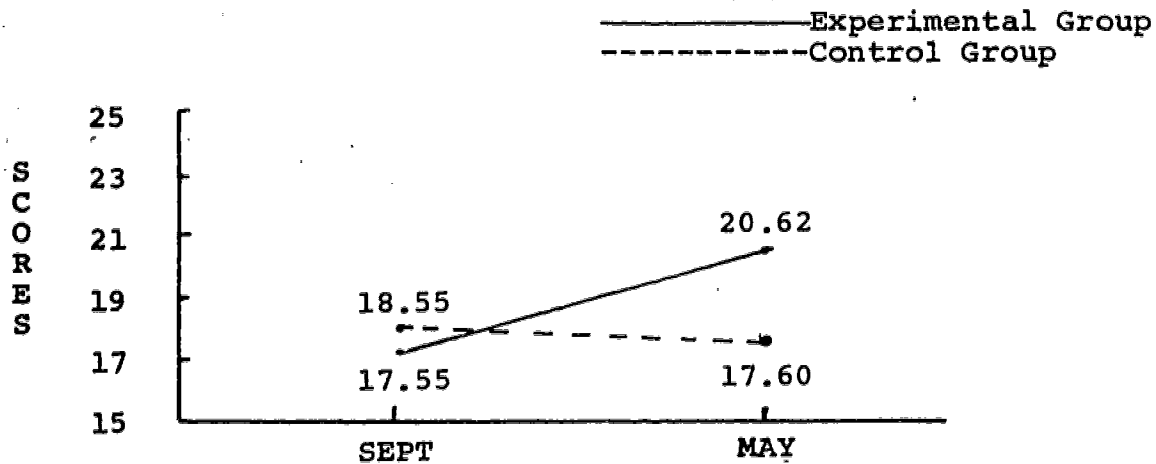


FIGURE 7

SUMMARY OF VOCATIONAL ASSURANCE TEST
SCORES FOR GROUP E₃



Hypothesis (H₇): "Career Group" Participants. The subjects in Group E₄ were composed of thirty-eight high school students from mixed grade levels. Eighteen subjects were assigned to treatment groups and twenty were designated as control subjects. At the beginning of treatment, all subjects were administered the VAS. A posttest of the same instrument was conducted at the end of the school year.

When subjected to an analysis of variance, the mean group scores for level of vocational anxiety indicated a significant difference between groups at the .01 level as shown in Table 8. In view of the findings then, the research hypothesis is supported. Figure 8 shows a graphic presentation of the test results.

TABLE 8

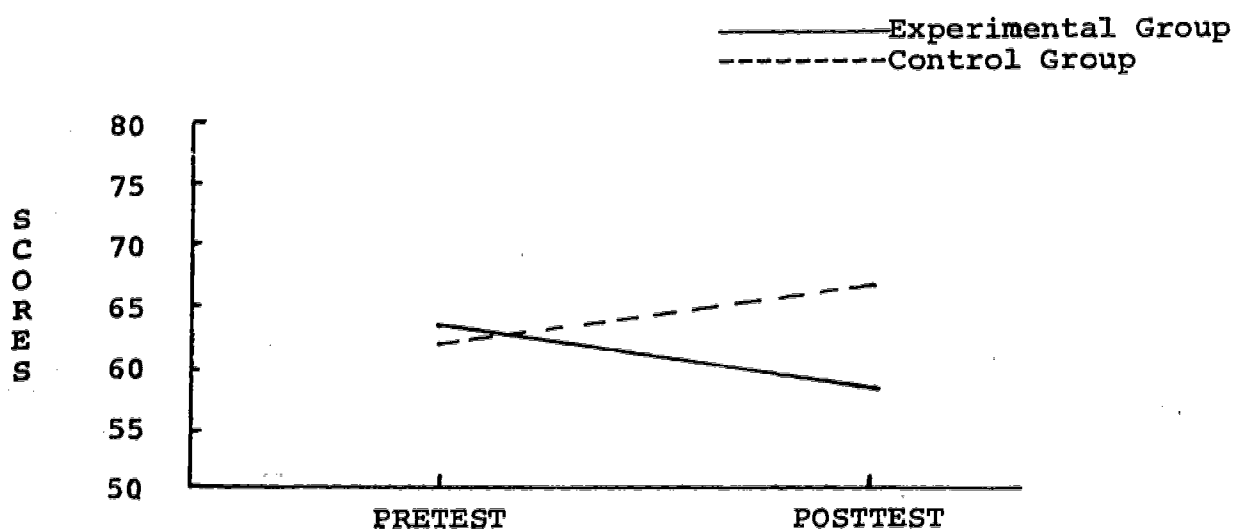
SUMMARY OF ANALYSIS OF VARIANCE ON POSTTEST
SCORES OF VOCATIONAL ANXIETY
FOR GROUP E₄

Source	Mean Square	d.f.	F-ratio	p
Total	92.3395	37.0		
Groups	661.3125	1.0	8.641	.0058
Error	76.5347	36.0		

Experimental Treatment Group Mean = 59.9444
Control Group Mean = 68.3000

FIGURE 8

SUMMARY OF VOCATIONAL ANXIETY TEST
SCORES FOR GROUP E₄



Hypothesis (^H8): Teacher Attitude. The subjects in group E₅ were composed of thirty teachers from the Columbia High School. At the beginning of the school year, all subjects were asked to complete a questionnaire. The instrument, which was administered both pre and post, was designed to determine the abilities, interests, and the motivation of the teachers. The questions and their respective pre and post mean ratings are shown below in rank order according to the change that took place between the tests:

Rank Order of Change	Item	Pretest Mean	Posttest Mean	Dif.
1	How would you rate your knowledge of the various career opportunities available to students within your specific teaching area?	4.26	7.70	3.44
2.	Indicate the degree to which you feel counselors have promoted career education in this school system.	4.32	6.96	2.64
3.	How would you rate your present degree of skill in communicating the career concepts to your students?	4.00	6.40	2.40
4.	How would you rate your present degree of understanding of career education today?	4.00	6.33	2.33
5.	How would you rate your present degree of knowledge about the changing employment conditions in your area	4.03	6.33	2.30

Rank Order of Change	Item	Pretest Mean	Posttest Mean	Dif.
6	How would you rate your knowledge of the career goals/objectives of your students?	4.30	6.60	2.30
7	How would you rate this school's overall commitment to career education?	4.00	6.29	2.29
8.	How would you rate your knowledge of the various career fields available to students within the four county area of Columbia?	4.50	6.76	2.26
9	How would you rate your personal commitment to career education?	4.40	6.40	2.26
10	How would you rate your knowledge of the various career opportunities available to students throughout the nation?	3.83	5.60	1.77
11	How would you rate your knowledge of the occupational/career areas which your past school graduates have selected?	4.16	5.23	1.07
12	How would you rate your present degree of knowledge of the local training opportunities for paraprofessionals?	4.40	4.67	.27

SECTION IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This section includes a summary of the study and a discussion of results of the analysis of the data. Conclusions and recommendations are made based on the results of the study.

Summary of the Study

In July 1974, the University of Southern Mississippi was awarded a federal grant through the U.S. Office of Education. The purpose of the grant was to establish a program of career counseling and placement which would: (1) lend itself to overall evaluation, (2) provide a context within which methods of career counseling and placement could be developed and evaluated, and (3) have potential for replication and dissemination to other districts throughout the state and region. The project was implemented in the Columbia City School System and continued until June 30, 1975.

In order to accomplish the above stated objectives of the project, the following hypotheses were examined:

(1) What effect, if any, would a planned program of career counseling and placement have on the vocational

assurance and vocational anxiety of high school freshmen?

(2) What effect, if any, would a planned program of career counseling and placement have on the vocational assurance and vocational anxiety of high school seniors?

(3) What effect, if any, would a planned program of career counseling and placement have on the vocational assurance and vocational anxiety of high school students who have volunteered for individual career counseling and students who have volunteered for career counseling via a "career group?"

(4) What effect, if any, would a planned program of career counseling and placement have on the attitude of teachers towards career education?

In order to test these hypotheses, 200 students were randomly selected and assigned to various experimental treatment groups. At the beginning of the school year all subjects were administered the Vocational Anxiety Scale and How Well Do You Know Yourself?. The instruments were administered both pre and post, with the final administration given during the last week of school in May. In the beginning of the school year, all teachers in the Columbia High School were asked to complete a questionnaire concerning their knowledge, abilities, and attitudes about career education. The same questionnaire was given during the last week of school in order to assess changes

in teacher attitude towards career education as a result of the project in career counseling and placement.

