THE EFFECTS OF AN EXPERIMENTAL CAREER ORIENTED GROUP GUIDANCE PROGRAM ON SELECTED NINTH GRADE STUDENTS

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ABSTRACT

THE EFFECTS OF AN EXPERIMENTAL
CAREER ORIENTED GROUP GUIDANCE PROGRAM
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By

Charles Robert Hitch

During the 1973-74 academic year, The Grosse Pointe Public School System, Grosse Pointe, Michigan, conducted an experimental program of career exploration known as COGG (Careers Oriented Group Guidance). The primary objective of COGG was to demonstrate that a Single-Course Concept approach to career development can affect positive growth in ninth graders who have identifiable weaknesses in occupational awareness, self awareness, and career planning and decision making.

The population of this study was 1,063 ninth graders from the two high schools in the district. Using pretest results, 275 students were identified as the sample to which the generalizations of this study were directed. The findings of this study were generalized only to these specific 275 students who represented 25.8 percent of the total ninth grade population in the school district.

Data included in this report was obtained by testing students in the experimental and control groups by administering The American College Testing Program Assessment of Career Development instrument.[1] The ACD was used in a pre and post testing situation to gather data on certain elements

of career development. Additional surveys of students and parents produced data related to the school performance of students and to opinions of participating students and their parents concerning the Life Roles Concept. Data focused on three major factors:

(1) Career Development
   a. occupational awareness
   b. career planning and decision making
   c. self awareness

(2) School Performance
   a. attendance, both excused and unexcused
   b. grade point average
   c. counselor referrals for social/emotional reasons
   d. classroom adjustment (promptness, preparedness, participation, and self control)

(3) Life Roles Concept
   a. occupational life role
   b. avocational life role
   c. citizenship life role
   d. family life role

The hypotheses were focused on the:

(A) success of the experimental group in attaining greater occupational awareness.

(B) success of the experimental group in attaining greater knowledge in career planning and decision making.

(C) success of the experimental group in attaining greater self awareness.

(D) success of the experimental group in attaining an improved school performance record.

(E) positive responses to the concept of Life Roles by participating students and their parents.

Analysis of the data revealed a significant difference between experimental and control groups on the career development elements of occupational awareness and career planning

and decision making. However, no significant difference was found in the area of self awareness. It was found that a twenty-week program does not provide sufficient time to demonstrate an impact upon the self awareness level of students.

Examination of the data also revealed that there was no significant difference between the experimental and control groups on factors of school performance. A "T" test analysis showed no significance in the areas of attendance (both excused and unexcused), grade point average, number of counselor referrals for social/emotional reasons, and classroom adjustment (promptness, preparedness, participation, and self control).

Positive attitudes were identified for participating students and their parents toward the concept of Life Roles. Both students and their parents expressed attitudes averaging 2.8 (out of a possible 5.0) or higher in the categories of occupational, avocational, citizenship, and family life roles.

In summary, it would appear that the Single-Course Concept approach, as demonstrated through a career instructional program such as COGG, can produce appreciable changes for ninth grade students who have weaknesses in the career development areas of occupational awareness and career planning and decision making.

Implications of the study indicate that the general attitude and interest of the experimental students in studying occupations and career fields suggests the desirability

of including more opportunities throughout the curriculum for students to study this field of information. Furthermore, an intermediate grade program of career exploration (such as COGG) should be available for any student who can benefit from such an experience. It is important at this level that students not focus narrowly on one specific occupation, but instead become involved in value clarification activities which will help them understand varying occupations across many career clusters.

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[1]Handbook for the ACT Assessment of Career Development; Preliminary Edition (Iowa City: The American College Testing Program, October 1973).

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CHAPTER I

THE PROBLEM

The concept of career education has been evident and in a sense, visible over the past fifty years on the American education scene. Vocational education, manual training, and occupational education are all dimensions of the career education philosophy and have been successful to varying degrees in preparing students for work. In addition, counselors have traditionally been in a unique position to help students explore their potential as they progress toward vocational maturity and self-fulfillment.

Career education can be an effective vehicle of assistance toward the achievement of the primary goal of education, that of the capacitating of human potential. Career education offers a practical approach to meeting the needs and maximizing the total potential of the individual.

> The purpose of education simply cannot be more education. Education must be seen as preparation for something--both as preparation for living and preparation for making a living.[1]

The educational, occupational, and social pressures created by parents, teachers, and authority figures require today's students to have well-ordered career plans. Career education,

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[1]Kenneth B. Hoyt et al., Career Education and The Elementary School Teacher, (Salt Lake City: Olympus Publishing Co., 1973), p. 13.

it is proposed, can assist and inform students about the many career options available to them and as a result, students may begin to develop rational and valid career goals. Students frequently find it difficult to focus on the relationship between education, career choice, and the total life style they wish to pursue.

> Career education provides a means for demonstrating the social relevance of most school learnings by showing their relationships to socially relevant careers and, indeed, to the continued existence of a society.[2]

The concept of career education theorizes that the relevancy of education is important as it develops the competencies in our young people to survive and cope with the realities of a real world. The basic thrust and purpose of career education is preparing students who are knowledgeable concerning their future life roles. "Specifically, career education is designed to capacitate individuals for their several life roles: economic, community, home, avocational, religious, and aesthetic."[3]

Career education enthusiasts postulate that the choice of one's career is a major life decision. Not only will it determine one's financial future, but it may also influence one's life style (manner of living), one's friends, and often the community or neighborhood in which one will live.

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[2]Rupert N. Evans, "The Rationale for Career Education," The Bulletin of the National Association of Secondary School Principals 57 (March 1973): 55.

[3]Keith Goldhammer and Robert E. Taylor, Career Education: Perspective and Promise (Columbus, Ohio: Merrill Publishing Co., 1972), p. 6.

> When an individual makes a decision affecting his career, he chooses his way of life: where and how he will live, the amount of time he will spend in leisure hours, his health concerns, his social and cultural attainments, and possibly even his mate.[4]

A review of the many exemplary career education projects in Michigan and across the nation reveals that career education curriculum development is designed essentially around three basic organizational systems. For example, the Warren Consolidated Public Schools of Warren, Michigan recently completed a three year funded project in career education. The Warren project included implemented instructional units which utilized all three organizational systems.

> Three types of instructional units of study were developed. One format is designed for implementation with a correlated, or inter-disciplinary approach. Another format is used for implementation in a single subject area. The third type of instructional unit is a ten-week course for seventh grade students.[5]

The three organizational systems are identified and described below:

(1) The Inter-Disciplinary Concept is used primarily at the elementary level in a self contained or team teaching situation. This system utilizes the subject content of many disciplines, united together, to deliver the objectives of a career unit or activity.

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[4]Charleta J. Dunn and Bill F. Payne, World of Work (Dallas: Leslie Press, 1971), p. 6.

[5]Carol B. Turner, Career Education in Warren Consolidated Schools (Lansing, Mich.: Michigan Department of Education, [1974]), p. 15.

(2) The Single-Discipline Concept is the most popular and frequently used system of career organization. Used to a great extent at the secondary level, the Single-Discipline Concept allows individual teachers to develop and implement career units within their specific subject matter area.

(3) The Single-Course Concept is appropriate for concentrated efforts in career development with various student populations. Basically, this system is designed with emphasis on student development and occupational exploration.

Each approach has several unique advantages, but to identify one system as being of greater value than another is of little importance at this time. As witnessed in the Warren Consolidated District, it would appear that there are numerous situations within a school district where utilization of a combination of all three organizational systems would result in meaningful career experiences for students. This study, therefore, was designed to demonstrate the value of a Single-Course Concept approach as one component in a total K-12 program of career development.

Statement of the Problem

It is said that career exploration in the intermediate grades (grades 7, 8, and 9) can provide many challenges and rewarding experiences. The basic objectives of career education theory in the middle school are threefold:

1. Becoming aware of and appraising individual abilities, potentials, interests, and needs;

2. Increasing awareness of the key concepts, structure, and trends in the world of work through the acquisition of career information (educational, occupational, personal, and social) which is appropriate to their level of career development;

3. Evaluating which, to what extent, and how career information applies to them and can facilitate their development.[6]

This research effort focused on the effects of a one semester, Single-Course Concept program of career exploration. This study involved selected ninth graders in the two high schools of The Grosse Pointe Public School System.[7] The emphasis in career education at the ninth grade level in Grosse Pointe is one of occupational information and exploration, and self evaluation delivered through the social studies curriculum. In theory, the ninth grader is ready for a wide variety of action oriented activities through which he

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[6]R. T. Scherer and J. R. Clary, Middle School Curriculum Guide (North Carolina State University at Raleigh, N. C.: Center for Occupational Education, [1973]), p. 3.

[7]Grosse Pointe is a suburban community of approximately 70,000 people, located east of metropolitan Detroit. Grosse Pointe is a bedroom community with no manufacturing concerns; residents have an annual average income estimated at $18,000--$20,000. The school district is composed of two high schools (approximately 2400 students each), three middle schools, and ten elementary schools. A professional staff of 523 teachers has the responsibility of educating 12,240 students, K-12. The Grosse Pointe Public School District is usually seen as one of a few prestige districts because annually 70-75 percent of the district's graduates continue their education at the postsecondary level. It is the personal observation of the researcher that even though Grosse Pointe students generally come from well educated, well read, well traveled families; they are growing, maturing young people who are confronted with the typical questions of today: "Who am I?--Why am I?--Where am I?"

can explore his capabilities and interests.

In the spring of 1973, interested middle school counselors and social workers in The Grosse Pointe Public School System developed a Careers Oriented Group Guidance program, which is nicknamed COGG. COGG is a twenty-week (one semester), one hour a day program designed for ninth graders with measurable weaknesses in specific areas of career development. The primary concern of COGG centers around the student's career development; more specifically, the areas of occupational awareness, self awareness, and career planning and decision making.

The problem in this study was concerned with the degree to which an instructional program (in this case, COGG) affects: (A) career development, and (B) school performance. The study also measured the degree of acceptance of the Life Roles Concept of career education. The specific research questions are as follows:

Career Development

1. Will ninth grade students participating in the COGG program achieve greater gain scores in specific areas of career development than selected ninth grade students who have not been involved in COGG?

2. Will ninth grade girls with Level I-A (see p. 13) ratings participating in the COGG program achieve greater gain scores in specific areas of career development than selected ninth grade girls with Level I-A ratings who have not been involved in COGG?

3. Will ninth grade girls with Level II-A (see p. 13) ratings participating in the COGG program achieve greater gain scores in specific areas of career development than selected ninth grade girls with Level II-A ratings who have not been involved in COGG?

4. Will ninth grade boys with Level I-B (see p. 13) ratings participating in the COGG program achieve greater gain scores in specific areas of career development than selected ninth grade boys with Level I-B ratings who have not been involved in COGG?

5. Will ninth grade boys with Level II-B (see p. 13) ratings participating in the COGG program achieve greater gain scores in specific areas of career development than selected ninth grade boys with Level II-B ratings who have not been involved in COGG?

School Performance

6. Will ninth grade students participating in the COGG program achieve an improved attendance record during the second semester compared to selected ninth grade students who have not been involved in COGG?

7. Will ninth grade students participating in the COGG program achieve an improved grade point average during the second semester compared to selected ninth grade students who have not been involved in COGG?

8. Will ninth grade students participating in the COGG program achieve a reduction in counselor referrals for social/emotional reasons during the second semester compared to selected ninth grade students who have not been involved in COGG?

9. Will ninth grade students participating in the COGG program achieve a higher rating on the "classroom adjustment scale" during the second semester compared to selected ninth grade students who have not been involved in COGG?

Acceptance of the Life Roles Concept

10. Will ninth grade students participating in the COGG program perceive the concept of Life Roles in a positive manner?

11. Will parents of ninth grade students participating in the COGG program perceive the concept of Life Roles in a positive manner?

Hypotheses

The research hypotheses were as follows:

Career Development

1-A. There is a significant difference between the adjusted posttest means of the experimental group (COGG) and the adjusted posttest means of the control group on occupational awareness.

1-B. There is a significant difference between the adjusted posttest means of the experimental group (COGG) and the adjusted posttest means of the control group on career planning and decision making.

1-C. There is a positive difference between the posttest results of the experimental group (COGG) and the posttest results of the control group on measures of self awareness.

2-A. There is a significant difference between the adjusted posttest means of the Level I-A experimental group (COGG) and the adjusted posttest means of the Level I-A control group on occupational awareness.

2-B. There is a significant difference between the adjusted posttest means of the Level I-A experimental group (COGG) and the adjusted posttest means of the Level I-A control group on career planning and decision making.

2-C. There is a positive difference between the posttest results of the Level I-A experimental group (COGG) and the posttest results of the Level I-A control group on measures of self awareness.

3-A. There is a significant difference between the adjusted posttest means of the Level II-A experimental group (COGG) and the adjusted posttest means of the Level II-A control group on occupational awareness.

3-B. There is a significant difference between the adjusted posttest means of the Level II-A experimental group (COGG) and the adjusted posttest means of the Level II-A control group on career planning and decision making.

3-C. There is a positive difference between the posttest results of the Level II-A experimental group (COGG) and the posttest results of the Level II-A control group on measures of self awareness.

4-A. There is a significant difference between the adjusted posttest means of the Level I-B experimental group (COGG) and the adjusted posttest means of the Level I-B control group on occupational awareness.

4-B. There is a significant difference between the adjusted posttest means of the Level I-B experimental group (COGG) and the adjusted posttest means of the Level I-B control group on career planning and decision making.

4-C. There is a positive difference between the posttest results of the Level I-B experimental group (COGG) and the posttest results of the Level I-B control group on measures of self awareness.

5-A. There is a significant difference between the adjusted posttest means of the Level II-B experimental group (COGG) and the adjusted posttest means of the Level II-B control group on occupational awareness.

5-B. There is a significant difference between the adjusted posttest means of the Level II-B experimental group (COGG) and the adjusted posttest means of the Level II-B control group on career planning and decision making.

5-C. There is a positive difference between the posttest results of the Level II-B experimental group (COGG) and the posttest results of the Level II-B control group on measures of self awareness.

School Performance

6. There is a significant difference between the postmeasurement means of the experimental group (COGG) and the postmeasurement means of the control group concerning second semester attendance records.

7. There is a significant difference between the postmeasurement means of the experimental group (COGG) and the postmeasurement means of the control group concerning second semester grade point averages.

8. There is a significant difference between the postmeasurement means of the experimental group (COGG) and the postmeasurement means of the control group concerning second semester counselor referrals.

9. There is a significant difference between the postmeasurement means of the experimental group (COGG) and the postmeasurement means of the control group concerning second semester ratings on the classroom adjustment scale.

Acceptance of the Life Roles Concept

10. There is a difference in a favorable direction between the positive and negative reactions of the experimental group (COGG) concerning the acceptance of the Life

Roles Concept.

11. There is a difference in a favorable direction between the positive and negative reactions of the parents of COGG students concerning the acceptance of the Life Roles Concept.

All significant differences were accepted at the .05 level.

Outcomes

The original intent of the COGG study was to, (1) demonstrate that the Single-Course Concept system can affect positive growth concerning career development progress in students with identifiable weaknesses in occupational awareness, self awareness, and career planning and decision making. Furthermore, it was intended to, (2) demonstrate that a Single-Course Concept system of career exploration is of measureable value and, therefore, should become an acceptable and permanent component of the Grosse Pointe middle school curriculum.

Additional outcomes were theorized for the study. In view of the fact that approximately 95 percent of all Grosse Pointe Public School ninth graders will take a standardized test in career development, it would be possible to judge the effectiveness of the K-8 curriculum in terms of career development progress. Also for those ninth graders receiving the pre and posttests, an effective guidance program could be tailored, using national norms to help identify students having the greatest weaknesses in terms of career development.

Another outcome from this study was perceived to be the identification of the degree of acceptance of the career education Life Roles Concept by participating students and their parents.

Limitations

This study was conducted with the following limitations in mind, and as such, these factors limited the generalizability of this study:

1. The secondary schools selected for this study are representative only of The Grosse Pointe Public School System.[8] Therefore, content and methodology utilized in this study, as well as the results, may be applicable to other school systems only to the extent that they are similar to The Grosse Pointe Public School System.

2. Subjects of the study, because of design limitation, were from the ninth grade.

3. Specific sampling was based on the following factors:

   a. The Assessment of Career Development pretest results
   b. school schedule
   c. sex
   d. intelligence quotient level

4. The effect of classroom teachers and counselors upon the students prior to and during the time at which the data was collected was not known.

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[8]This system was characterized by a secondary class size average of twenty-eight students. The ratio of teachers, counselors, social workers, librarians, and administrators to students was 51.5 per thousand. Secondary teachers had five class sessions per day, fifty-five minutes per session.

Definition of Terms

1. COGG--An organizational structure of Careers Oriented Group Guidance.

2. Career Development--This study measured three specific elements of career development:

   a. Occupational Awareness--includes knowledge of occupational characteristics, knowledge of occupational preparation requirements, and exploratory occupational experiences.[9]

      Clusters studied: Holland Classification[10]
      Business Operation
      Industrial Technologies and Trades
      Science and Medicine
      Creative and Applied Arts
      Personnel, Social, and Health Services
      Sales and Promotion

   b. Self Awareness--includes career plans, self-evaluation of career planning, and perceived needs for help with career planning.[11]

   c. Career Planning and Decision Making--includes knowledge of career planning and experiences which involve career planning.[12]

3. School Performance--Student achievement in the areas of grade point average, attendance record, and counselor referrals for social/emotional purposes.

4. Classroom Adjustment Scale--Judgements made by teachers which identify student progress on a scale of

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[9] Handbook for the ACT Assessment of Career Development (Iowa City: The American College Testing Program, [1973]), p. 1.

[10] The Holland Classification is organized around Dr. John L. Holland's theory of career development. Holland holds that there are six basic personality types and that all occupations can be classified into these same six categories. The six occupational areas in the Holland Classification contain 414 more common occupations in our nation and these occupations comprise nearly 95 percent of the national work force. See John L. Holland, The Psychology of Vocational Choice, (New York: Blaisdell, 1966).

[11] Handbook for the ACT, p. 1.

[12] Ibid.

0 to 10 (10 being of highest quality) in the areas of classroom promptness, preparedness, participation, and self control.

5. Life Roles Concept--The concept which says that schools should help students understand their occupational life roles, family life roles, citizenship life roles, and their avocational life roles.

6. Level I-A--Includes girls in both the experimental and control groups who as a result of the ACD pretest scored in the range of (E/-1); meaning that on an average of the five normative scales of the pretest that the individual was either even with (E) or one stanine below (-1) the combined national average.

7. Level II-A--Includes girls in both the experimental and control groups who as a result of the ACD pretest scored in the range of (-2/-4); meaning that on an average of the five normative scales of the pretest that the individual was either (-2), (-3), or (-4) stanines below the combined national average.