Experimental treatment in the student groups consisted of career counseling and placement activities which were designed to help the subject develop (1) a better understanding of himself, his interests, abilities, aptitudes, ambitions, resources, and limitations, (2) a knowledge of the world of work, to include the advantages, compensations, opportunities available, and prospects in different lines of work, and (3) the opportunity to assess the relationships between knowledge of himself and knowledge of the world of work so a career decision could be reached.

Findings and Conclusions

A series of general hypotheses were formulated regarding the effects of a planned program of career counseling and placement on (1) vocational anxiety, (2) vocational assurance, and (3) teacher attitude toward career education.

The findings clearly indicate that the program of career counseling and placement was instrumental in reducing the level of vocational anxiety in all experimental groups. Upon closer examination of the group means, however, it can be seen that much of the statistical difference between groups was due to two equally important factors. First, there was a reduction in the level of

vocational anxiety for those subjects in the experimental treatment groups. This reduction in vocational anxiety may be attributed directly to the career counseling and placement activities. A second factor contributing to the significant difference in group means, is the rather large increases in vocational anxiety experienced by subjects in the control groups. In Group E₂, for example, the treatment group actually increased slightly (+.03) in vocational anxiety between the pretest and posttest, while the control group increased 8 points. The one exception to this is with Group E₃, the student volunteer group, which started out initially with a significantly higher level of vocational anxiety as compared to the control group. Experimental treatment in this case was effective in significantly reducing the initial levels of anxiety.

By examination of the control group mean scores, it can be concluded that nearly all high school students experienced a relatively large increase in vocational anxiety as they approach the end of the school year. On the other hand, students who were exposed to a program of career counseling do not experience this large increase in anxiety, and often had slightly reduced levels of vocational anxiety.

The graphic presentations of vocational anxiety test scores show that the pretest level of anxiety was the same

for both the experimental treatment group and control groups. At the time of mid-year testing, both groups had generally increased their levels of vocational anxiety. The slightly higher level of anxiety at the second testing phase for the treatment group bore out the assumption that initial exposure to career information caused an increase in vocational anxiety. After the student had an opportunity to assimilate the career information, test results showed that anxiety was significantly reduced.

The results of this investigation also indicate that the program of career counseling and placement was significant in increasing the students' level of vocational assurance. As was found with vocational anxiety, the significant difference between group means was due to both the tendency for vocational assurance to increase in the experimental treatment groups and decrease in the control groups.

Results of the teacher questionnaire show that there was a positive increase in the teachers' attitude toward career education. A significant increase in all thirteen test items was recorded. In terms of rank order of change, the teachers experienced the greatest positive increase in knowledge of the various career opportunities available to students within their specific teaching area.

Considering the project as a whole, a number of factors should be taken into consideration. First, much of

the success of the project in career counseling and placement was due to the great degree of commitment by those in the Columbia City Schools, University of Southern Mississippi steering committee, project staff, and the community at large. Second, the positive gains made in the area of career education within the Columbia City Schools represents only a 'beginning.' The initial short term effects of this program can be turned into long term accomplishments only by the continued support and commitment of all those involved.

Recommendations

It is recommended that additional studies be made to further test the effectiveness of a career education program in reducing the levels of vocational anxiety and increasing vocational assurance. In addition, the following supplemental recommendations are proposed:

1. That a study be made to determine whether a reduction in the level of vocational anxiety has a positive effect on a student's ability to secure more satisfying employment and/or make a wiser career choice.
2. That a study be made to determine whether a student's increase in vocational assurance in high school is positively correlated with a student's ability to make a better career decision.
3. That a study be made to determine the long term effects of a career education program on the level of

vocational anxiety and vocational assurance. Although this study has shown that a career education program can reduce vocational anxiety over a period of one academic year, it still remains to determine whether this reduction in anxiety will continue over a period of time.

4. That a study be made to determine the degree of relationship between the level of vocational anxiety and level of vocational assurance.

5. That a study be made to determine the effects of a career education program on the high school dropout rate.

APPENDIX A

QUESTIONNAIRE

Each question or statement is followed by a ten-point rating scale. Read each question and circle the number of the scale which most nearly corresponds to your own assessment of your present degree of knowledge, understanding, skill, or attitude referred to in the question.

1. How would you rate your knowledge of the various career opportunities available to students throughout the nation?

0 1 2 3 4 5 6 7 8 9 10

2. How would you rate your knowledge of the various career fields available to students within the four county area of: Marion, Jeff Davis, Forrest, Lamar?

0 1 2 3 4 5 6 7 8 9 10

3. How would you rate your knowledge of the career opportunities available to students within your specific teaching/career area?

0 1 2 3 4 5 6 7 8 9 10

4. How would you rate your personal commitment to career education?

0 1 2 3 4 5 6 7 8 9 10

5. How would you rate your present degree of knowledge of the local training opportunities for paraprofessionals and technicians?

0 1 2 3 4 5 6 7 8 9 10

6. How would you rate your present degree of knowledge about the changing employment conditions in your area?

0 1 2 3 4 5 6 7 8 9 10

7. How would you rate your present degree of understanding of career education today?

0 1 2 3 4 5 6 7 8 9 10

8. How would you rate your present understanding of the theories of career choice and adjustment?

0 1 2 3 4 5 6 7 8 9 10

9. How would you rate your present degree of skill in communicating the career concepts to your students?

0 1 2 3 4 5 6 7 8 9 10

10. Indicate the degree to which you feel counselors have promoted career education in this school system?

0 1 2 3 4 5 6 7 8 9 10

11. How would you rate your knowledge of the career goals/objectives of your students?

0 1 2 3 4 5 6 7 8 9 10

12. How would you rate your knowledge of the occupational/career areas which your past school graduates have selected?

0 1 2 3 4 5 6 7 8 9 10

13. How would you rate this schools overall commitment to career education?

0 1 2 3 4 5 6 7 8 9 10

APPENDIX B

NAME: _____

JOB TITLE: _____

ORGANIZATION YOU REPRESENT: _____

BUSINESS ADDRESS: _____

BUSINESS PHONE: _____ HOME PHONE: _____

Would you be willing to participate in any of the following activities:

Circle one

- YES NO 1. SPEAK TO A GROUP OF STUDENTS about careers or job activities in your field?
- YES NO 2. Willing to serve as a resource person at a school career day?
- YES NO 3. Allow a small group of students to tour your Business/Company?
- YES NO 4. To provide the "Career Information Center" (located at Columbia High School) with information (booklets, films, slides, etc.) about your business or occupational/career field.
- YES NO 5. Participate in the hiring of eligible students?
a. Full time basis
b. Part time basis
- YES NO 6. Would you be willing to help establish and/or serve on a committee or council to further the area of Career Education and Placement in your community?
- YES NO 7. Would you be willing to actively search out and identify job for students?

IN ADDITION:

If you could do one thing to help the students of Marion County in their pursuit of a career or a secure job/employment, what would you do?

APPENDIX C

FOLLOW-UP QUESTIONNAIRE

Date _____

1. Your name when in high school: Mr. _____
Miss _____
Mrs. _____
Your name at present, if changed: _____

2. Present address: _____
(Street Number) (City) (State)

3. What is your present activity status? (Check one)
 a. Employed for wages full time e. Housewife
 b. Employed for wages part time f. In school full time
 c. Unemployed and seeking work g. Other (explain) _____
 d. Unemployed and not seeking work

4. Please indicate in the space below the information regarding your training beyond high school. (If none, draw a line through this chart and then go on to the next question)

(Name of school) (School address)

(Name of course taken)

Dates of training: From _____ TO _____

Did you receive a degree or diploma? YES _____ NO _____ Kind _____

5. If you have not attended school beyond high school, check reason or reasons.
 a. Financial g. Extensive travel
 b. Health h. Private lessons
 c. No wish to do so i. Secured satisfactory work without
the need for additional training
 d. Needed at home j. Other (explain) _____
 e. Marriage
 f. High school credits did not
meet college requirements

6. List the different jobs you have held since graduation from high school.
a. Name of firm: _____
Your position (Title or Duties) _____
Dates: FROM _____ TO _____ Salary: START _____ ENDING _____
Reasons for change: _____



b. Name of firm: _____

Your position (Title or Duties) _____

Dates: FROM: _____ TO: _____ SALARY: _____ PART: _____ EMPLOYER: _____

Reasons for change: _____

7. Have you had specific training for your present job? _____ YES _____ NO
8. Have you had specific training for the other jobs you have held? _____ YES _____ NO
9. Where was the knowledge or training needed in your present occupation gained?

- | | |
|---|---|
| <input type="checkbox"/> a. Father | <input type="checkbox"/> h. Vocational/Technical School |
| <input type="checkbox"/> b. Other relatives | <input type="checkbox"/> i. Correspondence school |
| <input type="checkbox"/> c. Friends | <input type="checkbox"/> j. Apprenticeship |
| <input type="checkbox"/> d. High School | <input type="checkbox"/> k. Other on-the-job training |
| <input type="checkbox"/> e. Junior College | <input type="checkbox"/> l. None needed |
| <input type="checkbox"/> f. Special School | <input type="checkbox"/> m. Other (explain) _____ |
| <input type="checkbox"/> g. College | |

10. What is the relationship between the job you now have and the job you thought you would have while you were attending Columbia High School?

- a. Nothing definite in mind while in high school.
- b. No relationship at all.
- c. Slight relationship
- d. Close relationship, but not exactly the job I had in mind.
- e. Exactly the job I had in mind while in high school.

11. Do you feel satisfied with your present position in respect to:

- a. Type of work: _____ Yes _____ No _____ Uncertain
- b. Salary: _____ Yes _____ No _____ Uncertain
- c. Opportunities for advancement _____ Yes _____ No _____ Uncertain

12. What methods have you used to find jobs?

- a. Own initiative (own advertisement, answered advertisements, etc.)
- b. Friends, relatives, or family
- c. School authorities
- d. Competitive examinations
- e. Private employment agency (one to which fee is paid)
- f. Public employment agency (state employment service)
- g. Other ways (explain) _____

13. What is your present marital status?

Single Married Divorced Separated Other

Children? Yes No

14. With whom do you live?

- a. Roommate
- b. Parents or relatives
- c. Boarding with non-relatives
- d. In own household
- e. Other (explain) _____

15. Which subjects that you took in high school have been of most value to you in your occupational life since you left high school? This includes your activities in getting jobs, doing the required work on the job, planning your life's work, and actually carrying out those life plans.

16. Check the following subjects which you feel would have helped you in your occupational and after school adjustment, but which you did not take in high school.

- | | |
|---|--|
| <input type="checkbox"/> a. English | <input type="checkbox"/> k. Typing |
| <input type="checkbox"/> b. Foreign Language | <input type="checkbox"/> l. Bookkeeping |
| <input type="checkbox"/> c. Algebra | <input type="checkbox"/> m. Shorthand |
| <input type="checkbox"/> d. Geometry | <input type="checkbox"/> n. Home economics |
| <input type="checkbox"/> e. General mathematics | <input type="checkbox"/> o. Social Studies |
| <input type="checkbox"/> f. Wood shop | <input type="checkbox"/> p. Art or music |
| <input type="checkbox"/> g. Auto shop | <input type="checkbox"/> q. Health |
| <input type="checkbox"/> h. Machine shop | <input type="checkbox"/> r. Biology |
| <input type="checkbox"/> i. Mechanical drawing | <input type="checkbox"/> s. Chemistry |
| <input type="checkbox"/> j. General science | <input type="checkbox"/> t. Physics |
| <input type="checkbox"/> u. Other (explain) _____ | |

17. Check the item or items below in which you think the high school did not give you sufficient training:

- a. Finding the line of work for which I am best suited
- b. Looking for a job
- c. Job training by means of part-time work
- d. Forming correct work habits
- e. Attacking new situations
- f. Thinking through problems
- g. Getting along with people
- h. Others (explain) _____

18. If you did not finish high school, please check one or more of these reasons.

- | | |
|--|---|
| <input type="checkbox"/> a. Had to earn a living | <input type="checkbox"/> f. Parents wished it |
| <input type="checkbox"/> b. Preferred to work | <input type="checkbox"/> g. Unhappy relations with other students |
| <input type="checkbox"/> c. Tired of school | <input type="checkbox"/> h. Unhappy relations with teachers |
| <input type="checkbox"/> d. Poor health | <input type="checkbox"/> i. Could see no use in going on |
| <input type="checkbox"/> e. Low grades | <input type="checkbox"/> j. Other reasons _____ |

19. Please list any suggestions that you feel might be of benefit in helping students to select and to prepare for entering into and succeeding in an occupation; to help them to adjust to out-of-school life, to enjoy life, and to become worthwhile citizens. Try to help us give them the benefit of your experience. What do you know now which would have helped you when you were in high school? Write your suggestions below.

20. Would you be willing to return to Columbia High School to discuss your job with students?

YES _____ NO _____

APPENDIX D

TO: All School Personnel
 FROM: David L. Fredrick, Career Counseling
 REGARDING: Columbia High School Follow-up Study

As many of you know, the Career Counseling and Placement Office recently conducted a follow-up study of the graduates from the Columbia High School. The results of this follow-up are summarized below.

1. Responses to the question: WHAT IS YOUR PRESENT ACTIVITY STATUS

47% - in school full time 21% - employed for wages
 12% - unemployed and seeking work 12% - unemployed and not seeking work
 06% - in military service

2. Responses to the question: TYPE OF TRAINING BEYOND HIGH SCHOOL

80% - college 20% - vocational/technical school

3. Responses to the question: REASONS FOR NOT ATTENDING SCHOOL BEYOND H.S.

18% - financial reasons 30% - marriage
 01% - health reasons 17% - secured work without need for training
 18% - no wish to do so beyond high school

4. Responses to the question: HAVE YOU HAD SPECIFIC TRAINING FOR YOUR PRESENT JOB

25% - yes 75% - no

5. Responses to the question: WHERE WAS THE KNOWLEDGE OR TRAINING NEEDED IN YOUR PRESENT OCCUPATION GAINED

18% - in college 04% - apprenticeship
 12% - in high school 35% - on the job training
 02% - relatives 03% - none needed
 23% - Vocational/technical school

6. Responses to the question: WHAT IS THE RELATIONSHIP BETWEEN THE JOB YOU NOW HAVE AND THE JOB YOU THOUGHT YOU WOULD HAVE WHILE YOU WERE ATTENDING COLUMBIA HIGH SCHOOL

12% - nothing definite in mind in HS 10% - close relationship, but not exactly
 33% - no relationship at all the job I had in mind
 12% - slight relationship 33% - exactly the job I had in mind in HS

7. Responses to the question: DO YOU FEEL SATISFIED WITH YOUR PRESENT POSITION

Type of work:	<u>60%</u> Yes	<u>20%</u> No	<u>20%</u> Uncertain
Salary:	<u>60%</u> Yes	<u>33%</u> No	<u>07%</u> Uncertain
Opportunities for advancement	<u>47%</u> Yes	<u>40%</u> No	<u>13%</u> Uncertain

(2)

8. Responses to the question: WHAT METHODS HAVE YOU USED TO FIND JOBS

46% - own initiative	01% - competitive examinations
38% - friends, relatives, family	08% - public employment agencies
06% - school authorities	01% - other ways

9. Responses to the question: WHICH SUBJECTS THAT YOU TOOK IN HIGH SCHOOL HAVE BEEN OF MOST VALUE TO YOU IN YOUR OCCUPATIONAL LIFE

31% - typing	03% - marketing
22% - English	03% - business courses
13% - math	03% - history
10% - Sciences	03% - office occupations
03% - speech	02% - bookkeeping
02% - home economics	04% - shop & mechanical drawing

10. Responses to the question: WHICH SUBJECTS WOULD HAVE HELPED YOU IN YOUR OCCUPATIONAL ADJUSTMENT, BUT WHICH YOU DID NOT TAKE

<u>05%</u> English	<u>05%</u> Mechanical drawing
<u>05%</u> Foreign Language	<u>02%</u> General Science
<u>05%</u> Algebra	<u>04%</u> Typing
<u>03%</u> Geometry	<u>25%</u> Bookkeeping
<u>05%</u> General mathematics	<u>05%</u> Shorthand
<u>02%</u> Wood shop	<u>02%</u> Home economics
<u>07%</u> Machine shop	<u>02%</u> Health
<u>09%</u> Auto Shop	<u>09%</u> Chemistry
	<u>04%</u> Physics

11. Responses to the question: SUBJECTS IN WHICH YOU THINK THE HIGH SCHOOL DID NOT GIVE YOU SUFFICIENT TRAINING

<u>33%</u> Finding the line of work for which you are best suited.
<u>12%</u> looking for a job
<u>18%</u> Job training by means of part-time work
<u>11%</u> Forming correct work habits
<u>11%</u> Attacking new situations
<u>11%</u> Thinking through problems
<u>04%</u> Getting along with people

12. Responses to the question: REASONS YOU DID NOT FINISH HIGH SCHOOL

<u>55%</u> Had to earn a living	<u>15%</u> Tired of school
<u>15%</u> Preferred to work	<u>15%</u> Could see no use in going on

(3)

Some of the most frequent responses to the question: PLEASE LIST ANY SUGGESTIONS THAT YOU FEEL MIGHT BE OF BENEFIT IN HELPING STUDENTS TO SELECT AND TO PREPARE FOR ENTERING INTO AN OCCUPATION: TO HELP THEM TO ADJUST TO OUT-OF-SCHOOL LIFE, TO ENJOY LIFE, AND TO BECOME WORTHWHILE CITIZENS.