8. Level I-B--Includes boys in both the experimental and control groups who as a result of the ACD pretest scored in the range of (E/-1); meaning that on an average of the five normative scales of the pretest that the individual was either even with (E) or one stanine below (-1) the combined national average.

9. Level II-B--Includes boys in both the experimental and control groups who as a result of the ACD pretest scored in the range of (-2/-4); meaning that on an average of the five normative scales of the pretest that the individual was either (-2), (-3), or (-4) stanines below the combined national average.

10. Intermediate Grades--Includes those grades commonly found in junior highs or middle schools, namely, grades 7, 8, and 9.

CHAPTER II

REVIEW OF RELATED LITERATURE

Research studies and current literature related to career development activities at the intermediate grades were reviewed. The review investigated the concepts of career orientation and career exploration and the implication of these concepts for students in grades six through nine.

The related literature was divided into three sections.

A. Rationale for Career Education in the Intermediate Grades

B. Career Development Theory

C. Career Development Activities and Projects

Rationale for Career Education in the Intermediate Grades

> A boy does not merely grow up into a man: he imagines himself into manhood--into the man he wants to be. . . . A child becomes an adult in society thus, not as a kitten becomes a cat, by necessity, but by the aspirations of his imagination. They uncover for him, and in turn he discovers the self that he wants to be.[1]

The preadolescent has need to discover his present self and possible future selves, and thus the time is right

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[1]Jacob Bronowski, "The Discovery of Self," American Personnel and Guidance Association Booklet, Man and the Emerging Self, 1968.

for career exploration opportunities in the intermediate grades. The need for career education at the intermediate level can easily be seen from the nature and characteristics of the student and the educational institution. The student is curious and full of energy, ready for a wide variety of action-oriented career activities through which he can explore his capabilities. He is looking for challenges that he can interact with and conquests he can make. As an institution, the junior high school at the intermediate level is transitional in nature, offering "a variety of classrooms and laboratories, specialized teaching staffs, and departmentalized subject areas."[2]

Certain changes in our society have given emphasis to the need for career education at the intermediate grade level.

> Some of these changes include (1) absence of other adults, such as aunts, uncles, or grandparents from the household; (2) the mobility of today's population; and (3) the shift of the father's or mother's work from the home or neighborhood to a distant office or factory.[3]

The consequence of these changes has been the elimination of traditional means through which developing youth could imagine themselves in adult roles. Today's youth know few adults whom they can confide in or imitate.

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[2]Robert A. Ristau, "Career Education at the Junior High Education Level--A Time for Career Exploration Plus," paper presented at the Fifth Annual Research Conference of the National Association of Business Teacher Educators, Chicago, Ill., 21 February 1973, p. 1.

[3]James E. Bottoms, Career Education Resource Guide, (Morristown, N. J.: General Learning Corp., 1972), pp. 93-94.

"Thus, youth have been blocked from viewing or experiencing the work environment of the adult world."[4]

The primary rationale for career education at the intermediate level is the knowledge that the career development of youth is a continuous process. An integrated, sequential program of career development beginning at the kindergarten level and continuing through high school is vital for the child's total development.

> Exploratory career development activities are essential if the middle school child is to successfully make the transition to high school and subsequently to a more effective life.[5]

Increasingly, studies are pointing up the significance of influences during the intermediate school years that will have lasting impact on the career style of the student. "Recent research evidence indicates that interest and work values are significantly modified in the period from grades 8 through 14."[6] Vocational development is usually not accomplished by a single decision. Vocational development "is more normally a long-term process which may continue throughout an individual's life span."[7]

Robert M. Worthington, lately Associate United States Commissioner of Education for Adult, Vocational, and Technical

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[4]Ibid.

[5]Career Development Resource Guide, Grades 6-8. It's Time to Plan (Clarksville, Md.: Howard County Board of Education, [1971]), p. 1.

[6]William A. Stanton, "Middle School Years and Career Development," The Clearing House 44 (May 1970): 532.

[7]Ibid.

Education, of the United States Office of Education, Washington, D. C., noted that:

> Career education as we now envision it, has five levels which are not distinct and often are overlapping. . . . The second level is occupational information, career orientation, and career exploration ranging from grades six or seven through nine or ten.[8]

The national Comprehensive Career Education Model[9] and the State of Michigan Model[10] are similar in that both identify the concept of "career exploration" as being a function of the intermediate grades. Career exploration then is an accepted responsibility of the middle school and is a vital link in the continual and progressive process of vocational development. Thus it is through career exploration that intermediate grade students can experience the meaning and the psychological rewards of work, and can come to know a broad range of adults in the context of their occupations.

Career Development Theory

The literature revealed that most educators believe that career decisions cannot be life to chance. Yet it is estimated that approximately 80 percent of the working population in our country are on the "wrong" job. Ask a dozen

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[8]Robert M. Worthington, "An (Over)view from the Top," School Shop 32 (April 1973): 58.

[9]Bruce Reinhart, A Comprehensive Career Education Model: A Bridge Between School and Work (Columbus, Ohio: The Center for Vocational and Technical Education, Ohio State University, [1972]).

[10]Components of Career Education (Lansing, Mich.: State of Michigan, Michigan Department of Education, [1973]).

people how they chose their occupation, and you'll likely receive a dozen different answers. The "right" occupation, however, can be discovered through a process of knowing one's self, knowing occupations, and matching one's talents with an occupation.

This section investigated and discussed the four major career development theories of Dr. Anne Roe, Dr. Donald Super, Dr. John Holland, and Dr. Eli Ginzberg. By no means is it to be inferred that these four theories in and of themselves represent all of career development theory, but in reviewing the literature, these particular theories are of significant value in understanding occupational and vocational choice processes.

Dr. Anne Roe's personality theory is based on the concept that early childhood experiences influence the occupational choice of the adult. Roe's theory recognizes "the effects of parental attitudes and behavior styles which lead the child to favor one of a number of interpersonal styles of behavior."[11] Thus, Dr. Roe believes that children who had warm, accepting parents would be more likely to enter "person-directed" occupations, while rejecting parents would likely turn a child toward "non-person-directed" occupations.

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[11]Samuel H. Osipow, Theories of Career Development. A Comparison of the Theories, (New York: Appleton-Century-Crofts, 1968), p. 226.

> In short, Dr. Roe thought that when people became adults they would choose to work in situations like those they had enjoyed as children. She also felt that they would try to avoid the kinds of situations that brought them pain.[12]

Dr. Roe's theory while neither proved or disproved, is primarily concerned with predicting what kind of occupation a person will choose.

Dr. Eli Ginzberg's theory of occupational choice views "career development as a series of events in a predictable sequence."[13] Ginzberg's theory is composed of three elements:

1. Occupational choice is a process that takes place over a period of eight to ten years, roughly between the ages of ten to twenty.
2. During this time, a young person makes a series of decisions which gradually reduce the number of choices that are left.
3. Every occupational choice ends up being a compromise.[14]

According to Ginzberg, occupational choice is influenced by internal factors like personality and interest, as well as external factors like school, family, and chance occurrences. An interesting portion of this theory recognizes that during the tentative period (ages 12 to 17) young people are more aware of their true interests and abilities. They realize that they will soon be making occupational decisions and

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[12]Jack L. Rettig, Careers--Exploration and Decision, (New Jersey: Prentice-Hall, 1974), p. 3.

[13]Osipow Theories of Career Development, 226.

[14]Rettig Careers--Exploration and Decision, 6.

choices. "These are the years of searching, reaching out, trying new things, getting acquainted with themselves and the world."[15]

The career development theory of Dr. John Holland, is based on the concept that occupational choice is an expression of one's personality. In this theory,

> youth develop images or sterotypes of the activities involved in a variety of kinds of work and then try to integrate these images into his own view of how he fits into the world.[16]

Dr. Holland has identified six basic personality types: realistic, intellectual, social, conventional, enterprising, and artistic. Holland holds that occupational choice is a matter of matching personalities and occupations and that basically "if a person with a 'realistic' personality chooses a 'realistic' occupation, everything should work out fine."[17]

Dr. Donald Super has long been concerned with how occupational choices occur and upon what they are based. The career development theory of Super is constructed around the idea that a person's self-concept (the person you think you are) determines his occupational choice. There are two fundamental aspects of the self-concept theory:

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[15]Ibid.

[16]Osipow Theories of Career Development, 228.

[17]Rettig Careers--Exploration and Decision, 5.

1. That career choice is seen by the chooser as a way in which to implement his self-concept.

2. That throughout life one is confronted with a series of career development tasks which specify the particular vocational decisions that must be made.[18]

Middle school students are in the exploratory stage of vocational development according to Super, and that "interest and capacity become stronger in the developing self-concept at ages 11 through 14."[19] Super believes that self-concept is gradually developed and that during this development the person

> . . . first makes a tentative selection of a field and level of work, later specifies a vocational preference in a transition substage, and finally, in a trial substage, converts his specified vocational preference into reality by commitment to employment or specialized training.[20]

Super implies that the middle school should be concerned with career development goals that teach students "to achieve a planning orientation and to take responsibility for personal decisions."[21] Following the theory of Super, if you thought of yourself as tough and rugged, it is likely that you might choose a tough and rugged occupation.

In concluding the investigation of career development theory, Harold Munson has consolidated much of the recent

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[18]Osipow Theories of Career Development, 222.

[19]Stanton, "Middle School Years," p. 532.

[20]Kenneth B. Matheny, "The Role of the Middle School in Career Development," American Vocational Journal 44 (December 1969): 18-19.

[21]Ibid.

research and offers suggestions for planning newer directions for vocational maturation at the intermediate grade level.

1. Vocational development is a process extending over a long period of time--perhaps a lifetime.

2. Vocational development is concerned with those physiological, psychological, sociological, and economic forces impinging on the decisions of an individual making both internal (personal) and external (environmental) considerations necessary and significant.

3. Vocational development consists of a series of decisions which eventuate over a period of time, in occupational involvement.

4. Vocational development is experimental in nature, necessitating trial-exploratory behavior of a real and simulated nature allowing one to explore further his self and self-in-vocation.

5. Vocational development is the progressive and compromising process of achieving self-identity in work roles.[22]

Career Development Activities and Projects

A large percentage of the reviewed literature revealed that curriculum development at the intermediate grade level in the area of career exploration is achieved essentially through the application of resource guides and individual courses or units.

Career Exploration Resource Guides

The Florida State Department of Education in 1971, developed a resource guide focusing on career awareness and

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[22]Harold L. Munson, Foundations of Developmental Guidance, (Boston: Allyn and Bacon, 1971), p. 322.

exploration. The resource guide, Countdown to the 70's--Occupational Information for Upper Elementary and Middle Grades,[23] is constructed around 128 job descriptions representing twenty-one clusters of occupations. Countdown to the 70's was adapted from the Atlanta program where it was originally developed under ESEA Title III funds.

The Minnesota State Department of Education developed A Resource Guide for Career Development in the Junior High School.[24] Developed in 1972, this guide was prepared by a counselor for a developmental junior high career education program. Contents of the guide included general and specific behavioral objectives, program descriptions, and a wide variety of resource materials.

Investigating Career Opportunities[25] is a curriculum guide used by The Little Rock Public Schools in Arkansas. Developed by administrators, teachers, counselors, and vocational counselors in September 1972, this guide contains three extensive twelve-week laboratory units at the junior high level. Careers related to business education, home economics, and industrial arts represent the basic thrust of this particular guide.

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[23]Countdown to the 70's--Occupational Information for Upper Elementary and Middle Grades (Tallahassee, Fla.: Florida State Department of Education, [1971]).

[24]Arland Benson, A Resource Guide for Career Development in the Junior High School (St. Paul, Minn.: Minnesota State Department of Education, [1972]).

[25]Investigating Career Opportunities, Curriculum Guide (Little Rock: Little Rock Public Schools, [1972]).

The Oklahoma Vocational Research Coordinating Unit at Stillwater developed a teaching guide in a workshop setting. Teachers and counselors helped design the guide, A Guide for Teachers of a Course in Career Exploration, Grades 8, 9, and 10.[26] The guide presents units in know yourself, world of work, use of occupational information, and career educational planning.

SCOPE (Student-Centered Occupational Preparation and Exploration)[27] was developed by Kolene M. Granger and the Utah State Board of Education in June 1972. Prepared by teachers and counselors for seventh, eighth, and ninth graders, this curriculum guide focuses on self appraisal, general educational and vocational awareness, and specific career and school planning.

The last two resource guides to be discussed are of a comprehensive nature. Both guides contain career activities and units which are intended to integrate career education concepts into all disciplines of the junior high school curriculum.

Howard County Board of Education in Clarksville,

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[26] A Guide for Teachers of a Course in Career Exploration, Grades 8, 9, and 10 (Stillwater, Okla.: Oklahoma State Department of Education, [1970]).

[27] Kolene M. Granger, Junior High Career Guidance Curriculum--Student-Centered Occupational Preparation and Exploration (SCOPE) (Salt Lake City: Utah State Board of Education, [1972]).

Maryland, constructed a Career Development Resource Guide, Grades 6-8. It's Time to Plan.[28] Designed by counselors, vocational teachers, and middle school teachers, It's Time to Plan, helps students develop positive self-concepts, wholesome work attitudes, and knowledge of the world of work.

The Mid-Hudson Career Development and Information Center, Beacon, New York, has designed the Vocational Development in Grades 7, 8, and 9--A Resource Guide Integrating Selected Vocational Development Concepts with Eight Areas of the Curriculum in Grades 7, 8, and 9.[29] This guide provides career units in English, math, science, social studies, art, home economics, industrial arts, and physical education. Each career activity is intended to emphasize work functions and worker traits by exposing students to relevant concepts.

Each of these discussed resource guides have several similar features. The majority of the guides were prepared by a combination of teachers, counselors, vocational educators, and administrators. The basic objectives and content are strikingly alike as they focus on the self-concept of the student, the world of work, and the decision making process.

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[28]Career Development Resource Guide, Grades 6-8. It's Time to Plan (Clarksville, Md.: Howard County Board of Education, [1971]).

[29]Vocational Development in Grades 7, 8, and 9. A Resource Guide Integrating Selected Vocational Development Concepts with Eight Areas of the Curriculum in Grades 7, 8, and 9 (Beacon, N. Y.: Mid-Hudson Career Development and Information Center, [1971]).

Career Exploration Courses or Units

A review of the literature revealed numerous innovative curriculum development projects which are similar in many respects to the research effort connected with this particular thesis.

The first project to be discussed is the C.O.R.E. (Careers Oriented Relevant Education)[30] program which began in June 1969. The C.O.R.E. project represents one of the first fundings for the development of a comprehensive school program (K-14) focusing on a career education theme.

A basic objective of the C.O.R.E. program and also of the researcher's project was to plan a public school program based on the concept of life career roles. The life career roles concept and the COGG organizational structure utilized by this researcher's project were adapted from the C.O.R.E. program. Much of the actual program development of C.O.R.E. occurred at the junior high level.

The SUTOE (Self Understanding Through Occupational Exploration)[31] program was one of the products of the C.O.R.E. project at the junior high level. SUTOE is one step in the careers guidance program of the Springfield, Oregon, School District #19. SUTOE is a one year course that was piloted in the junior highs of Springfield, Oregon. It was designed

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[30]Cas F. Heilman, Careers Oriented Relevant Education (C.O.R.E.). Final Report (Corvallis, Ore.: Oregon State University, [1969]), abstract.

[31]Guide to Self Understanding Through Occupational Exploration (SUTOE) (Salem, Ore.: Oregon State Department of Education, [1968]).

to help ninth graders with educational and career planning by "enabling students to gain knowledge and understanding of possible future goals and job opportunities."[32] No one can prescribe satisfactory goals for the individual, but

> . . . it is hoped that as a result of this course, students will be helped to make good decisions, making it easier to adjust to change and plan their futures more effectively.[33]

Sturges and others developed an experimental program of classroom instruction in 1968 and tested their program on ninth graders in seven selected secondary schools in the New Orleans area. The six-week instructional program utilized by Sturges focused on vocational information and career selection. Both the experimental and the control groups used the same social studies textbook during the experiment, but where the control group received a traditional textbook oriented approach to learning about occupations, the experimental group received an innovative unit in career information.

Many activities outside the classroom were featured in the experimental group instruction. Field visits, career day conferences, guest speakers, and a series of six half-hour TV programs which emphasized various occupational choice influencers were all incorporated into the experimental

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[32]Ibid., p. vi.

[33]Ibid.

instruction. Sturges noted in his findings:

> Students and teachers expressed in a variety of ways that the experimental unit was more effective than the control unit in promoting enthusiasm and interest in the study of occupations and career information.[34]

An analysis of the data showed no significant differences in occupational knowledge existed between the experimental and control groups. However, on a textbook oriented test, the experimental group performed equally as well, suggesting that the field experiences compensated for the lack of study time given to the textbook.

In Philadelphia, Jackson and others designed a program of vocational orientation and offered it to all eighth graders at Sayre Junior High. Each class attended the two-hour sessions. During the sessions, large group instruction was concerned with identifying career opportunities available in six major career areas. Small group instruction reinforced large group presentations, as students explored careers of individual interest. Small group instruction considered personality characteristics and abilities, reasons for selecting various careers, and the relationship of a chosen career to other occupations. Findings indicated

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[34]Jack Sturges et al., A Comparison of Two Methods of Providing Information to Ninth Grade Students About the World of Work (New Orleans: Educational Systems Development Corp., [1969]), p. 58.

that:

1. There was no increase in knowledge of careers about which pupils expressed an interest.
2. There was a significant increase in knowledge about certain aspects of the six major career areas in the second cycle, but it was limited.
3. There was no significant attitude change.[35]

Helping student assess their personal characteristics, study career opportunities, and set long range goals were the objectives of a tenth grade course developed by Arutunian. This nine-week course (five days per week) at Pioneer Senior High School in San Jose, California was teacher directed and consisted of eight self-directed learning units. Students worked individually, in small groups, and in large groups, depending on the activity involved.

After the first year, tenth graders who had taken the course were able to:

1. Identify important school and vocational decisions and the points in time when it is probably best to make them.
2. Understand (a) how to obtain information of current job trends, (b) the importance of a student understanding the availability of vocational opportunities when he is in the process of setting long range vocational goals and making plans to achieve them.
3. Recognize the factors by which occupations are sorted into a long range goal system of grouping occupations and understanding the meaning of each factor.
4. Judge how difficult it is to change specific personal characteristics.

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[35]James S. Jackson et al., Evaluation of the Career Development Laboratory Sayre Junior High School (Philadelphia: School District of Philadelphia, (1969)), p. 11.

5. Show that they had collected and organized both measured and self-reported information about their abilities, interests, values, and physical traits that can affect their choice of school and vocational goals.