The school should help students plan on how to find a job after high school.

The school should help the student build self-confidence and a sense of responsibility.

Students should spend more time in developing good study methods/habits. The school could help by offering a course for credit on HOW TO STUDY. This could be an elective for those students planning on attending college after high school.

"Teachers should get away from the straight academic line and help students to learn more about vocational activities."

"I suggest more emphasis be placed on vocational training. Today the vocational training is the place to be!"

"To hold a job in high school teaches you to have & hold responsibility. This responsibility in turn will help better prepare you for (a) independent living when attending college, (b) seeking new jobs in the future because you have established self-confidence & experience."

"I believe it would help a lot if more businessmen could find time to talk to the students about the opportunities they might need to begin the out-of-school life."

"Adjust your high school schedules to be able to satisfactorily maintain a job through the skills you obtain in high school. (Just in case you are unable to continue schooling)"

More emphasis should be placed on courses which help students communicate with people.

"Give students more field trips to places of employment that show interesting opportunities."

"My most important suggestion would be that of stressing the importance of getting along with your boss and other employees. If there is a sense of cooperation among employees, much more work can be accomplished. Also, there is a better chance for a raise in salary. Another important factor of any occupation is taking pride in your work."

"English is a big help so take English and learn."

"While in school take one course in each field such as Art, Science, English, Math, etc. This gives a sampling of all outlines of study. Take advantage of their school counselors, be open to their advice. Give the student an interest test. Instead of just meeting clubs, have programs in these clubs to promote interest. As far as jobs are concerned, have a man in each class or teacher, explain how to go about searching for jobs; what days to go on, how to dress, etc. One thing that helps one is to always work as if it was your first day at work. I hope I have made myself clear and offered helpful suggestions."

"Chemistry should be required of all students, it will help in life and college."

APPENDIX E



University of Southern Mississippi

Southern Station, Box 12
Hattiesburg, Mississippi
39401

Department of Counseling and Guidance

Dear Employer:

The University of Southern Mississippi is presently conducting a research program in the area of Career Education. This program is designed to help all students make the transition from school to the world of work by furnishing them with realistic information about job opportunities and skills required by employers in Mississippi. The results will be extremely valuable for high school students, vocational-technical students, and college students. We hope that the outcome of this survey will mean more satisfactory employment for the students and better employees for business and industry in Mississippi.

Specifically, this research will attempt to answer the following questions: (1) what types of job opportunities can students expect to find in the near future, (2) what specific skills, training, and/or education do employers require for new future employees, (3) what new skills or training can we offer students that will help them find and hold the job of their choice, and (4) can our students find satisfactory employment with the skills and training they are now receiving in our schools.

In order to complete this research, we desperately need your help in determining the current and future employment needs in this area of Mississippi. We would be sincerely grateful if you would take a minute to complete the attached questionnaire. Information pertaining directly to your company will be considered "confidential." Only generalized information pertaining to the community needs for specific employment skills will be released to the public.

Our youth are depending upon the results of this survey to help them make career decisions. PLEASE HELP by taking a minute now to complete the questionnaire. If we can assist you in completing the questionnaire or if you have any questions concerning this research project, please call Dr. David Fredrick (266-7163) in Hattiesburg at the University of Southern Mississippi or (736-5334) in Columbia, Mississippi. Let me thank you in advance for your consideration.

Sincerely,

David L. Fredrick, Ph.D.
Project Coordinator

QUESTIONNAIRE

Section A

1. Your name/company name: _____
ADDRESS: _____
2. How many employees do you now have working for your company? _____
3. Approximately how many new employees did you hire last year? _____
4. Approximately how many new employees do you anticipate hiring during the next two years (1975-1976): _____
5. As a result of the current economic recession, how many employees were you forced to lay-off during the past two years? _____
6. Do the employees that are currently on "lay-off" have a first priority for employment when a job becomes available? _____
7. What are some of the most important characteristics that you look for in a new worker?

Section B

This section is designed to help us determine what type of training programs are needed by our students in this area of Mississippi. The results will allow us to plan new courses for high schools and/or new vocational-technical programs which will meet the employment needs of this area.

On the following pages is an alphabetical listing of training programs, some of which are currently being offered in the Marion county high schools, vocational-technical centers, and area junior colleges. Following each program listing you are asked to respond to two questions: (1) the number of workers you currently have employed in that occupational field, and (2) the number of workers you anticipate hiring in that occupational field during the next two years.

Please respond to the questions based on the assumption that economic conditions will stay about the same for the next few years. Your answers to these questions DO NOT constitute any commitment on your part to hire anyone. We understand that your answers represent just an estimate of predicted future employment needs.

Please look at the example on the following page before completing this section.

EXAMPLE

TRAINING PROGRAM	NUMBER OF WORKERS CURRENTLY EMPLOYED IN THIS OCCUPATION	NUMBER OF WORKERS YOU ANTICIPATE HIRING IN THIS OCCUPATION DURING THE NEXT TWO YEARS
1. Air Conditioning & Refrigeration	2	1
2. Auto Mechanics	0	0
3. Secretarial Science	4	2

In the example above, Mr. John Doe has indicated that he currently has two (2) workers employed in the Air Conditioning & Refrigeration field, and with the current rate of turn-over he will possibly be hiring another worker in that field within the next two years.

Mr. Doe has also indicated that he currently has no workers employed in the Auto Mechanics trade and does not anticipate hiring anyone with that type of background training within the next two years.

Under the program heading of "Secretarial Science", Mr. Doe has indicated that he currently has four (4) workers employed as secretaries AND by considering the rate of employee turn-over for that occupation, he estimated that he may possibly hire two secretaries over the next two years.

Please complete the list below and on the following pages:

TRAINING PROGRAM (1-2 year vocational- technical programs)	NUMBER OF WORKERS CURRENTLY EMPLOYED IN THIS OCCUPATION	NUMBER OF WORKERS YOU ANTICIPATE HIRING IN THIS OCCUPATION DURING THE NEXT TWO YEARS
1. Accounting (2 yr)	_____	_____
2. Agriculture (2 yr)	_____	_____
3. Air Conditioning & Refrigeration (2 yr)	_____	_____
4. Animal Laboratory Assistant (2 yr)	_____	_____

TRAINING PROGRAM
(1-2 year vocational-
technical programs)

NUMBER OF WORKERS CURRENTLY
EMPLOYED IN THIS OCCUPATION

NUMBER OF WORKERS YOU
ANTICIPATE HIRING IN
THIS OCCUPATION DURING
THE NEXT TWO YEARS

5. Applied/Graphic/Fine Arts (2 yr)	_____	_____
6. Aviation Technology (2 yr)	_____	_____
7. Auto Mechanics (2 yr)	_____	_____
8. Banking & Finance (2 yr)	_____	_____
9. Business (General High School - 1 yr)	_____	_____
10. Business (Basic Skills) 1 year	_____	_____
11. Business (Advanced-2 yr)	_____	_____
12. Chemical Technology (2 yr)	_____	_____
13. Child Care (1 yr)	_____	_____
14. Computer Technology (2 yr)	_____	_____
15. Construction (Building Technology - 2 yr)	_____	_____
16. Data Processing (2 yr)	_____	_____
17. Dental Laboratory Assistant - (1 yr)	_____	_____
18. Dental Technology (2 yr)	_____	_____
19. Diesel Technology (2 yr)	_____	_____
20. Drafting (Architectural (2 yr)	_____	_____
21. Drafting and Design Technology - 2 yr	_____	_____
22. Electronics (Basic 1 yr)	_____	_____
23. Electrical Technology (2 yr)	_____	_____
24. Farm Mechanics (2 yr)	_____	_____
25. Farm Management Technology (2 yr)	_____	_____
26. Food Services (2 yr)	_____	_____

TRAINING PROGRAM
(1-2 year vocational-
technical programs)

NUMBER OF WORKERS CURRENTLY
EMPLOYED IN THIS OCCUPATION

NUMBER OF WORKERS YOU
ANTICIPATE HIRING IN
THIS OCCUPATION DURING
THE NEXT TWO YEARS

27. Forestry/Wildlife/ Fisheries (2 yr)	_____	_____
28. Graphic Communication technology (2 yr)	_____	_____
29. Health Service Assis- tant (1 yr)	_____	_____
30. Industrial Arts (1 yr)	_____	_____
31. Industrial Electricity (2 yr)	_____	_____
32. Industrial Technology (2 yr)	_____	_____
33. Key Punch Operator (1 yr)	_____	_____
34. Laboratory Technologist (2 yr)	_____	_____
35. Machine Shop (2 yr)	_____	_____
36. Marketing/Distribution High School - 1 yr	_____	_____
37. Marketing/Business Manage- ment (2 yr)	_____	_____
38. Mechanical Drawing (1 yr)	_____	_____
39. Mechanical Engineering (2 yr)	_____	_____
40. Medical Laboratory Tech- nologist (2 yr)	_____	_____
41. Medical Office Assistant (1 yr)	_____	_____
42. Medical Record Technician (1 yr)	_____	_____
43. Nursing (LPN - 2 yr)	_____	_____
44. Nursing (RN - under 4 yr)	_____	_____
45. Occupational Therapy (2 yr)	_____	_____
46. Offset Printing Press Operator (1 yr)	_____	_____
47. Photography (2 yr)	_____	_____
48. Police/Law Enforcement (2 yr)	_____	_____

TRAINING PROGRAM
(1-2 year vocational-
technical programs)

NUMBER OF WORKERS CURRENTLY
EMPLOYED IN THIS OCCUPATION

NUMBER OF WORKERS YOU
ANTICIPATE HIRING IN
THIS OCCUPATION DURING
THE NEXT TWO YEARS

49. Printing/Lithography (2 yr)

50. Public Relations (2 yr)

51. Radio & Television Repair (2 yr)

52. Radiologic Technician (2 yr)

53. Recreation/Social Work (2 yr)

54. Secretary (typing, filing, book-
keeping, NO shorthand, 1 yr)

55. Secretary (typing, filing, book-
keeping, shorthand, 2 yr)

56. Sheet Metal Worker (2 yr)

57. Teacher Aide (1 yr)

58. Veterinary Assistant (2 yr)

59. Welding (1 yr)

60. Welding (Combination - 2 yr)

61. X-Ray Technology (2 yr)

62. LIBERAL ARTS DEGREE (2 yr)

63. BACHELOR OF ARTS DEGREE (4 yr)
BACHELOR OF SCIENCE DEGREE (4 yr)

OTHERS (Please Specify)

54. _____

APPENDIX F

STUDENT EMPLOYMENT QUESTIONNAIRE

Check One:

Summer Employment Only

Full Time Employment

NAME: _____

ADDRESS: _____

HOME PHONE: _____ AGE: _____ SEX: _____

MARITAL STATUS: _____

PREFERENCE FOR LOCALE OF EMPLOYMENT: _____

WORK EXPERIENCE (SKILLS): _____

APPENDIX G

Mr.
Miss
Mrs.

NAME: _____

AGE: _____

CIRCLE HIGHEST GRADE IN SCHOOL: 1 2 3 4 5 6 7 8 9 10 11 12 13 14
15 16 17 18

OCCUPATION: _____

Are you presently employed: YES _____ NO _____ Part Time _____ Full Time _____

Circle number of jobs you have held in your life: 1 2 3 4 5 6 7 8 9
10 over 10

Number of years at present job: _____

DIRECTIONS:

On the following pages are some statements concerning your feelings about jobs. To the right of each statement are five blank spaces which range from STRONGLY AGREE to STRONGLY DISAGREE.

Please answer each statement by choosing one of the following answers:

- SA means STRONGLY AGREE (You agree with the statement all the time)
- A means AGREE (You agree with the statement, but not all the time)
- U means UNCERTAIN (You are not sure whether you agree or disagree)
- D means DISAGREE (You disagree with the statement, but not all the time)
- SD means STRONGLY DISAGREE (You disagree with the statement all the time)

Show your answer by placing an "X" in the space under the letter or letters which best represents the way you feel.

Here is a sample statement to show you how to mark your answers:

SA A U D SD
1. _____ _____ _____ _____ _____ 1. I would like to be rich.

SA

Here you would place an "X" on the space under x , if you strongly agree you would like to be rich; under x , if you agree with the statement sometime, but not all the time; under x , if you are uncertain about whether you would like to be rich, and so on. USE A PENCIL

Put an "X" in only one space for each item. If you make a mistake, erase your mark cleanly and then fill in another space for the correct answer. When you are not sure what each space means, you can find out by looking back at the five spaces below. WORK RAPIDLY

STRONGLY AGREE
AGREE
UNCERTAIN
DISAGREE
STRONGLY DISAGREE

SA A U D SD



	SA	A	U	D	SD
1. I worry about how to apply for my first job.....	_____	_____	_____	_____	_____
2. I feel I am prepared for the type of work I want to do after I finish school.....	_____	_____	_____	_____	_____
3. Getting a job is the least of my worries right now...	_____	_____	_____	_____	_____
4. I wish I could have more information concerning different jobs.....	_____	_____	_____	_____	_____
5. I worry about being able to find a job when I finish school.....	_____	_____	_____	_____	_____
6. I know I won't have any trouble keeping a job when I find one.....	_____	_____	_____	_____	_____
7. Making the right decision about my future is a big concern of mine right now.....	_____	_____	_____	_____	_____
8. I spend a lot of time in school thinking about what I will do when I graduate.....	_____	_____	_____	_____	_____
9. I would not have any trouble getting a job tomorrow if I had to.....	_____	_____	_____	_____	_____
10. I wish I could be more sure of what my future jobs will be like.....	_____	_____	_____	_____	_____
11. Being turned down for a job does not concern me.....	_____	_____	_____	_____	_____
12. I sometimes worry about whether I will be able to get along with those I work with when I get a job.....	_____	_____	_____	_____	_____
13. I know I can be a success at some type of work.....	_____	_____	_____	_____	_____
14. Whenever I think about jobs, everything seems so confusing.....	_____	_____	_____	_____	_____
15. I wish there weren't so many things keeping me from getting the kind of job I want.....	_____	_____	_____	_____	_____
16. I am happy with the type of work I have chosen to do when I graduate.....	_____	_____	_____	_____	_____
17. I feel under a lot of pressure from everyone to make a decision about the type of work I want...	_____	_____	_____	_____	_____
18. I wish someone would help me decide about the type of work I might enjoy.....	_____	_____	_____	_____	_____
19. I do not worry about getting a job as much as other people.....	_____	_____	_____	_____	_____
20. I think I can earn as much as I really want.....	_____	_____	_____	_____	_____

APPENDIX H

CAREER EDUCATION BIBLIOGRAPHY

A

- Abington School District, Career development activities, grades V, VI, VII. Abington, Pa.: District, 1967-68.
- ACT, Research and Development Division. Handbook for the ACT career planning programs and student's booklet, 1971-72. Iowa City: American College Testing Program, 1972.
- Anderson, H. H. et al. Books about occupation, a reading list for high school students. Lawrence, Kansas: School of Education, University of Kansas, 1957.
- Andrews, N. E. Providing school placement services. Chicago: Science Research Associates, Inc., 1957.
- Arbuckle, D. S. Student personnel services in higher education. New York: McGraw-Hill, 1953.
- Arnow, P. Bridging the gap between school and work. Washington, D.C.: U.S. Department of Labor, 1968.

B

- Baer, Max & Boeber, E. C. Occupational information (Rev. ed.). Chicago: Science Research Associates, Inc., 1958.
- Bancroft, G. The American labor force: its growth and changing composition. New York: John Wiley & Sons, Inc., 1958.
- Barry, J. A. The elementary teacher and guidance. New York: Holt, 1958.
- Barry, R. & Wolf, B. An epitaph for vocational guidance. New York: Bureau of Publications, Teachers College, Columbia University, 1962.
- Berger, P. The human shape of work. New York: MacMillan, 1964.

- Blocher, D. H. Developmental counseling. New York: Ronald Press, 1966.
- Boocock, S. S. Instructor's manual for life career. New York: Western, 1968.
- Borow, H. (Ed.) Man in a world at work. Boston: Houghton Mifflin, 1963.
- . Career guidance for a new age. Boston: Houghton Mifflin, 1973.
- Borow, H. & Lindsey, R. V. Vocational planning for college students. Englewood Cliffs: Prentice-Hall, 1959.
- Borow, Henry (Ed.). Vocational guidance in the 1970's. Boston: Houghton Mifflin, for National Vocational Guidance Association, 1970.
- Bottoms, J. K. & Cleere, W. R. A one-week institute to develop objectives and models for a continuous exploratory program related to the world of work from junior high through senior high school. Final Report. Carrolton, Ga.: West Georgia College, September, 1969.
- Brochard, J. H. School subjects and jobs. Chicago: Science Research Associates, Inc., 1961.
- Brownstein, S. C. College bound, a guide to college and career planning. Great Neck, N.Y.: Barron's Educational Series, Inc., 1964.
- Budke, W. E. Review and synthesis of information on occupational explorations. Columbus: Center for Vocational and Technical Education, the Ohio State University, 1971.
- Bureau of Pupil Personnel Services. Handbook for placement counselors. Chicago Public Schools, 1954.