6. Pick their first and second choice tentative long range vocational goals and plan a high school program to help them reach their goal.[36]

Curry and Brooks conducted a study in an effort to find a better way to help students make educational and vocational decisions. The study centered on junior high school students and involved an experimental group taught by means of the Life Career game and a control group taught by traditional teacher directed methods.

Noted in the implications of the study was the statement:

> The greatest strength of the Life Career game as compared with traditional methods and materials may be in its ability to change student attitude toward the concepts of Education, Marriage and Family Life, and Leisure.[37]

Further analysis of the data showed that the Life Career game is no more affective than traditional methods in assisting students to learn subject matter.

In Miami, Florida, Dade County Public Schools offers junior high school students a course of study entitled "Project YOU." Resource personnel from business as well as tours

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[36]Carol Ann Arutunian, Case Studies in Practical Career Guidance, Number 3: Career and Educational Planning Program, Pioneer Senior High School, San Jose, California (Palo Alto: American Institute for Research, [1973]), p. 11.

[37]John F. Curry and Robert L. Brooks, A Comparison of Two Methods of Teaching Life Career Planning to Junior High School Students (Denton, Texas: North Texas State University, [1971]), p. 49.

to business sites are incorporated into the course. "Project YOU" is designed to acquaint students with the world of work and the personal characteristics that will help them succeed in their career choice.

Hamilton and Jones designed a project of Integrating and Evaluating Career Information in a Developmental Guidance Program.[38] A portion of this project was pilot tested with twenty-five ninth and tenth graders at Santa Clara High, Santa Clara, California. This project identified three major needs of an individual when contronted with an educational/occupational choice.

1. Need to assess personal abilities, aptitudes, interests, job and college characteristic preferences, and physical and social characteristics.
2. To acquire information about educational and occupational alternatives.
3. To learn to apply a strategy for processing this information into personal goals, plans, and actions.[39]

This career information program was developed to assist the student "in the role of exploration and the formation of tentative decisions about long range educational and occupational goals."[40]

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[38]Jack A. Hamilton and Brian G. Jones, Integrating and Evaluating Career Information in a Developmental Guidance Program (Palo Alto: American Institute for Research, [1970]).

[39]Ibid., p. 1.

[40]Ibid.

The Career-Centered Curriculum for the Vocational Complexes in Mississippi[41] was an exemplary project designed to develop an integrated program of career development kindergarten through post secondary. As a part of this overall project, the junior high school students can elect a course of "Occupational Information." "Occupational Information" provides exploratory experiences in a wide range of occupational categories. In the course, "students are brought to grip with self and society, self and occupations, and self and personality development."[42]

In concluding our review of related activities and projects, Hansen in the 1970 National Vocational Guidance Association publication Career Guidance Practices in School and Community[43] has identified several career guidance projects which offer units in occupational study. They are as follows:

Introduction to Vocations--New Jersey

Started in 1965, this pilot project focused on helping eighth and ninth graders gain in occupational awareness and giving students a foundation for later career and educational choice. Students experienced field trips, speakers,

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[41]James H. McMinn, The Career-Centered Curriculum for The Vocational Complexes in Mississippi (Jackson, Miss.: Mississippi State Board for Vocational Education, [1971]).

[42]Ibid., p. 7.

[43]Lorraine S. Hansen, Career Guidance Practices in School and Community, (Washington: National Vocational Guidance Association, [1970]).

films, and job visitation days.

Among the unique characteristics of this project are:

> . . . the team approach using several teachers, and counselors, and coordinators; the examination of self, economics, and work; and the attempts to relate subjects to careers.[44]

An evaluation of this project shows "that experiences have opened many new doors, new goals, and new aspirations for pupils."[45]

Introduction to Vocations Course--North Carolina

"Introduction to Vocations" is a one-year elective course for ninth grade boys and girls in selected North Carolina schools. Started in 1963, the course is designed to help students develop career planning skills. The purpose of the course has been:

1. to help students in self-appraisal in relation to a variety of vocational opportunities;
2. to help students gain first hand knowledge of the changing employment patterns and opportunities in North Carolina;
3. to help students understand the basic process of production, processing, and distribution in the American economy; and
4. to acquaint students with major occupational fields.[46]

Studies in Success--Grossmont, California

A plan to improve the vocational guidance of average or non-college-bound students has been developed in 1965 at

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[44]Ibid., p. 42.

[45]Ibid.

[46]Ibid.

Grossmont Union High School. "Studies in Success" was organized to help students learn about themselves and the world of work. Using a team approach (both teachers and counselors), students met for two-hour-per-day sessions.

Following the pilot effort, evaluation of findings showed,

> The key to the success of the unit seemed to be the establishment of a good working relationship between the counselor and the teacher, and the counselor's ability to identify with the average student.[47]

Many participating teachers and counselors felt that a short vocational unit would be more successful than one spread through the year. There was also strong feeling that "Studies in Success" should be given to all ninth graders as part of a four-year sequential program of vocational guidance.

Career Planning Units--Minnesota State Department of Education

"Career Planning, An Outline for the Ninth Grade Unit" and "Your Future: An Outline for the Ninth Grade Career Planning Unit" are two units of career study available to Minnesota schools interested in occupations. The units were originally developed by the Hopkins and Roseville Public Schools and contain sections on self-evaluation, the world of work, and educational planning. Plans were made to revise the units, making them adaptable at various levels in the school curriculum.

In conclusion, the literature was examined in this

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[47]Ibid., p. 47.

chapter to determine what had been written regarding the need and rationale for career education in the intermediate grades, career development theory, and career development activities and projects.

A review of the literature disclosed that the need for career education at the intermediate level exists primarily because the career development of an individual is an on-going process of understanding one's self and the world of work. Values and attitudes toward the world of work are formed at an early age and thus, career exploration activities in grades six through nine can assist in the development of positive attitudes regarding the dignity of work. Many influencers impact on the career development of the intermediate grades level. The rationale above is responsible in part for the assignment of career exploration to the intermediate level as witnessed by the USOE Comprehensive Career Education Model and the State of Michigan Career Model.

Career development theory and the career education movement are emerging and providing a new direction for curriculum innovation. The differences between various theories have been identified, but there appears to be some consensus that the self-concept theory of Dr. Donald Super may provide the appropriate direction in terms of career education programing.

Different curriculum resource guides and research projects with similarities to the research effort of this

thesis were investigated. In terms of program content and objectives, many of the reviewed research projects are identical.

CHAPTER III

PROCEDURES AND METHODOLOGY

The Design

The design of this study was design four (Pretest-Posttest Control Group Design) described as follows by Campbell and Stanley.[1]

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R	O		O

The students participating in this study were pretested in October 1973. The Assessment of Career Development[2] was used for the pretest and the posttest which was administered in late May 1974. Pre and posttest data derived from the ACD was machine scored and processed by The American College Testing Program, publishers of the instrument.

A presurvey which used the classroom adjustment instrument was taken in February 1974. The survey requested teachers to base their judgments on the first semester efforts of the student being evaluated. The postsurvey on classroom adjustment was administered in late May 1974 and required

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[1]Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally and Company, 1969), p. 22.

[2]Handbook for the ACT Assessment of Career Development; Preliminary Edition (Iowa City: The American College Testing Program, [October 1973]).

teachers to make judgments of the individual efforts of students for the second semester of the 1973-74 school year. In this procedure, the same teachers evaluated each student twice, once in February and again in May. The classroom adjustment survey involved three teachers evaluating each participating student in both the experimental and control groups.

The opinion survey measuring attitudes toward the Life Roles Concept was given to students in the experimental group and their parents in February 1974. The Life Roles opinionnaire was the only phase of this study that deviated from the pretest-posttest control group design. No posttest survey was conducted as it was not the intent of the instructional program to affect attitudes concerning Life Roles.

The experimental treatment was provided through the twenty-week COGG program. COGG met during the last class period of the day, five days per week. COGG was an innovative program of career exploration developed around a series of commercially prepared career instructional materials appropriate for intermediate level students. Appendix A contains a course guide which describes the purpose and goals of COGG. Middle school counselors, administrators, and curriculum implementors interested in utilizing a Single-Course Concept approach to career development will find the operational structure of COGG in appendix B.

Population and Derived Sample

During the 1973-74 school year, a second semester program of career exploration was implemented for selected ninth graders at both Grosse Pointe North and Grosse Pointe South High Schools. The population of this study was 1,063 ninth graders from the two high schools in the system. This group was pretested in a series of three one-hour testing sessions in October 1973. The pretest results, presented in table 1, showed a total Grosse Pointe ninth grade score of a plus-two stanine average across the five normative scales of the instrument. This plus-two average means Grosse Pointe ninth graders scored significantly higher across the five scales when compared with the national ninth grade norms of the ACD.

TABLE 1

ACD PRETEST COMPARISON OF LOCAL AND NATIONAL NINTH GRADE MEANS

Norm Group	ACD--Career Development Factors				
	Occup. Knowl.	Occup. Prep. Requirements	Gen. Occ. Expl. Exp.	Career Pl. Knowledge	Career Pl. Involvement
Grosse Pointe	37.7*	11.5*	1.7	26.4	1.6
ACD Nat'l.	33.4	10.3	1.8	24.4	1.7

*One stanine above National Norm Mean

As a result of the total ninth grade average exceeding the national normative average, it was decided that any ninth

grader who scored even with or below the average of the national norms would benefit from participation in the experimental COGG program. This resulted in 275 students being identified as even with or below the average of the national norms. These 275 students represented the sample to which the generalizations of this study were directed. Therefore, the findings of this study were generalized only to these specific 275 students who represented 25.8 percent of the total ninth grade population in The Grosse Pointe Public School System. This sample of 275 was reduced to 267 because eight students who scored in the range of -5, -6, and -7 were removed to eliminate extremes.

At this point, with the experimental treatment group organized to meet as a separate class the last period of the school day, it was necessary to identify from the group of 267 students, those students whose class schedule with a maximum of two class changes would permit them to participate. An investigation of the class schedules of the 267 students revealed a group of 108 ninth graders whose schedules with minimal changes would allow participation.

Letters of explanation concerning the purpose of the experimental COGG program were sent to the parents of the 108 ninth graders. Some parents, because of necessary class schedule changes, asked that their child not be involved in the project and therefore the sample was finally determined to be 98. It was from this group of 98 students that selection for the experimental and control groups (considering

factors of sex I. Q., and pretest weakness levels) was made.

Final sample sizes then were N = 43 for the experimental treatment group and N = 50 for the control group. The N of 93 reflects a reduction from the sample of 98 indicated above because two students moved from the district, two students experienced prolonged illness, and one schedule change was unacceptable to the student involved. The final sample of N = 93 was representative of the total ninth grade population from which it was drawn. Sex and I. Q. characteristics of the sample were similar in nature to the total ninth grade population. The final sample N of 93 for this study, therefore, represented 8.7 percent of the population. Table 2 identifies the treatment groups by their selection characteristics.

Instrumentation

Three basic instruments were used in this experimental program. They were: (1) The Assessment of Career Development (see appendix C), (2) The Classroom Adjustment Survey (see appendix D), and (3) The Life Roles Opinion Survey (see appendix E). Only two instruments, those of the Assessment of Career Development and the Classroom Adjustment Survey, were employed for comparison purposes between the experimental and control groups.

The Assessment of Career Development

The Assessment of Career Development (ACD) instrument

TABLE 2

CHARACTERISTICS OF STUDENTS BY TREATMENT GROUP

Characteristic	Experimental		Control		Total	
	Male	Female	Male	Female	Male	Female
Sex	22	21	25	25	47	46
I. Q.						
80--89	2	1	2	0	4	1
90--99	4	1	3	5	7	6
100-109	8	8	8	9	16	17
110-119	6	6	10	11	16	17
120-129	1	4	2	0	3	4
130 & Up	1	1	0	0	1	1
Weakness Level						
Even / -1 . . .	11	13	14	10	25	23
-2 / -3 / -4 . .	11	8	11	15	22	23

designed by The American College Testing Program in 1972[3] was used as a pre and a posttest measurement of both treatment groups. The ACD is a nationally standardized test that samples only certain predefined elements of career development behavior; namely--occupational awareness, self awareness, and career planning and decision making. The ACD does not pretend to measure the psychological dimensions of vocational maturity or any other psychological factors.

> Examples of career development components not assessed by the ACD include occupational self-concept, realism of choice, attitudes toward work, appreciation of different life styles associated with occupations, job interview skills, and accuracy of self knowledge.[4]

Content validity of the ACD is the judgment of the user. That is, the user must judge whether the ACD assesses aspects of career development which are relevant to local needs. However, national norms of the ACD are available and are representative of different geographic regions, sizes of communities, and socioeconomic status. The mean reading level for the entire ACD is at the 7.2 grade level. The ACD norms were used in this study to provide a meaningful comparison of national and local mean scores. The pretest results of the ACD and the subsequent comparison of the national and local mean scores were used by the researcher for the purpose of student selection and assignment to treatment groups. As mentioned earlier, students who as a result of their pretest scores scored even with or below the average of the national

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[3]Ibid., p. 19.

[4]Ibid., p. 26.

norms were considered for participation in this study. The pre and posttesting sessions were administered in identical fashion by the same supervisors at both high schools following those procedures recommended by The American College Testing Program. A copy of the ACD instrument is presented in appendix C.

The Classroom Adjustment Survey Card

The Classroom Adjustment Survey Card was an instrument developed locally which required teachers to make judgments concerning students adjustment on certain specific classroom factors. This survey instrument was constructed through the combined efforts of teachers, counselors, and school social workers. Prior to using the survey card, twelve teachers tested the instrument and reported that they understood and had little difficulty in completing the form.

The survey measured individual students on factors of attendance, grade point average, counselor referrals, and classroom adjustment (promptness, preparedness, participation, and self control). In The Grosse Pointe Public School System, the official attendance record of the student is noted in the teacher's class record book. A copy of the classroom adjustment instrument is presented in appendix D.

The Life Roles Opinion Survey

The third and final instrument used in this study was an opinionnaire which measured reactions to the concept of Life Roles. Life Roles Concepts were measured in the predefined areas of occupational, avocational, citizenship, and

family life roles. The Life Roles survey instrument[5] utilized in this research effort was adapted from the Springfield, Oregon C.O.R.E. project discussed in chapter II of this thesis. The Oregon Life Roles Instrument was developed by C.O.R.E. personnel and measured the extent of agreement between students, parents, and teachers concerning the acceptance of the Life Roles. A copy of the Life Roles survey is presented in appendix E.

Analysis Procedures

Statistical consultant services provided by the Wayne County Intermediate School District were employed in analyzing the data of this study. Additional computing and consulting services from Wayne State University were also utilized.

An analysis of covariance (using pretest scores as the covariate) was utilized to determine if a significant difference at the .05 level existed between the adjusted posttest scores of the experimental group and the adjusted posttest scores of the control group on factors of occupational awareness and career planning and decision making. An analysis of covariance was computed for the following hypotheses:

1-A	2-A	3-A	4-A	5-A
1-B	2-B	3-B	4-B	5-B

An analysis of a percentage comparison was utilized to determine if a positive difference existed between the

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[5]William W. Pierson, The Acceptance of Careers Education Concepts in Four Junior High Schools (Corvallis, Ore.: Oregon State University, [1972]).

posttest results of the experimental group and the posttest results of the control group on the factor of self awareness. A percentage comparison was derived for hypotheses 1-C, 2-C, 3-C, 4-C, and 5-C through a chi-square analysis.

A t-test analysis was utilized to determine if a significant difference at the .05 level existed between the postmeasurement mean of the experimental group and the postmeasurement mean of the control group on factors of attendance, grade point average, counselor referrals, and the classroom adjustment scale. A t-test analysis was computed for hypotheses 6, 7, 8, and 9.

A presentation of the data collected regarding the Life Roles Concept was used to determine if there was a difference in a favorable direction between the positive and negative reactions of the experimental group and parents of students in the experimental group. Responses to this survey ranged from a high of "strongly agree" (weighted five points) to "strongly disagree" (weighted one point). Response averages at or above 2.5 were accepted as being positive and supportive of the concept. This particular presentation of data was directed toward hypotheses 10 and 11.

CHAPTER IV

FINDINGS

The findings are listed and discussed in this chapter under five major headings:

(A) Occupational Awareness
(B) Career Planning and Decision Making
(C) Self Awareness
(D) School Performance
(E) Life Roles Concept

Testing of Occupational Awareness Hypotheses

Research Question

Will ninth grade boys and girls representing different levels of career development who have participated in COGG achieve greater gain scores in occupational awareness than selected ninth grade boys and girls not involved in COGG?

The above research question was directly related to hypotheses 1-A, 2-A, 3-A, 4-A, and 5-A. These five hypotheses were concerned with attaining greater student awareness in the career development factor of occupational awareness.

Occupational awareness findings

Table 3 presented the posttest means for all levels of experimental and control groups on the three variables (occupational characteristics, preparation requirements, and exploratory experiences) comprising occupational awareness. A multivariate analysis of covariance on occupational awareness by treatment was presented in table 4. The data

indicated that a significant difference at the 0.022 level existed between the experimental and the control groups. Table 5 presented an analysis of covariance breakdown of the variables comprising occupational awareness and showed a significant difference on the element of occupational preparation requirements at the 0.002 level. The statistical analysis presented in both tables 3 and 4 is consistent between gender and weakness levels and therefore, directly applicable to hypotheses 1-A, 2-A, 3-A, 4-A, and 5-A.

Research hypotheses 1-A, 2-A, 3-A, 4-A, and 5-A are therefore accepted and appear plausible.

Research hypothesis 1-A stated that: There is a significant difference between the adjusted posttest means of the experimental group (COGG) and the adjusted posttest means of the control group on occupational awareness.

Research hypothesis 2-A stated that: There is a significant difference between the adjusted posttest means of the Level I-A experimental group (COGG) and the adjusted posttest means of the Level I-A control group on occupational awareness.

Research hypothesis 3-A stated that: There is a significant difference between the adjusted posttest means of the Level II-A experimental group (COGG) and the adjusted posttest means of the Level II-A control group on occupational awareness.

Research hypothesis 4-A stated that: There is a significant difference between the adjusted posttest means of the Level I-B experimental group (COGG) and the adjusted posttest means of the Level I-B control group on occupational awareness.

Research hypothesis 5-A stated that: There is a significant difference between the adjusted posttest means of the Level II-B experimental group (COGG) and the adjusted posttest means of the Level II-B control group on occupational awareness.

TABLE 3

POSTTEST MEANS ON ELEMENTS OF OCCUPATIONAL AWARENESS BY TREATMENT GROUP

Elements of Occupational Awareness	Treatment Groups									
	Experimental					Control				
	Total* Exper. N=43	Level I-A N=13	Level II-A N=8	Level I-B N=11	Level II-B N=11	Total* Contr. N=50	Level I-A N=10	Level II-A N=15	Level I-B N=14	Level II-B N=11
1. Occupational Characteristics	37.4	38.3	36.3	37.4	36.0	36.1	34.7	36.9	39.2	33.8
2. Occupational Preparation Requirements	12.2	11.9	13.1	11.9	11.7	10.8	10.6	10.9	12.3	9.8
3. General Exploratory Experiences	1.7	1.8	1.5	1.8	1.8	1.7	1.7	1.6	1.8	1.6

*Adjusted Posttest Means

TABLE 4

MULTIVARIATE ANALYSIS OF COVARIANCE
ON OCCUPATIONAL AWARENESS

Source of Variation	D. F. Hyp.	D. F. Error	F Value
Treatment	3.0	80.0	3.4*

D. F. = Degrees of Freedom

*Significant at the 0.022 level and consistent for all boys and girls at the E, -1, -2, -3, and -4 weakness levels. (See definition of terms--p. 13)

TABLE 5

ANALYSIS OF COVARIANCE ON
OCCUPATIONAL AWARENESS

Element of Occup. Awareness	Source of Variation	D. F.	Mean Squares	F Value
1. Occupational Characteristics	Treatment	1	36.3	1.6
2. Occupational Preparation Requirements	Treatment	1	47.4	9.8*
3. General Exploratory Experiences	Treatment	1	.1	.02

*Significant at the 0.002 level and is consistent for all gender and weakness levels.

Discussion of occupational awareness findings

These hypotheses were directly concerned with the experimental group attaining greater occupational awareness. Furthermore, they were intended to demonstrate that a group of students who had a concentrated, planned program of career education experiences would be different from a non-treatment group on the basis of occupational awareness. Occupational awareness is comprised of the elements of occupational characteristics, occupational preparation requirements, and general occupational exploratory experiences. The multivariate analysis of covariance proved these hypotheses to be acceptable. On the element of occupational preparation requirements there was a significant difference. The difference of 0.002 on occupational preparation requirements was of such large significance that it offset the lack of difference between the other two elements to the degree that combining all three elements produced a composite significant difference.

The COGG program helped students attain a greater increase in occupational awareness by utilizing a combination of audio-visual materials, field visitations, and guest speaker appearances. When discussing jobs with different workers, COGG students were asked to identify the steps that are required to secure employment in the particular area of the person being interviewed. This process increased the students' knowledge of job characteristics and illustrated the preparation requirements of varying occupations. Sturges, through his program "A Comparison of Two Methods of Providing

Information to Ninth Grade Students About the World of Work" in New Orleans, found no significant differences in occupational knowledge between experimental and control groups. Jackson in Philadelphia, found mixed results with the "Evaluation of the Career Development Laboratory Sayre Junior High School" in the area of educational and training requirements for occupations. Jackson noted that in the first cycle of the program, students did not meet the criterion, but during the second cycle, on the Career Information Survey, students demonstrated a greater knowledge of educational and training requirements for occupations.

Testing of Career Planning and Decision Making Hypotheses

Research Question

Will ninth grade boys and girls representing different levels of career development who have participated in COGG achieve greater gain scores in career planning and decision making than selected ninth grade boys and girls not involved in COGG?

The above research question was directly related to hypotheses 1-B, 2-B, 3-B, 4-B, and 5-B. These five hypotheses were concerned with increased student knowledge in the career development area of career planning and decision making.

Career planning and decision making findings

Table 6 presented the posttest means for all levels of experimental and control groups on career planning and decision making. A significant difference at the 0.001 level

was identified in table 7 through a multivariate analysis of covariance on the two elements (career planning knowledge and career planning involvement) comprising career planning and decision making. Table 8 illustrated a significant difference at the 0.001 level, on the element of career planning involvement. Again, the statistical analysis presented in both tables 7 and 8 was consistent between gender and weakness levels and therefore, directly applicable to hypotheses 1-B, 2-B, 3-B, 4-B, and 5-B.

Research hypotheses 1-B, 2-B, 3-B, 4-B, and 5-B are accepted and appear plausible.

Research hypothesis 1-B states that: There is a significant difference between the adjusted posttest means of the experimental group (COGG) and the adjusted posttest means of the control group on career planning and decision making.

Research hypothesis 2-B stated that: There is a significant difference between the adjusted posttest means of the Level I-A experimental group (COGG) and the adjusted posttest means of the Level I-A control group on career planning and decision making.

Research hypothesis 3-B stated that: There is a significant difference between the adjusted posttest means of the Level II-A experimental group (COGG) and the adjusted posttest means of the Level II-A control group on career planning and decision making.

Research hypothesis 4-B stated that: There is a significant difference between the adjusted posttest means of the Level I-B experimental group (COGG) and the adjusted posttest means of the Level I-B control group on career planning and decision making.

Research hypothesis 5-B stated that: There is a significant difference between the adjusted posttest means of the Level II-B experimental group (COGG) and the adjusted posttest means of the Level II-B control group on career planning and decision making.

TABLE 6

POSTTEST MEANS ON ELEMENTS OF CAREER PLANNING AND DECISION MAKING

Career Planning and Decision Making	Treatment Groups									
	Experimental					Control				
	Total* Exper. N=43	Level I-A N=13	Level II-A N=8	Level I-B N=11	Level II-B N=11	Total* Contr. N=50	Level I-A N=10	Level II-A N=15	Level I-B N=14	Level II-B N=11
1. Career Planning Knowledge	27.0	26.0	29.6	27.5	24.7	24.8	25.8	25.1	26.2	23.1
2. Career Planning Involvement	2.0	2.2	1.9	2.0	1.8	1.7	1.8	1.6	1.7	1.6

*Adjusted Posttest Means

TABLE 7

MULTIVARIATE ANALYSIS OF COVARIANCE ON CAREER PLANNING AND DECISION MAKING

Source of Variation	D. F. Hyp.	D. F. Error	F Value
Treatment	2	82.0	14.8*

D. F. = Degrees of Freedom

*Significant at the 0.001 level and consistent for all boys and girls at the E, -1, -2, -3, and -4 weakness levels. (See definition of terms--p. 13)

TABLE 8

ANALYSIS OF COVARIANCE ON CAREER PLANNING AND DECISION MAKING

Elements of Career Planning and Decision Making	Source of Variation	D. F.	Mean Squares	F Value
1. Career Planning Knowledge	Treatment	1	102.1	3.6
2. Career Planning Involvement	Treatment	1	237.3	24.8*

*Significant at the 0.001 level and consistent for all gender and weakness levels.

Discussion of career planning and decision making findings

Career planning knowledge and career planning involvement were the two elements which together comprise the career development area referred to as career planning and decision making. A statistical analysis of the data identified a significant difference at the 0.001 level for the total area of career planning and decision making. It is important to recognize that the multivariate analysis of covariance on the total area of career planning and decision making was significant and consistent for both males and females regardless of weakness level.

The COGG program demonstrated a substantial, significant difference at the 0.001 level on the element of career planning involvement. This was not surprising because many of the activities of COGG were designed to place students in situations that required them to utilize basic concepts of decision making. Role playing, case studies, and debriefing sessions following field visitations, were just some of the techniques employed to help students understand and apply the basic concepts of career planning.

The element of career planning knowledge showed an 'F' value of 3.6 for the experimental group which is significant at the 0.1 level. While not statistically significant, the 'F' value is relatively close enough to the 0.05 level of confidence to warrant reporting because the COGG program did assist students in understanding the following:

a. impact of work on one's life
b. labor market trends
c. the multiple potential of people for occupations

d. different sources of occupational help and information
e. the importance of self/career exploration

Testing of Self Awareness Hypotheses

Research Question

Will ninth grade boys and girls representing different levels of career development who have participated in COGG achieve greater gain scores in self awareness than selected ninth grade boys and girls not involved in COGG?

The above research question was directly related to hypotheses 1-C, 2-C, 3-C, 4-C, and 5-C. These five hypotheses were concerned with attaining greater student awareness in the career development factor of self awareness.

Self awareness findings

Tables 9, 10, 11, 12, and 13 presented a summary of desired responses on items of self awareness by levels of treatment groups. An analysis of data showed no significant difference on the factor of self awareness between levels of experimental and control groups. However, certain self awareness items within levels were found to be significant. Item five which was, "How sure are you of the steps to take in order to prepare for and enter each of the two jobs?" was significant at the 0.05 level on tables 9 and 10. Item five is in referrence to the two occupational preference choices made by the students. Item three, again referring to the student's occupational choice, was significant at the 0.05 level on table 11 and stated, "Is the amount of education you are planning in line with what is needed for the jobs?"

Research hypotheses 1-C, 2-C, 3-C, 4-C, and 5-C are

rejected.

Research hypothesis 1-C stated that: There is a positive difference between the posttest results of the experimental group (COGG) and the posttest results of the control group on measures of self awareness.

Research hypothesis 2-C stated that: There is a positive difference between the posttest results of the Level I-A experimental group (COGG) and the posttest results of the Level I-A control group on measures of self awareness.

Research hypothesis 3-C stated that: There is a positive difference between the posttest results of the Level II-A experimental group (COGG) and the posttest results of the Level II-A control group on measures of self awareness.

Research hypothesis 4-C stated that: There is a positive difference between the posttest results of the Level I-B experimental group (COGG) and the posttest results of the Level I-B control group on measures of self awareness.

Research hypothesis 5-C stated that: There is a positive difference between the posttest results of the Level II-B experimental group (COGG) and the posttest results of the Level II-B control group on measures of self awareness.

TABLE 9

SUMMARY OF DESIRED RESPONSES ON SELF AWARENESS ITEMS BY TREATMENT GROUP

Questions	Desired Response(s)	Treatment Group	
		N = 43	N = 50
		Expmtl. %	Control %
1. How sure are you that your "First Job Choice" will be the same in a year?	I am very sure I am fairly sure	83.8 %	86.0 %
2. Have you given much thought as to why these two jobs are "right" for you?	A lot	51.2	30.0
3. Is the amount of education you are planning in line with what is needed for the jobs?	Yes	58.1	46.0
4. Will the two jobs help you obtain what you want out of life?	Yes	58.1	50.0
5. How sure are you of the steps to take in order to prepare for and enter each of the two jobs?	Steps are pretty clear Steps are quite clear	60.5	24.0*
6. Do you feel you will be able to complete all of the necessary steps for at least one of the jobs?	Yes	74.4	58.0
7. Would you say that your job future is--	Bright	55.8	58.0
8. Would you like help with choosing courses?	Yes	60.5	56.0
9. Would you like help with making career plans?	Yes	72.1	70.0

*Significant at the .05 level

TABLE 10

SUMMARY OF DESIRED RESPONSES ON SELF AWARENESS QUESTIONS BY LEVEL I-A*

Questions	Desired Response(s)	Treatment Group	
		N = 13	N = 10
		Expmtl. Level I-A	Control Level I-A
1. How sure are you that your "First Job Choice" will be the same in a year?	I am very sure I am fairly sure	92.3 %	100.0 %
2. Have you given much thought as to why these two jobs are "right" for you?	A lot	53.9	50.0
3. Is the amount of education you are planning in line with what is needed for the jobs?	Yes	61.5	60.0
4. Will the two jobs help you obtain what you want out of life?	Yes	69.2	70.0
5. How sure are you of the steps to take in order to prepare for and enter each of the two jobs?	Steps are pretty clear Steps are quite clear	84.6	20.0**
6. Do you feel you will be able to complete all of the necessary steps for at least one of the jobs?	Yes	76.9	100.0
7. Would you say that your job future is--	Bright	69.2	70.0
8. Would you like help with choosing courses?	Yes	46.2	80.0
9. Would you like help with making career plans?	Yes	69.2	80.0

*Level I-A = girls in the range of (E) or (-1)
**Significant at the .05 level

TABLE 11

SUMMARY OF DESIRED RESPONSES ON SELF AWARENESS QUESTIONS BY LEVEL II-A*

Questions	Desired Response(s)	Treatment Group	
		N = 8	N = 15
		Expmtl. Level II-A	Control Level II-A
1. How sure are you that your "First Job Choice" will be the same in a year?	I am very sure I am fairly sure	87.5 %	66.7 %
2. Have you given much thought as to <u>why</u> these two jobs are "right" for you?	A lot	50.0	26.7
3. Is the amount of education you are planning in line with what is needed for the jobs?	Yes	75.0	20.0**
4. Will the two jobs help you obtain what you want out of life?	Yes	62.5	40.0
5. How sure are you of the steps to take in order to prepare for and enter each of the two jobs?	Steps are pretty clear Steps are quite clear	50.0	6.7
6. Do you feel you will be able to complete all of the necessary steps for at least one of the jobs?	Yes	37.5	40.0
7. Would you say that your job future is--	Bright	50.0	53.3
8. Would you like help with choosing courses?	Yes	62.5	46.7
9. Would you like help with making career plans?	Yes	75.0	66.7

*Level II-A = girls in the range of (-2), (-3), or (-4)
**Significant at the .05 level

TABLE 12

SUMMARY OF DESIRED RESPONSES ON SELF AWARENESS QUESTIONS BY LEVEL I-B*

Questions	Desired Response(s)	Treatment Group	
		N = 11	N = 14
		Expmtl. Level I-B	Control Level I-B
1. How sure are you that your "First Job Choice" will be the same in a year?	I am very sure I am fairly sure	72.7 %	84.6 %
2. Have you given much thought as to why these two jobs are "right" for you?	A lot	45.5	30.8
3. Is the amount of education you are planning in line with what is needed for the jobs?	Yes	36.4	76.9
4. Will the two jobs help you obtain what you want out of life?	Yes	54.6	53.9
5. How sure are you of the steps to take in order to prepare for and enter each of the two jobs?	Steps are pretty clear Steps are quite clear	54.6	38.5
6. Do you feel you will be able to complete all of the necessary steps for at least one of the jobs?	Yes	81.8	53.9
7. Would you say that your job future is--	Bright	45.5	69.2
8. Would you like help with choosing courses?	Yes	54.6	46.2
9. Would you like help with making career plans?	Yes	81.8	61.5

*Level I-B = boys in the range of (E) or (-1)

TABLE 13

SUMMARY OF DESIRED RESPONSES ON SELF AWARENESS QUESTIONS BY LEVEL II-B*

Questions	Desired Response(s)	Treatment Group	
		N = 11	N = 11
		Expmtl. Level II-B	Control Level II-B
1. How sure are you that your "First Job Choice" will be the same in a year?	I am very sure I am fairly sure	81.8 %	100.0 %
2. Have you given much thought as to why these two jobs are "right" for you?	A lot	54.6	16.7
3. Is the amount of education you are planning in line with what is needed for the jobs?	Yes	63.6	33.3
4. Will the two jobs help you obtain what you want out of life?	Yes	45.5	41.7
5. How sure are you of the steps to take in order to prepare for and enter each of the two jobs?	Steps are pretty clear Steps are quite clear	45.5	33.3
6. Do you feel you will be able to complete all of the necessary steps for at least one of the jobs?	Yes	90.9	50.0
7. Would you say that your job future is--	Bright	54.6	41.7
8. Would you like help with choosing courses?	Yes	81.8	58.3
9. Would you like help with making career plans?	Yes	63.6	75.0

*Level II-B = boys in the range of (-2), (-3), or (-4)

Discussion of self awareness findings

Self awareness, as measured by the chi-square statistical analysis, was the only area of career development in the COGG program that did not show a statistically significant difference. However, of the nine self awareness items, question five, was identified to be significantly different at the 0.05 level by treatment groups. Question five asked students, "How sure are you of the steps to take in order to prepare for and enter each of the two jobs?" This question was directed toward the selection of two occupations that most interested the student. It appeared that the significant difference on question five was related to the difference reported on the element of career planning involvement. The significant difference on question five stands in support of the findings attributed to the element of career planning involvement.

Question five was also found to be significant for Level I-A, girls in the range of (E) or (-1). Level II-A, girls in the range of (-2), (-3), or (-4), showed a significant difference on question three, "Is the amount of education you are planning in line with what is needed for the job?" Again this question correlates highly with career planning involvement.

While only question five showed any statistical significance between the experimental and control groups, it should be reported that questions two and six showed an average percentage difference of over 15 percent. Again, questions

two and six are related to career planning.

Nine self awareness items were measured and five or more of these items were required to be significant before the self awareness hypotheses would be accepted. The COGG program failed to develop statistically significant differences in five of the nine items of self awareness. COGG was a one semester program, and twenty weeks, given the characteristics of the experimental population did not provide sufficient time to impact and affect the self awareness levels of students.

Testing of the School Performance Hypotheses

Research Question

Will ninth grade boys and girls who have participated in COGG achieve an improved record in four specific areas of school performance than selected ninth grade boys and girls not involved in COGG?

Improving the student's school performance involved four factors. Hypothesis six was concerned with an improved attendance record. Hypothesis seven focused on an improved grade point average. Counselor referrals formed the basis for hypothesis eight. Hypothesis nine involved improvement in the area of classroom adjustment.

School performance findings

Table 14 presented the postmeasurement means and standard deviations on factors of attendance, grade point average, and counselor referrals. A one way multivariate analysis of variance presented in table 15 showed no significant differences between experimental and control groups on

factors of attendance, grade point average, and counselor referrals. Table 16 demonstrated no significant difference with any individual factor, through the application of a "T" test analysis.

Therefore, research hypotheses 6, 7, and 8 are rejected.

Research hypothesis 6 stated that: There is a significant difference between the postmeasurement means of the experimental group (COGG) and the postmeasurement means of the control group concerning second semester attendance records.

Research hypothesis 7 stated that: There is a significant difference between the postmeasurement means of the experimental group (COGG) and the postmeasurement means of the control group concerning second semester grade point averages.

Research hypothesis 8 stated that: There is a significant difference between the postmeasurement means of the experimental group (COGG) and the postmeasurement means of the control group concerning second semester counselor referrals.