C

- Campbell, R. E. & Vetter, S. Career guidance: an overview of alternative approaches. Columbus: Center for Vocational and Technical Education, The Ohio State University, 1971.
- Campbell, R. E., Walz, G. R., Miller, J. V., & Kriger, S. F. Career guidance: a handbook of methods. Columbus,

Ohio and Ann Arbor, Michigan: Center for Vocational and Technical Education, Counseling and Personnel Services Information Center, 1972. (Mimeo)

Caplow, Theodore. The sociology of work. Minneapolis: University of Minnesota Press, 1957.

Careers desk-top kit. Largo, Florida: Careers, Inc., 1967.

Career information kit. (1965 Ed.). Chicago: Science Research Associates, Inc.

Career Information Service, New York Life Insurance Company. Guide to career information. New York: Harper & Row, 1957.

Cottingham, H. F. Guidance in elementary schools. New York: McKnight & McKnight, 1956.

Crites, J. O. The maturity of vocational attitudes in adolescence. Iowa City: University of Iowa, 1969.

Vocational psychology. New York: McGraw-Hill, 1969.

D

Daane, C. J. Vocational exploration group: theory and research. Washington, D.C.: U.S. Department of Labor, Manpower Administration, 1972.

Davey, W., et. al. Everyday occupations. Boston: D. C. Heath, 1950.

Dictionary of occupational titles (2nd Ed.). Washington, D.C.: Federal Security Agency, Bureau of Employment Security, 1949.

Dinkmeyer, D. C. Guidance and counseling in the elementary school: readings in theory and practice. New York: Holt, 1960.

Downing, L. N. Guidance and counseling services: an introduction. New York: McGraw-Hill, 1968.

Dubin, R. The world of work. Englewood Cliffs: Prentiss-Hall, 1958.

Dunnette, N. D. (Ed.). Work and nonwork in the year 2001. Monterey, California: Brooks-Cole, in press.

E

Education for a changing world of work. Washington, D. C.:
U. S. Government Printing Office, 1963.

Eniger, M. W. The process and product of t & i high school
level vocational education in the United States. Pitts-
burgh: American Institutes for Research, 1965.

Epstein, C. F. Woman's place: options and limits in
professional careers. Chicago: University of
California Press, 1971.

F

Fine, S. A. The nature of automated jobs and their educa-
tional and training requirements. McLean, Va.: Human
Sciences Research, 1964.

Forrester, G. Methods of vocational guidance. (Rev. ed.).
Boston: D. C. Heath, 1951.

_____. Occupational literature. An Annotated Bibliography.
New York: H. H. Wilson, 1964.

G

Gardiner, G. L. How you can get the job you want. New
York: Harper & Row, 1962.

Ghiselli, Edwin. The validity of occupational aptitude
tests. New York: Wiley & Sons, 1966.

Ginzberg, E. Career guidance. New York: McGraw-Hill, 1971.

Ginzberg, E. et. al. Occupational choice. New York:
Columbia University Press, 1951.

Greenleaf, W. J. Occupations and careers. New York:
McGraw-Hill, 1955.

Gribbons, W. D. & Lohnes, P. R. Emerging careers. New
York: Teachers College Press, Columbia University,
1968.

_____. Career development. New York: Teachers College
Press, Columbia University, 1968.

Gross, E. Work and society. New York: Thomas Y. Crowell,
1958.

H

- Hahn, C. P. Dimensions of job satisfaction and career motivation. Pittsburgh: American Institute for Research, 1959.
- Hall, R. H. Occupations and the social structure. Englewood Cliffs: Prentice-Hall, 1969.
- Hansen, L. Career guidance practices in school and community. Washington: National Vocational Guidance Association, 1970.
- Hatch, R. N. Guidance services in the elementary school. Dubrique, Iowa: William C. Brown Company, 1951.
- Hatch, R. N., Parmenter, M. D., & Steffle, B. Planning your life's work. Bloomington: Mcknight, 1962.
- Hatch, R. N. & Dressel, P. L. Guidance services in the secondary schools. Durbrique, Iowa: William C. Brown, 1953.
- Herr, E. L. Decision-making and vocational development. Boston: Houghton-Mifflin, 1970.
- . Unifying an entire system of education around a career development theme. National Conference on Exemplary Programs and Projects, Atlanta, Georgia, March 12-14, 1969.
- . Review and synthesis of foundations for career education. Columbus, Ohio: Center for Vocational and Technical Education, Ohio State University, 1972.
- Herr, E. L. & Cramer, S. H. Guidance of the college-bound problems practices, perspectives. New York: Appleton-Century-Crofts, 1968.
- . Vocational guidance and career development in the schools: toward a systems approach. Boston: Houghton Mifflin, 1972.
- Herzberg, F., Mausner, B., & Snyderman, B. The motivation to work. New York: Wiley, 1959.
- Heyde, M. B. & Jofdaan, J. P. Vocational development in the high school years. Career Pattern Study Monograph No. 3. New York: Teachers College Press, in preparation.

- Hill, G. E. & Luckey, E. B. Guidance for children in elementary school. New York: Appleton-Century-Crofts, 1969.
- Holland, J. L. The psychology of vocational choice. Waltham, Mass.: Blaisdell, 1966.
- Holland, J. L., Viernstein, M, Kno, Hao-Mei, Karweit, N., & Blum, Z. A psychological classification of occupations. Report No. 90, Center for the Study of Social Organization of Schools, Johns Hopkins University, 1970.
- Hollingshead, B. S. Who should go to college. New York: Columbia University Press, 1951.
- _____. Who should go to college. New York: Columbia University Press, 1952.
- Hollis, J. W. & Hollis, L. U. Organizing for effective guidance. Chicago: Science Research Associates, Inc., 1965.
- _____. Personalizing information processes. New York: Macmillan, 1969.
- Hoppock, R. Occupational information. New York: McGraw-Hill, 1957.
- Hopson, B. & Hayes, J. The theory and practice of vocational guidance. Oxford: Pergamon Press, 1968.
- Hoyt, K. B., Evans, R. N., Mackin, E. F., & Mangum, G. L. Career education: what it is and how to do it. Salt Lake City: Olympus Publishing Company, 1972.
- Hoyt, K. B., Pinson, N. M., Laramore, D., & Mangum, G. L. Career education and the elementary school teacher. Salt Lake City: Olympus Publishing Company, 1973.
- Hughes, Everett C. Men and their work. New York: Free Press, 1958.
- Hulslander, S. C. Utilizing community resources in a program of guidance service. Ann Arbor: Ann Arbor Publishers, 1951.
- Hummel, D. L. & Bonham, S. J., Jr. Pupil personnel services in schools. Chicago: Rand McNally, 1968.

Hunt, D. Work experience programs in American secondary schools. Washington: U. S. Government Printing Office, 1957.

1962 handbook on women workers. Washington: Superintendent of Documents, U. S. Government Printing Office, 1962, pp. 202.

I

Issacson, L. Career information in counseling and teaching. Boston: Allyn and Bacon, 1971.

Ivins, W. H. & Runge, W. L. Work experience in high school. New York: Ronald Press, 1951.

J

Job experience kits. Chicago: Science Research Associates, 1970.

Johnson, W. F., Stefflre, B., & Edelfelt, R. A. Pupil personnel and guidance services. New York: McGraw-Hill, 1961.

K

Katz, M. Decisions and values: a rationale for secondary school guidance. New York: College Entrance Examination Board, 1963.

Kirk, B. A. & Michels, M. E. Occupational information in counseling: use and classification. Palo Alto: Consulting Psychologists Press, Inc., 1964.

Kitson, H. D. I find my vocation. New York: McGraw-Hill, 1954.

Knapp, D. L. & Bedford, J. H. The parent's role in career development. Washington: National Vocational Guidance Association, 1967.

Kohler, M. C. & Freedman, M. K. Youth in the world of work. New York: Taconic Foundation, 1962.

Kowitz, G. T. & Kowitz, N. Guidance in the elementary classroom. New York: McGraw-Hill, 1959.