TABLE 14

POSTMEASUREMENT MEANS AND STANDARD DEVIATIONS ON FACTORS OF ATTENDANCE, GRADE POINT AVERAGE, AND COUNSELOR REFERRALS BY TREATMENT GROUP

Factors	Treatment Groups			
	N = 43		N = 50	
	Experimental		Control	
	Mean	S. D.	Mean	S. D.
1. Attendance excused	5.2	3.8	4.7	4.2
Attendance unexcused	0.7	1.4	0.6	1.6
2. Grade point average	2.5	0.7	2.5	0.6
3. Counselor referrals	0.2	0.6	0.1	0.4

TABLE 15

ONE WAY MULTIVARIATE ANALYSIS OF VARIANCE ON FACTORS OF ATTENDANCE, GRADE POINT AVERAGE, AND COUNSELOR REFERRALS

Source of Variation	D. F. Hyp.	D. F. Error	F Value
Treatment	4.0	88.0	0.1

D. F. = Degrees of Freedom

No Significant Difference

TABLE 16

ANALYSIS OF HOETELLING "T" SQUARE ON FACTORS OF ATTENDANCE, GRADE POINT AVERAGE, AND COUNSELOR REFERRALS

Factor	Source of Variation	D. F.	Mean Squares	F Value
1. Attendance excused	Treatment	1	4.8	0.3
Attendance unexcused	Treatment	1	0.3	0.1
2. Grade point average	Treatment	1	0.02	0.1
3. Counselor referrals	Treatment	1	0.03	0.1

D. F. = Degrees of Freedom

No Significant Difference

TABLE 17

POSTMEASUREMENT MEANS AND STANDARD DEVIATIONS ON FACTORS RELATED TO THE CLASSROOM ADJUSTMENT SCALE

Factors of Classroom Adjustment	Treatment Groups			
	N = 43		N = 50	
	Experimental		Control	
	Mean	S. D.	Mean	S. D.
1. Classroom promptness	8.6	1.5	8.4	1.6
2. Classroom preparedness	7.7	1.9	7.7	1.8
3. Classroom participation	7.3	2.1	7.2	1.8
4. Classroom self control	7.4	2.0	7.5	2.0

Table 17 presented the postmeasurement means and standard deviations on factors related to the classroom adjustment scale. A one way multivariate analysis of variance, presented

in table 18 showed no significant differences between experimental and control groups on factors of classroom promptness, preparedness, participation, and self control. Table 19 illustrated no significant difference with any individual factor on the classroom adjustment scale, through the application of a "T" test analysis.

Research hypothesis 9 is therefore rejected.

Research hypothesis 9 stated that: There is a significant difference between the postmeasurement means of the experimental group (COGG) and the postmeasurement means of the control group concerning second semester ratings of the classroom adjustment scale.

TABLE 18

ONE WAY MULTIVARIATE ANALYSIS OF VARIANCE ON FACTORS RELATED TO THE CLASSROOM ADJUSTMENT SCALE

Source of Variation	D. F. Hyp.	D. F. Error	F Value
Treatment	4.0	88.0	0.4

No Significant Difference

TABLE 19

ANALYSIS OF HOETELLING "T" SQUARE ON FACTORS RELATED TO THE CLASSROOM ADJUSTMENT SCALE

Factors of Classroom Adjustment	Source of Variation	D. F.	Mean Squares	F Value
1. Promptness	Treatment	1	1.1	0.4
2. Preparedness	Treatment	1	0.01	0.001
3. Participation	Treatment	1	0.3	0.1
4. Self control	Treatment	1	0.1	0.03

No Significant Difference

Discussion of school performance findings

Three basic elements of school performance; attendance (both excused and unexcused), grade point average, and the number of counselor referrals for social/emotional reasons, were analyzed by means of a one way multivariate analysis of variance. No significant differences were found between experimental and control groups on any of the three elements of school performance. This means that those activities of the COGG program that focused on areas of self evaluation and self improvement had no carry-over effect and no direct impact on the school performance of the individual. COGG students did not improve their attendance because of their participation in the program, neither did participation improve their grades or reduce the number of counselor referrals for social/emotional reasons.

There was no evidence to support the research hypotheses that emphasis on career development would result in significant gains in certain areas of school performance. Given the COGG instructional program and the characteristics of the experimental population, a one semester, twenty-week unit of career exploration did not positively affect areas of school performance.

On the classroom adjustment survey, three classroom teachers for each student in the experimental and control groups evaluated students individually in the areas of classroom promptness, preparedness, participation, and self control. No significant difference was found in any of the four

areas measured by the classroom adjustment scale. Initially, it was hypothesized that the COGG instructional efforts would significantly affect career development gains in the area of self awareness and that these gains would be visible and evident in other classrooms. No significant gains were made in the area of self awareness and consistently, no gains were identified in the area of classroom adjustment.

Testing of the Life Roles Concept Hypotheses

Research Question

Will participating ninth grade students and their parents perceive the concept of Life Roles in a positive manner?

Hypotheses ten and eleven were directed toward the above research question and involved surveying participating ninth grade students and their parents to determine their opinions regarding the concept of Life Roles.

Life Roles survey findings

Table 20 presented a summary of mean score responses by category level on the Life Roles survey for both students and their parents. Research hypotheses ten and eleven are both accepted. An average response score of 2.5 or higher at each category level demonstrated a positive attitude by both parents and students concerning the acceptance of the Life Roles Concept.

Research hypothesis 10 stated that: There is a difference in a favorable direction between the positive and negative reactions of the experimental group (COGG) concerning the acceptance of the Life Roles Concept.

Research hypothesis 11 stated that: There is a difference in a favorable direction between the positive and negative reactions of the parents of COGG students concerning the acceptance of the Life Roles Concept.

TABLE 20

MEAN SCORE SUMMARY BY CATEGORY OF RESPONSES FROM PARTICIPATING STUDENTS AND THEIR PARENTS ON THE LIFE ROLES SURVEY

Elements of Life Roles	Response Category* 5 (SA)	4 (A)	3 (CS)	2 (D)	1 (SD)
	Students (N = 43)		Parents (N = 39)**		
Occupational role	4.3		4.7		
Avocational role	2.8		3.8		
Citizenship role	4.0		4.5		
Family role	3.1		4.1		

*SA--strongly agree, A--agree, CS--can't say, D--disagree, SD--strongly disagree

**Several parents elected not to participate in this opinion survey.

Table 21 presented a summary of mean score responses by line item on the Life Roles Concept survey.

TABLE 21

SUMMARY OF MEAN SCORES BY LINE ITEM OF PARTICIPATING STUDENTS AND THEIR PARENTS ON THE LIFE ROLES SURVEY

Life Role Questions By Category	Response Category 5 (SA) 4 (A) 3 (CS) 2 (D) 1 (SD)	
	Students (N = 43)	Parents (N = 39)
Occupational Roles		
1. School should help students get a job.	4.3	4.6
2. Students should be informed about occupations in school.	4.3	4.7
3. School should prepare people to make a living. .	4.2	4.7
4. Different kinds of occupations should be studied in school.	4.4	4.5
5. Schools should help students explore what they want to become	4.3	4.7
6. The values of work should be stressed in school. . .	4.0	4.7
Avocational Roles		
7. How to use free time should be stressed in school	2.7	4.0
8. School should provide less free time for students	1.8	3.6
9. School should help students explore different uses of free time.	3.0	4.1

TABLE 21--Continued

Life Role Questions By Category	Response Category 5 (SA) 4 (A) 3 (CS) 2 (D) 1 (SD)	
	Students	Parents
10. Students should be informed about how much free time different jobs allow.	3.8	3.9
11. School should offer a class in the use of free time	2.8	3.4
12. School should provide ways for students to use free time.	2.5	3.8
Citizenship Roles		
13. School should help students to work together . .	3.9	4.6
14. Students should learn how to register to vote while they are in school .	4.0	4.6
15. School should teach students to be responsible for their own actions.	3.9	4.4
16. School should teach students how a democracy works	4.0	4.4
17. School should help students understand their individual rights.	4.2	4.4
Family Life Roles		
18. School should help students understand family relations.	3.1	4.2
19. School should help students learn what is needed to support a family. . . .	4.0	4.4

TABLE 21--Continued

Life Role Questions By Category	Response Category 5 (SA) 4 (A) 3 (CS) 2 (D) 1 (SD)	
	Students	Parents
20. School should help students in understanding the importance of the family .	3.2	4.3
21. Students should study how different families live	3.2	4.1
22. How to get along better as a family member should be studied in school . . .	2.6	4.0
23. Students should study different ways families live	3.0	4.0
24. Different family roles (mother, father, son, etc.) should be studied in school	2.7	3.7

Discussion of Life Roles survey findings

The opinions of participating students and their parents concerning the concept of career life roles, were positive as measured by the Life Roles survey. In all four categories of occupational, avocational, citizenship, and family life roles, students and their parents developed positive average responses of 2.8 or higher.

All but one of the twenty-four opinion items received a positive response average from students and parents. The

exception was item seven which was, "School should provide less free time for students." Students expressed a negative reaction of 1.8 to item seven. The category of occupational roles received the largest response average among the four elements of life roles by both students and parents. The Life Roles survey demonstrated that there was strong support among students and their parents for the idea that schools should help students understand occupations and work values, help students get a job, and prepare students for making a living.

These findings concerning career life roles were consistent and similar to the life role findings of the 1968 SUTOE (Self Understanding Through Occupational Exploration) program at the junior high level in Springfield, Oregon, School District #19.

CHAPTER V

SUMMARY, FINDINGS, AND CONCLUSIONS

The concept of career education is not entirely new on the American education scene. As early as 1909, Frank Parsons in his book Choosing A Vocation identified many of the same important vocational guidance principles which today are being promoted in the current national and state emphasis of career education.

Career education can be an effective vehicle of assistance toward the achievement of the primary goal of education, that of the capacitating of human potential. Career education offers a practical approach to meeting the needs and maximizing the total potential of the individual. The educational, occupational, and social pressures confronting students today demand well-ordered career plans. Career education can assist and inform students about the many career options available to them and as a result, students will begin to develop rational and valid career goals. Students frequently find it difficult to focus on the relationship between education, career choice, and the total life style they wish to pursue.

The concept of career education utilizes the relevancy of education as it develops the competencies in our young people to survive and cope with the realities of a real

world. The basic thrust and purpose of career education is preparing students who are knowledgeable concerning their future life roles. The choice of one's career is a major life decision. Not only will it determine one's financial future, but it will also influence one's life style (manner of living), one's friends, and often the community or neighborhood in which one will live.

A review of career education exemplary projects across the nation and within the State of Michigan, revealed that career education curriculum development is designed around three basic organizational systems. The three organizational systems are:

(1) The Inter-Disciplinary Concept is used primarily at the elementary level in a self contained or team teaching situation. This system utilizes the subject content of many disciplines, united together, to deliver the objectives of a career unit or activity.

(2) The Single-Discipline Concept is the most popular and frequently used system of career organization. Used to a great extent at the secondary level, the Single-Discipline Concept allows individual teachers to develop and implement career units within their specific subject matter areas.

(3) The Single-Course Concept is appropriate for concentrated efforts in career development with various student populations. Basically, this system is designed with emphasis on student development and occupational exploration.

Each approach has several unique advantages, but it

would appear that there are numerous situations within a school district where utilization of a combination of all three organizational systems would result in meaningful career experiences for students.

The Problem

In the spring of 1973, interested middle school counselors and social workers in The Grosse Pointe Public School System developed a Careers Oriented Group Guidance program, known as COGG. COGG was a twenty-week, one semester program designed for ninth graders with measurable weaknesses in specific areas of career development. COGG focused specifically on the career development areas of occupational awareness, self awareness, and career planning and decision making. The Grosse Pointe Public School System, Grosse Pointe, Michigan, implemented the experimental program of career instruction known as COGG (Careers Oriented Group Guidance) during the second semester of the 1973-74 academic year. Forty-three ninth graders from both North and South High Schools participated in COGG.

This research effort focused on the problem of determining the effects of a one semester Single-Course Concept program of career exploration for selected ninth graders in the two high schools. The primary objective of COGG was to demonstrate that a Single-Course Concept approach to career development can affect positive growth in ninth graders who have identifiable weaknesses (as measured on the ACD pretest)

in occupational awareness, self awareness, and career planning and decision making.

The COGG program was designed, therefore, to demonstrate that a Single-Course Concept approach to career development can be effective. The problem in this study concerned itself with the degree to which an instructional program (in this case, COGG) affects: (A) career development, and (B) school performance. The study also measured: (C) acceptance levels of participating students and their parents toward the Life Roles Concept of career education.

Research Questions

The research questions were organized around the following statement: Will ninth grade students participating in the COGG program achieve greater gain scores in specific areas of career development, school performance, and attitudes toward Life Roles than selected ninth grade students who have not been involved in COGG. The specific research questions were as follows:

Career Development

1. Will ninth grade students participating in the COGG program achieve greater gain scores in specific areas of career development than selected ninth grade students who have not been involved in COGG?

2. Will ninth grade girls with Level I-A ratings participating in the COGG program achieve greater gain scores in specific areas of career development than selected ninth grade girls with Level I-A ratings who have not been involved in COGG?

3. Will ninth grade girls with Level II-A ratings participating in the COGG program achieve greater gain scores in specific areas of career development than selected ninth

grade girls with Level II-A ratings who have not been involved in COGG?

4. Will ninth grade boys with Level I-B ratings participating in the COGG program achieve greater gain scores in specific areas of career development than selected ninth grade boys with Level I-B ratings who have not been involved in COGG?

5. Will ninth grade boys with Level II-B ratings participating in the COGG program achieve greater gain scores in specific areas of career development than selected ninth grade boys with Level II-B ratings who have not been involved in COGG?

School Performance

6. Will ninth grade students participating in the COGG program achieve an improved attendance record during the second semester compared to selected ninth grade students who have not been involved in COGG?

7. Will ninth grade students participating in the COGG program achieve an improved grade point average during the second semester compared to selected ninth grade students who have not been involved in COGG?

8. Will ninth grade students participating in the COGG program achieve a reduction in counselor referrals for social/emotional reasons during the second semester compared to selected ninth grade students who have not been involved in COGG?

9. Will ninth grade students participating in the COGG program achieve a higher rating on the "classroom adjustment scale" during the second semester compared to selected ninth grade students who have not been involved in COGG?

Acceptance of the Life Roles Concept

10. Will ninth grade students participating in the COGG program perceive the concept of Life Roles in a positive manner?

11. Will parents of ninth grade students participating in the COGG program perceive the concept of Life Roles in a positive manner?

Hypotheses

The research hypotheses were as follows:

Career Development

1-A. There is a significant difference between the adjusted posttest means of the experimental group (COGG) and the adjusted posttest means of the control group on occupational awareness.

1-B. There is a significant difference between the adjusted posttest means of the experimental group (COGG) and the adjusted posttest means of the control group on career planning and decision making.

1-C. There is a positive difference between the posttest results of the experimental group (COGG) and the posttest results of the control group on measures of self awareness.

2-A. There is a significant difference between the adjusted posttest means of the Level I-A experimental group (COGG) and the adjusted posttest means of the Level I-A control group on occupational awareness.

2-B. There is a significant difference between the adjusted posttest means of the Level I-A experimental group (COGG) and the adjusted posttest means of the Level I-A control group on career planning and decision making.

2-C. There is a positive difference between the posttest results of the Level I-A experimental group (COGG) and the posttest results of the Level I-A control group on measures of self awareness.

3-A. There is a significant difference between the adjusted posttest means of the Level II-A experimental group (COGG) and the adjusted posttest means of the Level II-A control group on occupational awareness.

3-B. There is a significant difference between the adjusted posttest means of the Level II-A experimental group (COGG) and the adjusted posttest means of the Level II-A control group on career planning and decision making.

3-C. There is a positive difference between the posttest results of the Level II-A experimental group (COGG) and the posttest results of the Level II-A control group on measures of self awareness.

4-A. There is a significant difference between the adjusted posttest means of the Level I-B experimental group (COGG) and the adjusted posttest means of the Level I-B control group on occupational awareness.

4-B. There is a significant difference between the adjusted posttest means of the Level I-B experimental group (COGG) and the adjusted posttest means of the Level I-B control group on career planning and decision making.

4-C. There is a positive difference between the posttest results of the Level I-B experimental group (COGG) and the posttest results of the Level I-B control group on measures of self awareness.

5-A. There is a significant difference between the adjusted posttest means of the Level II-B experimental group (COGG) and the adjusted posttest means of the Level II-B control group on occupational awareness.

5-B. There is a significant difference between the adjusted posttest means of the Level II-B experimental group (COGG) and the adjusted posttest means of the Level II-B control group on career planning and decision making.

5-C. There is a positive difference between the posttest results of the Level II-B experimental group (COGG) and the posttest results of the Level II-B control group on measures of self awareness.

School Performance

6. There is a significant difference between the postmeasurement means of the experimental group (COGG) and the postmeasurement means of the control group concerning second semester attendance records.

7. There is a significant difference between the postmeasurement means of the experimental group (COGG) and the postmeasurement means of the control group concerning second semester grade point averages.

8. There is a significant difference between the postmeasurement means of the experimental group (COGG) and the postmeasurement means of the control group concerning second semester counselor referrals.

9. There is a significant difference between the postmeasurement means of the experimental group (COGG) and the postmeasurement means of the control group concerning second semester ratings on the classroom adjustment scale.

Acceptance of the Life Roles Concept

10. There is a difference in a favorable direction between the positive and negative reactions of the experimental group (COGG) concerning the acceptance of the Life Roles Concept.

11. There is a difference in a favorable direction between the positive and negative reactions of the parents of COGG students concerning the acceptance of the Life Roles Concept.

All significant differences were accepted at the .05 level.

Outcomes

The intent of the COGG study was to demonstrate that a Single-Course Concept system of career exploration was of measureable value and therefore, should become an acceptable element of the Grosse Pointe middle school curriculum. Furthermore, it was intended to demonstrate that the Single-Course Concept system can affect positive growth concerning career development progress in students with identifiable weaknesses in occupational awareness, self awareness, and career planning and decision making.

Additional important outcomes resulted from the COGG study. In view of the fact that approximately 95 percent of all Grosse Pointe Public School ninth graders took a standardized test in career development, it was possible to judge the effectiveness of the K-8 curriculum in terms of career development progress. Also for those ninth graders receiving the pre and posttests, an effective guidance program can be tailored using national norms to help identify students having the

greatest weaknesses in terms of career development.

Another important outcome from this study was the identification of the degree of acceptance of the career education Life Roles Concept by participating students and their parents.

Limitations

Specific factors limited the generalizability of this study. The researcher was aware of the following limitations while this study was being conducted:

1. The secondary schools selected for this study were representative only of The Grosse Pointe Public School System.

2. Treatment populations were composed of ninth grade students.

3. Specific sampling was based on the following factors:

   a. pretest results on the Assessment of Career Development
   b. school schedule
   c. sex
   d. intelligence quotient level

4. The effect of classroom teachers and counselors upon the students prior to and during the time at which the data was collected was not known.

Definition of Terms

1. COGG--An organizational structure of Careers Oriented Group Guidance.

2. Career Development--This study proposes to measure only three specific elements of career development:

a. Occupational Awareness--includes knowledge of occupational characteristics, knowledge of occupational preparation requirements and exploratory occupational experiences.

Clusters studied: Holland Classification
Business Operation
Industrial Technologies and Trades
Science and Medicine
Creative and Applied Arts
Personnel, Social, and Health Services
Sales and Promotion

b. Self Awareness--includes career plans, self-evaluation of career planning, and perceived needs for help with career planning.

c. Career Planning and Decision Making--includes knowledge of career planning and experiences which involve career planning.

3. School Performance--Student achievement in the areas of grade point average, attendance record, and counselor referrals for social/emotional purposes.

4. Classroom Adjustment Scale--Judgments made by teachers which identify student progress on a scale of 0 to 10 (10 being of highest quality) in the areas of classroom promptness, preparedness, participation, and self control.

5. Life Roles Concept--The concept which says that schools should help students understand their occupational life roles, family life roles, citizenship life roles, and their avocational life roles.

6. Level I-A--Includes girls in both the experimental and control groups who as a result of the pretest scored in the range of (E/-1); meaning that on an average of the five normative scales of the pretest that the individual was either even with (E) or one stanine below (-1) the combined national average.

7. Level II-A--Includes girls in both the experimental and control groups who as a result of the pretest scored in the range of (-2/-4); meaning that on an average of the five normative scales of the pretest that the individual was either (-2), (-3), or (-4) stanines below the combined national average.

8. Level I-B--Includes boys in both the experimental and control groups who as a result of the pretest scored in the range of (E/-1); meaning that on an

average of the five normative scales of the pretest that the individual was either even with (E) or one stanine below (-1) the combined national average.

9. Level II-B--Includes boys in both the experimental and control groups who as a result of the pretest scored in the range of (-2/-4); meaning that on an average of the five normative scales of the pretest that the individual was either (-2), (-3), or (-4) stanines below the combined national average.

10. Intermediate Grades--Includes those grades commonly found in junior highs or middle schools, namely, grades 7, 8, and 9.

Findings

Occupational Awareness

The COGG program proved effective with both males and females regardless of their weakness level, (as determined by ACD pretest results), in developing significant gains in the area of occupational awareness. An analysis of data on occupational awareness (comprised of occupational characteristics, occupational preparation requirements, and general occupational exploratory experiences) identified an "F" value of 3.4 which is significant at the 0.022 confidence level. The element of occupational preparation requirements was significant at the 0.002 level as determined by an analysis of covariance. Therefore, ninth grade students participating in the COGG program do achieve greater gain scores in the area of occupational awareness than ninth grade students who have not been involved in COGG.

Career Planning and Decision Making

Data analysis supported the research hypotheses concerning career planning and decision making that "ninth grade

students participating in the COGG program do achieve greater gain scores in the area of career planning and decision making than ninth grade students who have not been involved in COGG." The 0.001 level of significant difference for this area was consistent regardless of gender or weakness level. Two elements combined to form the area of career planning and decision making: (1) career planning knowledge and (2) career planning involvement. An analysis of covariance of the element of career planning involvement showed a significant difference at the 0.001 level.

Self Awareness

A chi-square analysis showed no significant difference on the factor of self awareness between gender and weakness levels of experimental and control groups. Therefore, ninth grade students participating in the COGG program do not achieve greater gain scores in the area of self awareness than ninth grade students who have not been involved in COGG. However, three of the nine self awareness items were found to be significant at the 0.05 level with certain treatment groups.

School Performance

No significant differences were identified for factors of school performance. A "T" test analysis showed no significance in the following areas: (A) attendance, both excused and unexcused, (B) grade point average, (C) number of counselor referrals for social/emotional reasons, and (D) classroom adjustment (promptness, preparedness, participation, and self

control). Thus, ninth grade students participating in the COGG program did not achieve an improved school performance record during the second semester compared to ninth grade students who have not been involved in COGG.

Life Roles Concept

Research hypotheses concerning attitudes of participating students and their parents toward the concept of Life Roles were accepted. Therefore, participating ninth grade students and their parents did perceive the concept of Life Roles in a positive manner. An average response score of 2.5 or higher for each category of Life Roles demonstrated a positive attitude. Both students and their parents expressed attitudes averaging 2.8 or higher in the categories of:

(1) occupational life role
(2) avocational life role
(3) citizenship life role
(4) family life role

The category of occupational life role received the most positive response with students showing an average of 4.3 (out of a possible 5.0) and parents averaging 4.7. The citizenship life role was also well received with students responding at the 4.0 level and their parents at 4.5.

Conclusions

The conclusions are based on data obtained through the use of the Assessment of Career Development, the Classroom Adjustment Survey, and the Life Roles Survey. The conclusions are confined to populations similar to those used in this project and within the limitations of the study.

Career Development

Ninth grade students participating in the COGG program did achieve greater gain scores in two specific areas of career development when compared to non-participating ninth graders. Significant differences were identified in the areas of occupational awareness and career planning and decision making. The COGG program, however, failed to produce a significant difference in the career development area of self awareness.

A Single-Course Concept approach to career exploration (such as COGG) can introduce students to a wide variety of occupations while increasing their knowledge of occupational characteristics, job preparation requirements, and career planning. There is no evidence to support the hypotheses that COGG would be more effective with one gender or the other, or that COGG is more effective with certain students representing different levels of weaknesses in career development. COGG is equally effective with boys and girls regardless of their career development weakness level.

School Performance

The COGG program does not produce an improved school performance record--attendance, grade point average, reduced counselor referrals for social/emotional reasons, or better classroom adjustment in the areas of promptness, preparedness, participation and self control. Therefore, it can be concluded that the COGG program within the limits of its structure has

no significant effects on the school performance record of participating students.[1]

Life Roles

Participating ninth graders and their parents expressed positive attitudes toward the concept of Life Roles. Therefore, it can be concluded that both students and parents believe that schools should help students understand their occupational life roles, family life roles, citizenship life roles, and their avocational life roles.[2]

Implications

The researcher is Coordinator of Career and Vocational Education in The Grosse Pointe Public School System, Grosse Pointe, Michigan. Personal experience with the COGG program leads the researcher to the following observations. These observations are based on reactions of the researcher to what happened to students and their overall evaluations of the COGG program.

1. The general attitude and interest of the experimental students in studying occupations and career clusters suggests the desirability of including more opportunities

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[1]It is the personal conclusion of the researcher that a one semester, twenty-week program simply does not provide sufficient time to impact the area of school performance.

[2]It is the personal conclusion of the researcher that a Single-Course Concept approach to career exploration can be of value in illustrating the influence of life styles on the ultimate occupational choice of individuals. Furthermore, regarding the concept of Life Roles, the researcher concludes that the public is asking for schools that will prepare young people not only for living but also for making a living.

throughout the curriculum for students to study this field of information.

2. An intermediate program of career exploration (such as COGG) should be available for any student who can benefit from such an experience. It is important at this level that students not focus narrowly on one specific occupation but instead become involved in value clarification activities which will help them understand varying occupations across many career clusters.

3. An expanded program of career exploration/preparation should be available for high school juniors and seniors. Emphasis at the high school level should focus on two or three occupational areas that are of personal interest to the student. This program will involve much individual instruction (perhaps on an independent study basis) and many in-depth work experiences in the business community.

4. A career development program of career exploration or preparation will focus on many different aspects of career information, but it is important that emphasis and attention be given to the following:

(A) Preparing students to make intelligent decisions regarding the next step in their "career" whether this involves helping students select courses of study in high school or deciding whether to enter the world of work or continue their education upon high school graduation.

(B) Assisting students in the identification of their personal values and helping them understand the influence of these values upon their career choices and decisions.

(C) Illustrating the concept of Life Roles and demonstrating to students the important relationships

between life roles and a rewarding, successful career.

5. The staffing of career development programs would best be achieved by utilizing experienced counselors who are qualified in the following areas:

1. occupational knowledge across career clusters
2. occupational experience outside of education
3. knowledge of business within the community

If a qualified counselor is not available, a vocational education coordinator should be considered for instructional purposes within career programs.

6. A career development program (such as COGG) is an effective tool for in-servicing counselors and teachers in regard to the world of work. Counselors and teachers may elect to accompany career students on their business visitations. The world of work is in constant flex; involving teachers and counselors in visitations would keep them abreast of the ever changing occupations in the community.

7. Students who elect to participate in career development programs at either the intermediate level or the high school level should be screened for acceptance into those programs by counselors. Career development can be greatly facilitated by a program such as COGG, but only to the extent that participating students bring to the program some degree of positive interest, motivation, attitude, and effort.

8. A Single-Course Concept approach to career development (such as COGG) can be an effective means of introducing career students to vocational cooperative programs provided in the upper high school grades. While studying career

clusters, cooperative education students can assist in helping career students understand the occupational programs available in high school.

9. Field observations and visitations are effective techniques for understanding different occupations. Personal classroom appearances by different workers provides an interesting forum for exchanges between workers and students. Students quickly develop a lackadaisical attitude toward the use of filmstrips as a means of introducing occupations.

10. Parents are anxious for their children to learn about the world of work. This parent interest can be put to good use in several ways:

(A) Parents can have students to their place of employment for visitation purposes.

(B) Parents can assist in providing transportation for groups of students visiting different jobs in the community.

11. Community service clubs (Rotary, Jaycees, etc.) are all excellent sources for business visitation contacts. Businessmen, if they are approached, are quite willing to become involved in career development activities. Do not overlook retirement service clubs; they provide another fine source of occupational information.

APPENDICES

APPENDIX A

THE GROSSE POINTE PUBLIC SCHOOL SYSTEM
Career and Vocational Education

NINTH GRADE
CAREER ORIENTATION COURSE GUIDE

COGG
(Career Oriented Group Guidance)

I. Purpose

COGG is a systematic program of school and community activities designed to enable the student to expand his knowledge of careers and career opportunities. COGG is designed to encourage ninth graders to consider important work attitudes, investigate the world of work, learn about available career resources, and actively personalize and retain occupational information. This program, given one hour each day during the second semester, will help insure that young people have considered many career possibilities, as well as many important factors which affect career selection.

II. Goals

A. Self-awareness: Development and understanding of self by means of the "self knowledge domain."

B. Occupational awareness: Understanding the world of work by means of the "knowledge of work and leisure domain."

C. Career planning and decision making: Development of career planning attitudes and skills by means of the "career planning domain."

III. Terminal Goals*

A. Self-awareness

1. To assist the student in developing a realistic self-concept and in understanding and appraising his needs, personality traits, interests, aptitudes, and abilities.

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*Juliet Miller, Ritz Mintz, Garry Walz, Career Guidance Objectives (Ann Arbor, Mich.: ERIC Counseling and Personnel Services Information Center).

2. To help the student identify different value systems and life styles.

3. To enable the student to see himself as an agent in determining the course of his life.

4. To help the student become open to new experiences, human relationships, and information.

5. To help the student view himself as being in process and to help him become adaptable to changes within himself and the environment.

B. Occupational awareness

1. To help the student understand work as a generic concept.

2. To help the student gain an understanding of the characteristics of a wide variety of occupational clusters.

3. To enable the student to investigate a few selected occupations.

4. To help the student understand the training requirements of various occupations.

5. To help the student gain an understanding of changes in the job market and to help him acquire an awareness of future trends.

6. To help the student explore the negative as well as the positive side of the world of work.

7. To help students explore their attitudes and values toward work.

C. Career planning and decision making

1. To help the student develop skills needed to obtain, utilize and evaluate information from a wide variety of sources.

2. To help the student synthesize knowledge and perceptions about self and environment, and make decisions based upon this synthesis.

3. To help the student develop skills in formulating plans, carrying them out, and evaluating the outcomes of his experiences.

4. To help the student see the relationship between present planning and future vocational outcomes.

5. To help the student view vocational choice and adjustment as a continuous process.

6. To help the student be open to new information and experiences, and modify plans accordingly.

IV. By the End of the COGG Experience, the Student Will:

A. Self-awareness

1. Be able to distinguish between interests and abilities.

2. Know his strengths and weaknesses.

3. Have some idea about the kind of person he would like to be.

4. Begin to develop his own opinions, values, and beliefs, and implement them through his actions.

5. Work interdependently with peers and share experiences, feelings, and ideas with them.

6. Accept and appreciate individual differences.

7. Recognize and accept himself as a changing individual.

B. Occupational awareness

1. Be able to group occupations by analyzing shared characteristics.

2. Understand that within each occupational grouping there is a wide range of occupations.

3. Understand that occupations are interrelated and support one another.

4. Believe that there is a wide variety of present and future career opportunities open to him.

5. Understand that he can potentially be satisfied with a number of occupations.

6. Realize that jobs and job requirements are constantly changing.

7. Appreciate the idea that people work for different reasons.

8. Be able to specify some of the reasons why work is important to him.

9. Understand that the type of work an individual does affects other areas of his life.

10. Has explored several occupational areas of interest to him.

11. Realize that entry into an occupation depends on training and/or educational background.

C. Career planning and decision making

1. Develop skills in obtaining occupational information.

2. Be able to formulate plans for a long period of time.

3. More clearly understand the cause-effect relationship between decision making and outcomes.

4. Recognize his abilities, interests, and limitations, and be able to relate them to educational choices.

5. Begin to consider broad occupational alternatives which may be satisfying to him.

6. Understand the interdependence of occupational and educational planning.

7. Know that decisions and plans are not irrevocable, and must often be modified in light of experiences and information.

APPENDIX B

THE GROSSE POINTE PUBLIC SCHOOL SYSTEM
Career and Vocational Education

NINTH GRADE
CAREER ORIENTATION

COGG
(Career Oriented Group Guidance)

OPERATIONAL ORGANIZATION

Part I--SCHOOL AND CLASSROOM PROCEDURES

All instruction during the COGG project will be devoted to achieving the overall program goals for the individual student. Program goals are centered around student development in the areas of:

A. Self-awareness
B. Occupational awareness
C. Career planning and decision making

Activities

Many different and exciting activities have been developed for meeting the stated program goals. Simulation games, role playing, case problem solving, panel discussions, buzz sessions, resource visitors, field observations and interviews, individual and group projects and many interesting audio-visual aids will be utilized both within the school setting as well as in the working community.

Instructional Materials

Major Resources--Career Education Program, Vol. II--Grades 7-9
Glenn A. Saltzman, Ph. D.
Houghton Mifflin Co., Copyright 1973

Career Education Resource Guide
Bottoms, Evans, Hoyt, and Willers
General Learning Corp., Copyright 1972

Secondary Resources--DISCOVERY--A Career Education Program
Scholastic Magazines, Inc., Copyright 1973

The Self Directed Search--A Guide to Educational and Vocational Planning
John L. Holland, Ph.D.
Consulting Psychologists Press, Copyright 1970

Career World--The Continuing Guide to Careers
Joyce Kennedy, Executive Editor
Curriculum Innovations, Inc., Twice monthly

After High School--What?
Channing L. Bete Co., Copyright 1973

Part II--FIELD VISITATION PROCEDURES

The field visitations ninth graders participate in during the COGG program are directly related to the program goal of increasing the "occupational awareness" level of each individual. Field visitations will also focus on the program goal of "career planning and decision making." It is the intent of field visitations that all students will have the opportunity to explore not only their major occupational interest area but also to explore many new and different occupational clusters.

Coop Visitations

Students in groups of three will be involved in eight different field visits directly related to the various vocational coop programs. Each student group will visit two different coop training stations and will observe the work environment and gather occupational data related to the employment of the coop student. An interview with a veteran worker who functions in some capacity with the coop student will also be arranged. It should be noted that there will be two visits within each of the four vocational coop programs--thus providing a total of eight visits.

Parent Visitations

Within each student group, two working parents will be selected for observation of their work environment. The students will employ interview techniques to gather occupational data at the site of the parent's place of employment.

Student Major Interest Visitations

Each student will arrange a visitation for the group to observe and interview workers related to his major occupational interest area. The student visiting his major interest area will be expected to gather additional data from which he will prepare a detailed report.

PROCEDURES

Prior to each field visitation the students are expected to use various career resources (occupational briefs, DOT, Occupational Outlook Handbook, VIEW, etc.) to "search out" certain facts and information directly related to the occupational area to be visited.

During the field visitation each student will observe the work environment and through an interview, gather data for completing their "Interview Guide." Also at this time, students will have an opportunity to verify and/or up-date occupational information collected from career resources at school.

Following each field visitation the students will have an opportunity to summarize their feelings about the occupational area visited. As frequently as possible, each group will present an oral report to the entire class highlighting the data discovered.

Part III--EVALUATION

Student Evaluation

Student evaluation will be based upon the following four elements:

A. Career Notebook--students will maintain an up-to-date notebook which will include all program assignments and handouts.

B. Data gathered from the field visit--students are responsible for "searching out" facts and information in preparation for their visit. While on the field visit students will gather information to complete their "Interview Guide." Following the field visit, each student will summarize his feelings toward that particular occupation and frequently share his occupational findings in an oral presentation to the group.

C. Short quizzes based upon previous class discussions or assigned material readings.

D. One major in-depth occupational study concentrating on the student's primary career interest area.

It is important to note that as much class time as possible will be provided to students to complete any assignments, projects or activities. If students use their time wisely, there should be little or no homework.

PLEASE NOTE:

Appendix C, pages 102 -123
"The Assessment of Career Development"
not microfilmed at the request of the
author. Available for consultation
at Michigan State University Library.

UNIVERSITY MICROFILMS

STUDENT TEST BOOKLET (FORM C)

FOR

THE ASSESSMENT OF CAREER DEVELOPMENT

About Career Planning

Whether you know it or not, there's a CAREER ahead of you—a whole series of experiences and decisions related to your *educational* and *job* future. Answers to the questions in this booklet will indicate what you and other students at your school *know* about and *have done* about career planning. Your school will use this information to plan activities and programs that will help you and others at your school prepare for the career decisions that lie ahead. A report summarizing the scores for students at your school will be sent to the guidance office in a few weeks. In the meantime, the questions in this booklet will help *you* identify some of the things you know and have done—or haven't done—about career planning.

STOP DO NOT GO TO THE NEXT PAGE UNTIL TOLD TO DO SO!

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IDENTIFYING INFORMATION

On the front cover of your answer folder, print your school name, today's date, and your group number in the spaces provided.

Open the answer folder to page 2, and complete all information according to the following directions:

1. Use only a soft lead *pencil* to mark your answer folder. Make no marks in your test booklet and do not use a pen.

2. NAME: Print your full *legal* name (last name, first name, and middle initial) in the boxes provided on your answer folder. No nicknames please! Use only one box for each letter of your name. Then, for *each* of the boxes with a letter, find the matching letter circle below and completely blacken it with your pencil.

3. GRADE: Next, beneath the section you have just completed, print your present grade in the box provided and completely blacken the matching grade circle below it.

4. DATE OF BIRTH: Next, indicate your date of birth by blackening the correct circle for the month in which you were born. Print the day (date) and year of your birth in the boxes provided and then completely blacken the matching number circles below.

5. SEX: Next, indicate your sex by printing M (for male) or F (for female) in the box provided and then completely blacken the matching letter circle below.

6. BACKGROUND: To be most helpful to all students, we need to find out whether students of different backgrounds answer the questions in this booklet in different ways. This information can then be used to identify and drop any items that are unfair for any groups. If your background is listed below and if you wish to identify yourself, print the correct letter in the box provided and then completely blacken the matching letter circle on the answer folder.