Krumboltz, J. D., Sheppard, L. E., Jones, G. B., Johnson, R. G., & Baker, R. D. Vocational problem-solving experiences for simulating career exploration and interest. Final report of Project OE 5-85-059, U. S. Office of Education, 1967.

L

Lass, A. H. How to prepare for college. New York: David White, 1964.

Laws, L. Elementary guide for career development, 1-6. Austin, Texas: Texas Education Agency, 1970.

Leonard, G. E. Developmental career guidance in action. Detroit: Wayne State University, Plans for Progress and Detroit Public Schools, 1968.

Lester, R. Manpower planning in a free society. Princeton: Princeton University Press, 1966.

Lifton, W. Introducing the world of work to children. Chicago: Science Research Associates, Inc., 1960.

_____. Keys to vocational decisions. Chicago: Science Research Associates, Inc., 1964.

_____. What could I be? Chicago: Science Research Associates, 1960.

Lloyd-Jones, E. M. & Rosenau, N. Social and cultural foundations of guidance. New York: Holt, 1968.

Lohnes, P. R. Career development project. Washington: U.S. Office of Education, Final Report on Project No. 70-001, 1970.

M

Martinson, W. D. Educational and vocational planning. Chicago: Scott, Foresman, 1959.

Mathewson, R. H. Guidance policy and practice. (3rd ed.). New York: Harper & Row, 1962.

Miller, C. H. Foundations of guidance. New York: Harper & Brothers, 1961.

Minnesota, University of. A guide for cooperative vocational education. Minneapolis: College of Education, Division of Vocational and Technical Education, University, September, 1969.

Mueller, K. H. Educating women for a changing world. Minneapolis: University of Minnesota Press, 1954.

Murphy, J. M. Handbook of job facts. (3rd. ed.). Chicago: Science Research Associates, Inc., 1963.

N

National Manpower Council. Womanpower. New York: Columbia University Press, 1957.

Norris, W. Occupational information in the elementary school. Chicago: Science Research Associates, 1963.

Norris, W., Zeran, F. R., & Hatch, R. N. The information service in guidance. Chicago: Rand McNally, 1960.

North Dakota State Board of Education. Career development. North Dakota Exemplary World of Work Project, Bismarck, North, 1970.

Nosow, S. & Form, W. H. Man, work, and society. New York: Basic Books, Inc., 1962.

NVGA bibliography of current occupational literature (1959 rev.). Washington: American Personnel and Guidance Association.

NVGA Commission on Vocational Materials for Elementary Schools. Assisting vocational development in the elementary school.

NVGA. Guidelines for preparing and evaluating occupational materials. Washington: National Vocational Guidance Association, 1964.

O

Olympus Research Corporation. Career education: a handbook for implementation. Washington: U.S. Government Printing Office, 1972.

Olympus Research Corporation. Career education in the environment: a handbook for implementation. Washington: U.S. Government Printing Office, 1972.

Osipow, S. H. Theories of career development. New York: Appleton-Century-Crofts, 1968.

P

Patterson, C. H. Counseling and guidance in schools. New York: Harper, 1962.

Pearl, A. & Riessman, F. New careers for the poor. New York: Free Press, 1965.

Peters, H. J. & Hansen, J. C. (Eds.) Vocational Guidance and career development. New York: MacMillan, 1966.

Peters, H. J. & Farwell, G. F. Guidance: a developmental approach. Chicago: Rand McNally, 1967.

Purdue Opinion Panel, What does youth want from education and jobs? Report No. 48, Lafayette: Purdue University, 1957.

R

Reiss, J. & Fox, M. G. Guiding the future college student. Englewood Cliffs: Prentice Hall, 1968.

Roe, A. The psychology of occupations. New York: Wiley, 1956.

Rosenberg, M., et. al. Occupations and values. New York: Free Press of Glencoe, 1957, pp. 158.

Rothney, J. W. M. & Roens, B. A. Guidance of American youth. Cambridge: Harvard University Press, 1950.

S

Sanderson, H. Basic concepts in vocational guidance. New York: McGraw-Hill, 1954.

Shartle, C. L. Occupational information (3rd rev. ed.). Englewood Cliffs: Prentice-Hall, 1959.

- Sherman, V. S. Guidance curriculum for increased self-understanding and motivation for career planning. American Institute for Research in Behavioral Sciences. ERIC Document, ED010 626.
- Sims, V. Sims SCI occupational rating scale. Yonders: World Book Col., 1952.
- Sinick, D. You and your child's career. B'nai B'rith Vocational Service, 1966.
- Slocum, W. L. Occupational careers. Chicago: Aldine, 1966.
- Speigler, C. & Hamburger, M. If you're not going to college. Chicago: Science Research Associates, 1959.
- Splaver, S. High school students and occupational books. New York: Julian Messner, 1963.
- _____. Your career if you're not going to college. New York: Julian Messner, 1963.
- Steinberg, J. L. Guide to careers through college majors. San Diego: Robert R. Knapp, 1964.
- Stephens, W. R. Social reform and the origins of vocational guidance. Washington: National Vocational Guidance Association, 1970.
- Super, D. E. The psychology of careers. New York: Harper, 1957.
- Super, D. E. & Bachrach, P. B. Scientific careers: vocational development theory. New York: Teachers College, Columbia University, 1957.
- Super, D. E. & Bohn, M. J., Fr. Occupational psychology. Belmont, California: Wadsworth, 1970.
- Super, D. E. & Overstreet, P. L. The vocational maturity of ninth-grade boys. New York: Bureau of Publications, Teachers College, Columbia University, 1960.
- Super, D. E. & Crites, J. O. Appraising vocational fitness. New York: Harper & Brothers, 1962.
- Super, D. E. et. al. Career development: self-concept theory. New York: College Entrance Examination Board, 1963, pp. 95.

Vocational development: a framework for research.
New York: Bureau of Publications, Teachers College,
Columbia University, 1957.

T

Talagon, D. P. A comprehensive occupational education program. Cheyenne: State Department of Education, 1970.

Tennyson, W. W., Soldahl, T. A. & Mueller, C. The teacher's role in career development (Rev. ed.). Washington: National Vocational Guidance Association, 1965.

Thomas, L. G. The occupational structure and education. Englewood Cliffs: Prentice-Hall, 1956.

Thompson, A. S., Lindemass, R. H., Clark, S., & Bohn, M. J. Jr. The educational and career exploration system: field trial and evaluation in Montclair high school.

Thorndike, R. L. & Hagen, E. 10,000 careers. New York: Wiley, 1959, pp. 48-49.

Tiedeman, D. V., Landy, E., Fletcher, W. J., Ellis, A. B., Davis, R. G., & Boyer, E. G. An information system for vocational decisions. Annual Report, 1967-68.

Tolbert, E. L. Counseling for career development. Boston: Houghton Mifflin, 1974.

U

U. S. Department of Health, Education and Welfare, Office of Education. Education and training: learning for jobs. Washington: U.S. Government Printing Office, 1968.

U. S. Department of Labor. Estimates of worker trait requirements for 4,000 jobs. Washington: GPA, 1957.

U. S. Department of Labor. A supplement to the dictionary of occupational titles. (3rd ed.). Washington: U.S. Government Printing Office, 1966.

U. S. Department of Labor, Women's Bureau. Handbook on women workers. Washington: U.S. Government Printing Office, 1963.

U. S. Department of Labor, Bureau of Labor Statistics.
Occupational outlook handbook. 1970-71 Edition.
Washington: Government Printing Office, 1970.

V

Venn, G. Man, education and work. Washington: American Council on Education, 1964.

Viteles, M. S., Brayfield, A. H. & Tyler, L. Vocational counseling: a reappraisal in honor of Donald G. Paterson. Minneapolis: University of Minnesota Press, 1961.

W

Warters, J. High school personnel work today. (2nd ed.). New York: McGraw-Hill, 1956.

Weeks, C. Career development for Philadelphia public schools. Philadelphia: University City Science Center, 1967.

Whitley, J. M. & Resnikoff, A. (Eds.). Perspectives on vocational development. Washington: American Personnel and Guidance Association, 1972.

Wiener, N. The human use of human beings. New York: Doubleday, 1954.

Williamson, E. G. Vocational counseling. New York: McGraw-Hill, 1965.

Wolfbein, S. L. Employment and unemployment in the United States. Chicago: Science Research Associates, 1964.

Wrenn, C. G. The counselor in a changing work. Washington: American Personnel and Guidance Association, 1962.

XYZ

Zaccaria, J. S. Approaches to guidance in contemporary education. Scranton: International Textbook, 1969.

Zapolean, M. W. Girls and their futures. Chicago: Science Research Associates, 1962.

Zapolean, M. W. Occupational planning for women. New York: Harper, 1961.

Zytowski, D. G. Vocational behavior: readings in theory and research. New York: Holt, 1968.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Bachman, J. G. & Green, S. Youth in transition. Ann Arbor: Braun-Brumfield, 1971.
- Baer, M. F. & Roeber, E. C. Occupational information: the dynamics of its nature and use. Chicago: Science Research Associated, Inc., 1964.
- Banaghan, W. F. The relationship of occupational information to job performance. Dissertation Abstracts, 1966, 29/05A, 2715.
- Bessell, H. & Palmares, U. Methods in human development-theory manual. San Diego: Human Development Training Institute, 1972.
- Borow, H. (Ed.). Career guidance for a new age. Boston: Houghton Mifflin Company, 1973.
- Brewer, J. M. History of vocational guidance. New York: Harper & Brothers, 1942.
- _____. Education as guidance. New York: MacMillan, 1932.
- Buros, O. K. (Ed.). The seventh mental measurement yearbook. Vol 1, Highland Park: The Gryphon Press, 1972.
- Campbell, D. P. The results of counseling: twenty-five years later. Philadelphia: Saunders, 1965.
- Cantron, D. W. The effects of educational-vocational group counseling on perceptions of self and others, Dissertation Abstracts, 1964, 25/11A, 6756.
- Edwards, A. L. Experimental design in psychological research. New York: Holt, 1972.
- Fink, H. O. The world of work as perceived by Anglo-American and Mexican American secondary school students in a border community, Dissertation Abstracts, 1969, 30/05A, 1818.

- Fitzgerald, D. B. Occupational motivation of the academically deprived high school student, Dissertation Abstracts, 1971, 32/10A, 5682.
- Gillin, J. L. Poverty and dependency. New York: Century, 1925.
- Ginzberg, E. (Ed.). Values and ideals of American youth. New York: Columbia University Press, 1961.
- Goldstein, B. Low income youth in urban areas. New York: Holt, 1967.
- Granville, R., Schmadtke, J., & Weble, K. An investigation of the difference between disadvantaged and low middle class high school students on selected dimensions of occupational aspirations, U.S. Department of Health, Education and Welfare, 1969.
- Green, B. I. Continuing education and the high school dropout, Adult Education, 1962, 12, 72-83.
- Guidry, L. W. & Randolph, D. L. Covert reinforcement in the treatment of anxiety, Journal of Counseling Psychology, 1974, 21(4), 260-264.
- Hall, D. H. The effects of occupational information on the inventoried interests of eleventh grade boys, Dissertation Abstracts, 1971, 32/06B, 3682.
- Hatfield, M. Children in court. New York: The Paebar Company, 1948.
- Healey, W. & Bronner, A. F. Delinquent and criminals. New York: MacMillan, 1928.
- Herr, E. L. (Ed.). Vocational guidance and human development. Boston: Houghton Mifflin Company, 1974.
- Herr, E. L. & Cramer, S. H. Vocational guidance and career development in the schools: toward a systems approach. Boston: Houghton Mifflin, 1972.
- Hoppock, R. Occupational information. (3rd. ed.). New York: McGraw-Hill, 1967.
- Hull, J. S. An investigation of identification of male college students with their fathers as a variable influencing vocational interests and vocational counseling, Dissertation Abstracts, 1969, 30/11A, 4775.

- Issacson, L. E. Career information in counseling and teaching. Boston: Allyn and Bacon, 1973.
- Katz, M. R. A model of guidance for career decision-making, Vocational Guidance Quarterly, 1966, 15(1), 2-10.
- Kroll, A. M. & Kinklage, L. B. Career development: growth and crisis. New York: Wiley, 1970.
- Lopez, N. Participation in educational and recreational activities of lower-class male adolescents in relation to occupational aspirations, Dissertation Abstracts, 1969, 31/03A, 1078.
- Lustig, F. M. A study of the effects of a pulmonary rehabilitation program on anxiety, medical orientation, social introversion, attitude toward work, and engagement in vocational activities in patients with chronic obstructive pulmonary emphysema, Dissertation Abstracts, 1970, 31/07A, 3344.
- Machen, R. B. The effects of ten hours of instruction in sex education on anxiety related to sex concepts, Dissertation Abstracts, 1970, 31/12A, 6407.
- MacIver, R. M. (Ed.). Dilemmas of youth: in America today. New York: Harper & Brothers, 1961.
- Margenau, E. A. The effects of a job corps rehabilitation program on the occupational aspirations of a group of disadvantaged youth, Dissertation Abstracts, 1969, 31/04B, 2259.
- Martin, R. P. The development of anxiety in persons anticipating a highly stressful event, Dissertation Abstracts, 1970, 31/11A, 5854.
- Meyers, J. L. Fundamentals of experimental design. Boston: Allyn and Bacon, 1966.
- Nichols, J. D. A study of Arkansas prison inmates concerning occupational training, Dissertation Abstracts, 1970, 31/03A, 1159.
- Nierenberg, A. H. Adolescent boys' level of occupational aspiration in relation to their perceptions of their school environment, Dissertation Abstracts, 1972, 33/04A, 1446.
- Perrone, P. A., Zeran, F. R., & Ryan, T. A. Guidance and the emerging adolescent. Scranton: International Textbook Company, 1970.

- Peters, H. J. & Hansen, J. C. (Ed.). Vocational guidance and career development. New York: MacMillan, 1966.
- Plummer, J. M. A comparison of successful and unsuccessful vocational rehabilitation clients from a reformatory population, Dissertation Abstracts, 1969, 31/05B, 2964.
- Poltkin, A. L. The effects of occupational information classes upon the vocational interest patterns of below average, adolescent males, Dissertation Abstracts, 1966, 29/05A, 2715.
- Ramsey, E. C. Problems of youth. Belmont: Dickenson Publishing Company, 1969.
- Robertson, V. H. (Ed.). Career counseling. Chicago: American Technical Society, 1968.
- Robins, L. N. Deviant children growing up. Baltimore: Williams and Wilkins, 1966.
- Sebald, H. Adolescence: a sociological analysis. New York: Appleton-Century-Crofts, 1968.
- Sharma, V. Career analysis and intensive career planning learning program for hospitalized adolescents, Dissertation Abstracts, 1971, 32/11A, 6139.
- Sherif, M. & Sherif, C. W. (Ed.). Problems of youth. Chicago: Aldine Publishing, 1965.
- Singell, L. D. Some private and social aspects of the labor mobility of young workers (Detroit, Michigan), Quarterly Review of Economics and Business, 1966, 6, 19-27.
- Spielberger, C. D., Wadsworth, A., Auerback, S., Dunn, T., & Taulbee, E. S. Emotional reactions to surgery, Journal of Consulting and Clinical Psychology, 1973, 40(1), 33-38.
- Stephens, E. W. Career counseling and placement in higher education. Bethlehem: The College Placement Council, Inc., 1970.
- Super, D. E. Career development: self concept theory. New York: College Entrance Examination Board, 1963.
- _____. The psychology of careers. New York: Harper & Row, 1957.

- Super, D. E. The dynamics of vocational adjustment. New York: Harper & Brothers, 1942.
- Super, D. E. & Crites, J. O. Appraising vocational fitness. New York: Harper & Row, 1962.
- Super, D. E. & Bahn, M. J. Occupational psychology. Belmont: Wadsworth Publishing, 1970.
- Super, D. E. & Overstreet, P. L. The vocational maturity of ninth-grade boys. New York: Teachers College, Columbia University, 1960.
- Tageson, C. F. The relationship of self-perceptions to realism of vocational choice. Washington: The Catholic University of America Press, 1960.
- U. S. Department of Labor. Occupational outlook handbook and quarterlies. Washington: U. S. Government Printing Office, 1967.
- Vedder, C. B. & Sommerville, D. V. The delinquent girl. Springfield: Charles C. Thomas, 1970.
- Veldman, D. J. Fortran programming for the behavioral sciences. New York: Holt, 1967.
- Wolfgang, M. E. (Ed.). Crime and culture. New York: Wiley, 1968.
- Wolman, B. B. (Ed.). Dictionary of behavioral science. New York: Litton Educational Publishing, Inc., 1974.
- Zaccaria, J. S. Approaches to guidance in contemporary education. Scranton: International Textbook Company, 1969.
- Zenger, W. E. A study of the influences of vocational and occupational exploration and self-appraisal activities upon the vocational choices and vocational interests of high school seniors, Dissertation Abstracts, 1970, 31/06A, 2627.