Afro-American/black	A
American Indian	B
Caucasian American/white	C
Spanish American/Puerto Rican/Chicano	D
Oriental American	E
Other	F
I prefer not to respond	G

NOTE: Further directions for the following items will be given by the test administrator.

SOCIAL SECURITY NUMBER (Identification Number)
SPECIAL CODE

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DIRECTIONS

SAMPLE

This booklet is divided into 6 units which, together, take about 3 class periods to complete. The separate answer folder is also divided into units that match the units in this booklet. For each question in this booklet there is a matching row of circles on the answer folder. To mark your answer to each question blacken the circle with the same letter. If you are not sure of the answer, give your best guess. Use a soft lead *pencil* and be sure to erase completely any answer you wish to change.

Example: Choose the one *best* answer.

Test Booklet	Answer Folder
Question	Question Ⓐ Ⓑ ● Ⓓ
17. A person's career involves his (her)—	**17.**
A. education B. work life C. both education and work life..... D. neither education nor work life	▲ correct answer has been marked

UNIT 1

JOB KNOWLEDGE
(30 minutes)

Jobs differ in many ways–the duties to be performed, the conditions under which work is done, the interests of people working in the jobs, etc. In this unit you will be asked questions about jobs and workers in jobs. Choose the one best answer to each question and mark that answer in **unit 1** on your answer folder. If you work steadily, you should be able to answer almost all of the questions in 30 minutes.

DO NOT GO TO THE NEXT PAGE UNTIL TOLD TO DO SO.

JOB KNOWLEDGE
(30 minutes)

Directions: Choose the one best answer–A, B, C, or D–for each of the items that follows:

1. **Who would most likely assist people in making arrangements for an out-of-town trip?**
   A. airline stewardess
   B. porter
   C. urban planner
   D. travel agent

2. **Who packages and keeps track of goods ordered by customers?**
   A. a sales manager
   B. a mail room supervisor
   C. a dispatcher
   D. a shipping clerk

3. **Who posts credits and debits in a ledger?**
   A. a postal clerk
   B. a stenographer
   C. a bookkeeper
   D. an actuary

4. **Who spends the most time working with groups of people?**
   A. a bookkeeper
   B. a playground director
   C. a proof reader
   D. a translator

5. **In which job is knowledge of English grammar most often used?**
   A. sign painter
   B. millwright
   C. secretary
   D. dressmaker

6. **Which one of the following jobs most often requires working irregular hours?**
   A. auto mechanic
   B. junior high school teacher
   C. barber
   D. newspaper reporter

7. **Which of the following have the least dangerous job?**
   A. medical lab technicians
   B. iron workers
   C. policemen
   D. coal miners

8. **Mathematical ability is most important for success in which one of the following jobs?**
   A. librarian
   B. mechanical engineer
   C. anthropologist
   D. hotel manager

9. **Who spends the most time standing while working?**
   A. a securities salesman
   B. an optician
   C. a flight engineer
   D. an appliance salesman

10. **Which one of the following jobs would most likely require working during evenings or Saturdays?**
    A. department store clerk
    B. telephone installer
    C. elementary school teacher
    D. roofer

11. **Having a friendly personality is especially important for success in which one of the following jobs?**
    A. ticket agent
    B. sculptor
    C. personnel assistant
    D. auto salesman

12. **Which of the following jobs usually requires the least amount of training?**
    A. physical therapist
    B. electrical engineer
    C. licensed practical nurse
    D. hospital attendant

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13. **Which of the following works under almost constant stress?**

A. industrial engineer
B. bulldozer operator
C. air traffic controller
D. bartender

14. **The ability to imagine how objects would look when viewed from different angles is most important for success in which one of the following jobs?**

A. photographer
B. dentist
C. veterinarian
D. astronomer

15. **Which of the following jobs usually requires the least amount of on-the-job training?**

A. route-delivery man
B. policeman
C. air traffic controller
D. fireman

16. **Which one of these jobs most often requires working irregular hours?**

A. file clerk
B. nurse
C. key punch operator
D. systems analyst

17. **Interest in reading and studying is most helpful in which one of the following jobs?**

A. bookbinder
B. computer programmer
C. horticulturist
D. historian

18. **Workers in which one of the following jobs are likely to have interests most similar to those of accountants?**

A. bankers
B. lawyers
C. chemists
D. engineers

19. **Which of the following jobs requires the longest period of specialized training?**

A. meter reader
B. author
C. child care aide
D. bank teller

20. **In which of the following jobs would a person who prefers** *work involving many different kinds of tasks* **be most satisfied?**

A. assembly line worker
B. hardware store manager
C. office clerk
D. typist

21. **In which of the following jobs would a person who values** *job security (not being put out of work)* **be most satisfied?**

A. postal clerk
B. carpenter
C. disk jockey
D. politician

22. **In which of the following jobs would a person who values** *independence (deciding for yourself how to do your job)* **be most satisfied?**

A. computer operator
B. bookkeeper
C. farmer
D. telephone operator

23. **In which of the following jobs would a person who values** *job security* **probably be least satisfied?**

A. truck driver
B. singer with a band
C. farmer
D. credit manager

24. **In which of the following jobs would a person who values** *independence* **and doesn't mind** *working alone* **be most satisfied?**

A. newspaper editor
B. research chemist
C. hospital orderly
D. factory worker

25. **Who spends the <u>most</u> time helping people with personal or family problems?**

A. banker
B. policeman
C. clergyman
D. teacher

26. **Having a friendly personality is especially important for success in which of the following jobs?**

A. psychologist
B. airline stewardess
C. payroll clerk
D. bus driver

27. **Who spends the <u>least</u> time working outdoors?**

A. an encyclopedia salesman
B. a rancher
C. a mail carrier
D. a cement finisher

28. **A person whose hobbies are rock collecting and exploring caves would probably have interests <u>most</u> similar to those of—**

A. biologists
B. oil well drillers
C. geologists
D. bricklayers

29. **Six years of college and professional training are usually needed to get a job as—**

A. an elevator repairman
B. a cashier
C. a draftsman
D. an optometrist

30. **Biology and chemistry courses would probably be <u>most</u> helpful to a student thinking about becoming a—**

A. meatcutter
B. tailor
C. jeweler
D. dietician

31. **A four-year college degree is <u>not</u> usually needed to get a job as—**

A. a pharmacist
B. an astronaut
C. a musician
D. a physicist

32. **Buildings are usually planned and designed by—**

A. a pattern maker
B. an architect
C. a building contractor
D. an engineer

33. **Predicting changes in weather is the job of—**

A. a meteorologist
B. an astronomer
C. a demographer
D. a geologist

34. **Helping physically disabled people return to work is the job of—**

A. a medical technologist
B. a rehabilitation counselor
C. a clinical psychologist
D. a physiologist

35. **A high school diploma is usually all that is needed to get a job as—**

A. a clothing salesman
B. an X-ray technician
C. a mining engineer
D. a home economist

36. **Civics and current events courses would probably be <u>most</u> helpful to a student thinking about becoming a—**

A. cartoonist
B. music teacher
C. nurseryman
D. bookkeeper

37. **A tool and die maker's job is most like that of—**

A. a welder
B. a machinist
C. an electrician
D. a boilermaker

38. For employment, a biologist usually must have at least—

A. a two-year college degree
B. a vocational-technical school certificate
C. a four-year college degree
D. a certificate showing completion of an apprenticeship program

39. Placing children in foster homes and arranging adoptions are most often done by a—

A. probation officer
B. child psychologist
C. social worker
D. lawyer

40. An insurance company's decision of how much money it is willing to pay for damage to property it has insured is based on the report of—

A. a claims adjuster
B. a purchasing agent
C. an auto-body repairman
D. a securities salesman

41. It is usually necessary to enter an apprenticeship program to become a—

A. dry cleaner
B. florist
C. plumber
D. bank teller

42. A four-year college degree is usually needed to get a job as—

A. a printer
B. a forester
C. an actor
D. a tool and die maker

43. Speech and debate courses would probably be <u>most</u> useful to a student thinking about becoming a—

A. barber
B. radio announcer
C. taxicab driver
D. purchasing agent

44. AN INSURANCE AGENT

A. hires employees for insurance companies
B. sets the rates charged by insurance companies
C. sells insurance policies
D. decides which applications for insurance should be accepted

45. A PHARMACIST

A. develops new methods of undersea farming
B. studies the digestive process of human beings
C. prescribes and administers drugs and medicines
D. prepares and dispenses drugs and medicines

46. A SURVEYOR

A. finds and marks property lines
B. sells stocks and bonds
C. designs roads and highways
D. asks people who they plan to vote for in upcoming elections

47. A CERTIFIED PUBLIC ACCOUNTANT

A. certifies applicants for public housing
B. compiles and checks business records
C. decides how products should be advertised
D. does public relations work

48. A DATA-PROCESSING EQUIPMENT SERVICEMAN

A. repairs and maintains dictating machines
B. installs and repairs duplicating machines
C. installs and repairs computers
D. provides researchers with data

49. A LANDSCAPE ARCHITECT

A. operates bulldozers and other types of earth moving equipment
B. designs the walls of buildings
C. draws city zoning maps
D. designs the layout of outdoor areas

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Directions for items 50-58: In almost any job you will have to work with at least one of the following:

A. THINGS or MACHINES (also tools and materials such as food, wood, or metal)
Bricklayers and electricians work mainly with THINGS or MACHINES.

B. PEOPLE (people you help, serve, and sell things to)
Sales clerks and grade school teachers work mainly with PEOPLE.

C. IDEAS or THEORIES (also knowledge and new ways of saying something—for example with words, equations, or music)
Song writers and scientists work mainly with IDEAS or THEORIES.

D. DATA or RECORDS (also files, money, and steps for handling data and records—for example in an office)
Secretaries and cashiers work mainly with DATA or RECORDS.

Choose the one best answer—A, B, C, or D—for each of the items that follows:

50. A softball coach works mainly with—

A. THINGS or MACHINES
B. PEOPLE
C. IDEAS or THEORIES
D. DATA or RECORDS

51. An auto mechanic works mainly with—

A. THINGS or MACHINES
B. PEOPLE
C. IDEAS or THEORIES
D. DATA or RECORDS

52. A public relations worker works mainly with—

A. THINGS or MACHINES
B. PEOPLE
C. IDEAS or THEORIES
D. DATA or RECORDS

53. A commercial artist works mainly with—

A. THINGS or MACHINES
B. PEOPLE
C. IDEAS or THEORIES
D. DATA or RECORDS

54. A child care aide works mainly with—

A. THINGS or MACHINES
B. PEOPLE
C. IDEAS or THEORIES
D. DATA or RECORDS

55. A grocery checkout clerk works mainly with—

A. THINGS or MACHINES
B. PEOPLE
C. IDEAS or THEORIES
D. DATA or RECORDS

56. A fashion model works mainly with—

A. THINGS or MACHINES
B. PEOPLE
C. IDEAS or THEORIES
D. DATA or RECORDS

57. An ecologist works mainly with—

A. THINGS or MACHINES
B. PEOPLE
C. IDEAS or THEORIES
D. DATA or RECORDS

58. Which of the following jobs involves working mainly with both PEOPLE and DATA or RECORDS?

A. Elevator operator
B. Punch press operator
C. Wholesaler
D. Actor (actress)

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Directions for items 59-63: Choose the minimum type of training the following jobs usually require.

59. WAITRESS—

A. on-the-job training
B. four years of high school plus on-the-job training
C. apprenticeship
D. vocational school training

60. FILE CLERK—

A. on-the-job training
B. four years of high school plus on-the-job training
C. two years of community or technical college
D. four years of college

61. COMPUTER PROGRAMMER—

A. on-the-job training
B. two years of community or technical college
C. four years of college
D. apprenticeship

62. JANITOR—

A. on-the-job training
B. four years of high school plus on-the-job training
C. two years of community or technical college
D. apprenticeship

63. TELEPHONE OPERATOR—

A. on-the-job training
B. four years of high school plus on-the-job training
C. two years of community or technical college
D. four years of college

64. Louise would like to be a hairdresser. Doing well in which one of the following high school courses would provide the best evidence that she would be successful in that job?

A. physics
B. French
C. stenography
D. art

65. Ted is studying to be a statistician. After he completes his training, in which one of the following businesses or organizations would he be least likely to seek employment?

A. an insurance company
B. a university
C. a large city school system
D. a travel agency

66. Mary took several business courses while in high school. English was her poorest subject. Her favorite outside activity was the Dramatic Club. She is a well-groomed, poised, and alert girl who likes to be around people. She now holds one of the following jobs. Which one seems most likely?

A. secretary
B. receptionist
C. stenographer
D. hotel maid

67. Dave enjoyed his high school courses in art and mechanical drawing. He also enjoyed and did well in mathematics and science courses. Dave is now preparing for one of the following jobs. Which one seems most likely?

A. draftsman
B. retail salesperson
C. pharmacist
D. plasterer

68. Joe scores high on tests of mechanical ability. He is very skillful with his hands and has a sensitive touch. He has a great deal of patience and enjoys doing work others find tedious and frustrating. Joe recently dropped out of high school and is now preparing for one of the following jobs. Which one seems most likely?

A. bricklayer
B. electrical engineer
C. accountant
D. watch repairman

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69. **Bill has artistic ability, a vivid imagination, and enjoys working with people. He received above average grades in high school and continued his education after graduation. Bill is now employed by a large, well-known department store where he holds one of the following jobs. Which one seems most likely?**

A. shoe department manager
B. interior decorator
C. maintenance man
D. sales clerk

70. **Ellen has always been interested in helping others. She is friendly, outgoing, and a good listener. After graduating from college with above average grades, Ellen served two years in the Peace Corps. She then took one of the following jobs. Which one seems most likely?**

A. college professor
B. dental assistant
C. social caseworker
D. airline stewardess

71. **Jane earned good grades in high school and college. She did quite well in science, especially zoology, which was her college major. Jane enjoys dealing with people and does not mind working long irregular hours. She is now in a professional school preparing for one of the following jobs. Which one seems most likely?**

A. chemical engineer
B. lawyer
C. medical doctor
D. statistician

72. **Sally got married right after high school. Her two children are now in school and the family is not well off financially. Sally is a bright, alert person who gets along well with people. She would like a job where she can talk to people and influence them. Which one of the following jobs seems to be the best possibility for Sally?**

A. dental lab technician
B. real estate agent
C. market analyst
D. sociologist

That's all for this unit.

DO NOT GO TO THE NEXT PAGE UNTIL TOLD TO DO SO.

PREFERRED JOB CHARACTERISTICS
(10 minutes)

Job Values (Questions 1, 2, and 3)

People find that different things are important to them in a job. The six statements below are examples of things that are important to many people.

A. Working with people I like (co-workers)
B. Being my own boss, doing the work as I want with nobody watching over me (independence)
C. Work that I enjoy doing, that is interesting to me (interest)
D. Having a steady job where I would not be fired (job security)
E. Being responsible for making decisions and for the work of other people (responsibility)
F. Being well paid for my work (pay)

1. **Pick out the statement above which describes what you feel would be most important to you on a job. On your answer folder in unit 2, blacken the circle for question 1 (MOST IMPORTANT) containing the letter for that statement.**

2. **Next, pick out the statement above which describes what you feel would be second most important to you on a job. Blacken the circle beside question 2 (SECOND MOST IMPORTANT) containing the letter of that statement.**

3. **Pick out the statement above which describes what you feel would be least important to you on a job. Blacken the circle beside question 3 (LEAST IMPORTANT) containing the letter of that statement.**

Working Condition Preferences (Questions 4-7)

Each pair of descriptions listed below presents opposite kinds of conditions which workers experience on different jobs. The working conditions on the left are labeled Condition 1; those on the right are labeled Condition 2. You are to decide whether you prefer Condition 1 or Condition 2 and how strongly you prefer one or the other. Use the following answers and mark them on your answer folder for questions 4, 5, 6, and 7.

A. I strongly prefer Condition 1
B. I prefer Condition 1
C. I prefer Condition 2
D. I strongly prefer Condition 2

	CONDITION 1	CONDITION 2
4.	Indoor work	Outdoor work
5.	Working with people	Working alone
6.	Working at a variety of tasks	Working at the same task
7.	Working with my hands or doing physical labor	Working at a desk with little physical activity

That's all for this unit.

DO NOT GO TO THE NEXT PAGE UNTIL TOLD TO DO SO.

CAREER PLANS
(10 minutes)

As you explore and plan your future, it will be helpful to think about how much education you would like to complete and what kinds of jobs you would like to have. The following questions will help you think about these things and, perhaps, suggest some possibilities you may want to explore.

1. What is the greatest amount of education you plan to complete during your life?

A. graduate from high school.
B. complete an apprenticeship program.
C. complete a job training program in the military.
D. complete up to two years in a community college, junior college, or technical college.
E. complete up to two years in a private business, trade, or technical school.
F. complete three or more years of college.
G. something else.

2. (a) No doubt you already have some ideas of job choices in mind. On your answer folder, print the name of the job that you are thinking about most, using the box marked "1st Job Choice."

(b) Look through the JOB FAMILY LIST on these two pages and find where your "1st Job Choice" fits best. On the answer folder, mark the circle that contains the letter for that JOB FAMILY.

3. (a) Print the name of your second job choice in the box marked "2nd Job Choice" on your answer folder.

(b) Find the JOB FAMILY where your "2nd Job Choice" fits best. Mark the letter for that JOB FAMILY on your answer folder.

4. Students often change their minds about job choices. How sure are you that your "First Job Choice" will be the same in a year?

A. I am very sure.
B. I am fairly sure.
C. I am not sure at all.

JOB FAMILY LIST

BUSINESS SALES & MANAGEMENT
JOB CLUSTER

A. PROMOTION AND DIRECT CONTACT SALES
Public relations workers, fashion models, travel agents, sales workers who visit customers (for example—real estate brokers, insurance agents, wholesalers, office supplies salesmen)

B. MANAGEMENT AND PLANNING
Hotel, store, and company managers, bankers, executive secretaries, buyers, purchasing agents, small business owners

C. RETAIL SALES AND SERVICES
Sales workers in stores and shops, auto salesmen, retail sales workers

BUSINESS OPERATIONS
JOB CLUSTER

D. CLERICAL AND SECRETARIAL WORK
Typists, file clerks, mail clerks, office messengers, receptionists, secretaries

E. PAYING, RECEIVING, AND BOOKKEEPING
Bank tellers, accountants, payroll clerks, grocery check-out clerks, ticket sellers, cashiers, hotel clerks

F. OFFICE MACHINE OPERATION
Adding, billing, and bookkeeping machine operators, computer and data processing machine operators, telephone operators

G. STORAGE, DISPATCHING, AND DELIVERY
Shipping and receiving clerks, stock clerks, truck and airplane dispatchers, route deliverymen, cab drivers, mail carriers

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TECHNOLOGIES & TRADES
JOB CLUSTER

H. HUMAN SERVICES CRAFTS
Barbers, hairdressers, tailors, shoe repairmen, cooks, chefs, butchers, bakers

I. REPAIRING AND SERVICING HOME AND OFFICE EQUIPMENT
Repairing and servicing—TV sets, appliances, typewriters, telephones, heating systems, photo copiers

J. GROWING AND CARING FOR PLANTS/ANIMALS
Farmers, foresters, ranchers, gardeners, yardmen, groundskeepers, plant nursery workers, animal caretakers, pet shop attendants

K. CONSTRUCTION AND MAINTENANCE
Carpenters, electricians, painters, custodians (janitors), bricklayers, sheet metal workers, construction laborers, (buildings, roads, pipelines, etc.)

L. TRANSPORT EQUIPMENT OPERATION
Long haul truck and bus drivers, bulldozer operators, crane operators, forklift operators

M. MACHINE OPERATING, SERVICING, AND REPAIRING
Auto mechanics, machinists, printing pressmen, sewing machine operators, service station attendants, laborers and machine operators in factories, mines, lumber camps, etc.

N. ENGINEERING AND OTHER APPLIED TECHNOLOGIES
(For science and medical technicians, see Job Families O and P.) Engineers and engineering technicians, draftsmen, pilots, surveyors, computer programmers

NATURAL, SOCIAL, & MEDICAL SCIENCES
JOB CLUSTER

O. NATURAL SCIENCES AND MATHEMATICS
Biologists, chemists, lab technicians, physicists, geologists, statisticians, agricultural scientists, ecologists

P. MEDICINE AND MEDICAL TECHNOLOGIES
Dentists, doctors, veterinarians, medical technologists and lab workers, pharmacists, X-ray technicians, optometrists, dental hygienists, dietitians

Q. SOCIAL SCIENCES AND LEGAL SERVICES
Sociologists, lawyers, political scientists, historians, psychologists, home economists

CREATIVE & APPLIED ARTS
JOB CLUSTER

R. CREATIVE ARTS
Authors, concert singers, musicians, actresses, dancers, artists

S. APPLIED ARTS (VERBAL)
Reporters, technical writers, interpreters, newscasters, newswriters, ad copy writers

T. APPLIED ARTS (VISUAL)
Interior decorators, architects, commercial artists, photographers, fashion designers

U. POPULAR ENTERTAINMENT
Night club entertainers, popular singers and musicians, disc jockeys, circus performers

SOCIAL, HEALTH, & PERSONAL SERVICES
JOB CLUSTER

V. EDUCATION AND SOCIAL SERVICES
Teachers*, counselors, social workers, librarians, athletic coaches, recreation workers, clergymen

W. NURSING AND HUMAN CARE
Child care aides, nurses, dental assistants, physical therapists, hospital attendants

X. PERSONAL AND HOUSEHOLD SERVICES
Waiters, airline stewardesses, housekeepers, maids, porters, car hops, butlers

Y. LAW ENFORCEMENT AND PROTECTIVE SERVICES
Police workers; building, food, and postal inspectors; watchmen; plant guards; firefighters

*NOTE—**Teachers:** Students thinking about high school or college teaching should consider whether their main goal is *teaching students* (mark Job Family V) or *doing work or research in the subject area:* for example—chemistry, (mark Job Family O), art (mark R or T), economics (mark Q), etc.

UNCERTAIN ABOUT WHERE YOUR JOB CHOICES FIT?

There will be many job titles that you can't find in the Job Family List. So look until you find a Job Family with "relatives" (similar jobs) and mark its letter on your answer folder. *Special problems:*

MILITARY: If military service is one of your job choices, select a specific job (such as mechanic, nurse, bookkeeper, etc.) that you would prefer to do while in the military. Mark the Job Family for it on your answer folder.

HOMEMAKERS: While being a homemaker (housewife) is often a full-time job, many women work outside of the home. So, those of you who wrote down homemaker should, instead, mark job choices outside of the home.

PROFESSIONAL ATHLETES: Those of you considering professional sports should mark job choices you would consider *after* your sports career is completed.

That's all for this unit.

DO NOT GO TO THE NEXT PAGE UNTIL TOLD TO DO SO.

CAREER PLANNING ACTIVITIES
(20 minutes)

PART A

Directions: There is a lot involved in making career (educational and job) plans. By seeing what you have already done about planning, we may be able to suggest other useful things for you to do. For this reason, we would like you to indicate how often you have done each activity listed below. Use the following responses for each activity.

A. No, I haven't done this OR the time I spent on this is not worth noting.
B. Yes, I have done this but only once or twice.
C. Yes, I have done this several times.

YOU MAY BEGIN.

1. **Listened to a tape recording or saw slides, a movie, or a TV program about a job in which I was interested.**
2. **Discussed, in class, jobs related to the subject we were studying.**
3. **Talked with an adult (not in my family) about how he (she) came to be in his (her) job.**
4. **Compared two different jobs in terms of how satisfied I would be with them.**
5. **Read a job description from the school library or guidance office job files.**

Talked (alone or in a group) with a counselor or teacher about—

6. **How my goals, interests, and abilities might relate to different kinds of jobs.**
7. **How jobs differ with respect to working conditions and fringe benefits.**
8. **How jobs differ with respect to rewards and satisfactions.**
9. **Education or job training after high school.**
10. **Financing education or job training after high school.**

11. **Wrote for materials describing jobs or educational programs.**
12. **Took a tour through a local industry, business, hospital, or office to observe what the various jobs were like.**
13. **Watched and talked with workers in jobs related to a school subject we were studying.**
14. **Attended a "job fair" or "career day" where workers or employers talked about jobs.**
15. **Took up a hobby or joined a group or club that was related to a job I was considering.**
16. **Played a game or did an assignment in school in which I had to make education or work plans for some student.**
17. **Took a course in school that studied several different types of jobs.**
18. **Took a course in school to find out what jobs related to it would be like.**
19. **Worked in a summer or part-time job related to an occupation I was considering.**
20. **Took part in an actual or a practice job interview.**
21. **Filled out a job application form, for an actual job or for practice.**
22. **Wrote a resume or summary sheet describing my job qualifications, education, work experience, etc.**
23. **Enrolled in (or plan to take) high school courses that will prepare me for a specific job after high school or for additional education.**
24. **Thought about whether I should obtain some additional education or job skills after high school.**
25. **Worked out a plan that will provide enough money for me to begin to do what I plan to do after high school.**

GO TO THE NEXT PAGE.

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SAMPLE

Directions: A few minutes ago, you were asked to print the names of your first two job choices on the answer folder. The rest of the questions on this page all refer to these two jobs. THINK ONLY OF THESE TWO JOBS as you answer each of the following items.

Show how often you have done each of the activities in items 26 through 32 using the following responses:

A. No, I haven't done this OR the time I spent on this is not worth noting.
B. Yes, I have done this but only once or twice.
C. Yes, I have done this several times.

26. Discussed the jobs with a parent, relative, or guardian.

27. Listened to tape recordings or saw slides, a TV program, or a movie about the jobs.

28. Talked with a counselor or teacher about how my goals, interests, and abilities relate to the jobs.

29. Talked with workers in the jobs about how they came to be in the job.

30. Compared how satisfied I would be with each of the jobs.

31. Identified the school courses that it would be helpful to take for each of the jobs.

32. Have taken a school course related to one of these jobs.

33. Have you given much thought as to why these two jobs are "right" for you?

A. A little
B. Some
C. A lot

34. Is the amount of education you are planning in line with what is needed for the jobs?

A. Yes
B. Not sure
C. Probably not

35. Will the two jobs help you obtain what you want out of life?

A. Yes
B. Not sure
C. Probably not

36. How sure are you of the steps to take in order to prepare for and enter each of the two jobs?

A. Don't know where to begin
B. Have some idea of how to go about it
C. The steps are pretty clear
D. The steps are quite clear

37. Do you feel you will be able to complete all of the necessary steps for at least one of the jobs?

A. Yes
B. Not sure
C. Probably not

38. Would you say that your job future is—

A. Bright?
B. Dark?
C. Uncertain?

BEGIN RIGHT AWAY ON THE ITEMS IN THE NEXT GROUP.

PART B: REACTIONS TO CAREER PLANNING ACTIVITIES

Directions for the next 5 items: Some of the ways schools help students with career planning are listed below. For each, show how you feel about the help provided at your school. Use these responses.

A. Help not provided or not used.
B. This was of little help.
C. This was of some help.
D. This was a lot of help.

39. File of job descriptions, pamphlets, or books on jobs. (Usually in library or a guidance office.)

40. Films on jobs, talks by workers (in person or on tape), "career days," tours.

41. Class discussion by teachers of jobs related to the subjects they are teaching.

42. Discussion with a counselor about education and job plans for after high school.

43. Meetings with small groups of students to discuss what we want from a job, educational plans, job plans, etc.

---

44. Overall, how much help with career (educational and job) planning has your school (teachers, counselors, principal, librarian, etc.) given you?

A. None
B. Little
C. Some
D. A lot

45. Do you feel that you can get to see a guidance counselor when you want to or need to?

A. Hardly ever
B. Usually
C. Almost always
D. We don't have a guidance counselor

PART C: "HELP WANTED" CHECK LIST

Directions: The list below covers several things with which students sometimes would like help. If you would like help with any of these things, mark A for YES. Otherwise mark B for NO.

A. YES
B. NO

46. Improving my study skills.

47. Improving my reading skills.

48. Improving my math skills.

49. Choosing courses.

50. Discussing personal things that are concerning me.

51. Discussing a health problem that is concerning me.

52. Making career plans.

53. Obtaining money to continue my education after high school.

54. Finding after-school or summer work.

Your responses to these items will be relayed to the school guidance director or principal when your score report is returned in a few weeks. You may wish to begin discussing some of these things before then.

STOP

That's all for this unit.

DO NOT GO TO THE NEXT PAGE UNTIL TOLD TO DO SO.

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CAREER PLANNING KNOWLEDGE
(20 minutes)

SAMPLE

This unit covers some of the things that may be helpful to know when you are making "career plans." By "CAREER PLANS" we mean plans for your EDUCATIONAL AND JOB future. Please remember this as you answer the questions that follow.

Choose the one best answer to each question. If you are not sure of an answer, make your best guess. The first group of questions should be answered "T" for TRUE or MOSTLY TRUE and "F" for FALSE or MOSTLY FALSE. Mark your answers in **unit 5** of your answer folder. If you work steadily, you should be able to answer almost all of the questions in 20 minutes.

DO NOT GO TO THE NEXT PAGE UNTIL TOLD TO DO SO.

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CAREER PLANNING KNOWLEDGE
(20 minutes)

Mark your answers on the answer folder.

T = TRUE or MOSTLY TRUE
F = FALSE or MOSTLY FALSE

1. Good career planning involves looking into several different occupations.
2. Except for the income it provides, a person's job has little influence on his way of life.
3. Most people do not need to begin career planning until their final year in high school.
4. There is only one "right job" for a person in terms of his abilities.
5. There is little one can do to get ready to choose a job except to see what's available when the time comes to choose.
6. The average American adult spends more waking time in work-related activities (including homemaking) than any other activity.
7. Two persons with the same interests and abilities could be satisfied with jobs that are different.
8. The State Employment Service Office provides free information about job openings and job training programs.
9. Apprentices are paid while they learn.
10. Less than one-third of the students graduating from high school finish a four-year college program.
11. Programs at two-year community colleges are limited to students who want to transfer to four-year colleges.
12. Less than one-third of all job openings require a college degree.
13. The English and Math skills of freshmen are about the same from one college to another.
14. The unemployment rate of 20 year olds in the labor market is usually less than the rate for other adults.
15. Few women work outside of the home after marriage.
16. Entering an occupation is the only way you can learn whether you might like it.
17. Most adults know by the end of high school which occupation they will be in when they are 40.
18. Most persons remain in the same job throughout their adult lives.
19. Jobs of equal benefit to the community have the same social standing.
20. The earlier one chooses his life's work the better.
21. Most people have the ability to do well in any job if they set their minds to it.
22. The typical man will hold more than four different full-time jobs during his lifetime.

GO ON TO THE NEXT PAGE.

Directions for questions 23-27:

Each of the following is important in making career plans: goals and values; abilities; interests; and the job market. In the next five questions, pick the one that is the most important to consider in answering the question.

23. What kinds of jobs have duties I might like?

(Find the choice below that is most important to consider in answering this question.)

A. goals and values
B. abilities
C. interests
D. the job market

24. What is important for me in a job?

A. goals and values
B. abilities
C. interests
D. the job market

25. Would I be able to learn the work?

A. goals and values
B. abilities
C. interests
D. the job market

26. Will I be able to find the job I have prepared for?

A. goals and values
B. abilities
C. interests
D. the job market

27. Would I be able to do the work?

A. goals and values
B. abilities
C. interests
D. the job market

Directions for questions 28-40:

Choose the one best answer-A, B, C, or D-for each of the questions that follows:

28. Which one of the following is the best way to begin career planning?

A. look at what is available on the job market
B. take tests to find out what you should do
C. consider what it is you want out of a job
D. read as many job descriptions as you can find

29. The *Occupational Outlook Handbook* gives information about all of the following except—

A. job entry requirements
B. average salaries in occupational fields
C. job openings in major cities
D. descriptions of job duties

30. Money for college may be provided by—

A. a scholarship or grant
B. a loan
C. a part-time job
D. any of the above

31. Which of the following is probably the best way for a person to find out whether he would like the work of a carpenter?

A. ask a counselor
B. talk to a building contractor
C. take a shop course in woodworking or carpentry
D. read articles about the building industry

32. Choosing a job is similar to choosing a marriage partner in that—

A. there is little you can do to prepare for either choice.
B. how a person feels about the choice is important in both cases.
C. there is only one right person and one right job for each of us.
D. both choices are final.

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33. **Ideally, which of the following should be <u>most</u> important in your career decisions?**

A. what the job market is like
B. the decisions you have made before
C. what your parents did
D. what you want out of life

34. **What will the labor force probably be like ten years from now?**

A. Most jobs will require four or more years of college.
B. There will be fewer jobs for unskilled workers.
C. There will be more jobs for high school dropouts than there are now.
D. There will be fewer jobs for technical workers.

35. **Which one of the following <u>best</u> describes women in the labor force?**

A. More women are choosing to remain in the home rather than work.
B. A larger percent of women now hold "women's jobs" such as secretary and bank teller.
C. More women are working at jobs which were once thought to be men's jobs.
D. Women now outnumber men on what used to be "men's jobs"; for example, drafting and law.

36. **Bob is interested in so many jobs he cannot make up his mind. He should—**

A. try out as many of the jobs as he can.
B. try one and if he likes it, stick with it.
C. find out what to do by taking an ability test.
D. find out more about what each job is like.

37. **Paula is interested in a medical career as a psychiatrist but doesn't know much about what they do. What is the <u>best</u> step for her to take?**

A. look up the job in a medical college catalog
B. make an appointment to see a psychiatrist
C. look up "psychiatrist" in the dictionary
D. get descriptions of the job from the school guidance office or library.

38. **Alice has been accepted by two colleges. College A is better known than College B but its costs are higher. She cannot make a choice. What is the <u>best</u> thing for her to do?**

A choose College B because it will cost less
B. choose College A and write to the financial aid office there for information
C. make a list of what she expects to get out of college and compare the two schools that way
D. ask her parents to decide since they pay the bills

39. **John's high school grades are good, and he would like to be an engineer. No one in his family went to college. His parents are against his going to college. What should he do?**

A. see if his parents will agree to his taking a two-year program in a community college
B. see his counselor about getting financial aid so he can go to an engineering college without the help of his parents
C. arrange a meeting with his guidance counselor and his parents to talk over the whole program
D. join the army and train for engineering there

40. **Bill cannot decide between engineering and auto mechanics. However, he must decide soon or it will be too late to prepare for either. What is the <u>best</u> thing for him to do?**

A. get some part-time work experience in each
B. get a job at a garage, and if he doesn't like it, go into engineering
C. discuss his goals and his abilities for each job with the school counselor
D. work his way through engineering college as a mechanic

That's all for this unit.

STOP **DO NOT GO TO THE NEXT PAGE UNTIL TOLD TO DO SO.**

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UNIT 6

EXPLORATORY JOB EXPERIENCES
(20 minutes)

Directions: People often develop special skills or have career-related experiences outside of the usual classroom setting. Often these skills and experiences provide clues for suggesting jobs that you might think about and explore. For this reason, we would like you to indicate in **unit 6** on your answer folder how often you have done each activity listed below. Use the following responses.

A. No, I haven't done this OR the time I spent on this is not worth noting.
B. Yes, I have done this but only once or twice.
C. Yes, I have done this several times.

SAMPLE

YOU MAY BEGIN.

1. **Studied different groups of stars on my own.**
2. **Played a musical instrument for a group.**
3. **Worked actively in a service group or as a volunteer aide.**
4. **Sold something through an ad in the paper.**
5. **Operated office machines such as adding or duplicating machines.**
6. **Used a voltmeter, micrometer, or pressure gauge.**
7. **Studied the theory of evolution on my own.**
8. **Sang in a choir or chorus.**
9. **Helped supervise summer playground activities for children.**
10. **Loaned someone some money and got it back with interest.**
11. **Filed letters, bills, or papers.**
12. **Repaired furniture.**
13. **Used a microscope outside of a class assignment.**
14. **Sketched people so they could be recognized.**
15. **Helped settle an argument between two friends.**
16. **Served as a school crossing guard, hall, study hall, or lunchroom monitor.**
17. **Typed letters or reports, not assigned in class.**
18. **Repaired a toy that wouldn't work.**
19. **Visited a science, natural history, or historical museum.**
20. **Wrote a short story or poem outside of a class assignment.**
21. **Instructed others in a sport such as bowling, swimming, tumbling, pool, hockey, basketball.**
22. **Had a regular paying job outside of my home (for example, paper route, baby-sitting, shoe shining, lawn mowing, car washing).**
23. **Sorted mail.**
24. **Fixed mechanical things around home.**
25. **Prepared a project for a science fair.**
26. **Played or sang in a band, combo, or rock group.**
27. **Took care of sick or elderly people.**
28. **Organized a club, "gang," school group, or team.**
29. **Worked out my own budget.**
30. **Replaced burned-out electrical fuses.**
31. **Wrote a science essay or report that was not assigned in class.**
32. **Wrote stories or news articles for a school newspaper or magazine.**
33. **Helped teach games or sports to young children.**
34. **Sold things like magazines, candy, Christmas cards, door to door.**
35. **Kept accurate records of my own expenses.**
36. **Spliced an electrical cord.**
37. **Did a science experiment that was not assigned in class.**
38. **Drew cartoons or comic strips.**
39. **Helped a new boy or girl in the neighborhood to get to know others.**
40. **Ran for a school club or office.**
41. **Checked for spelling errors in a theme or report.**
42. **Read magazines such as *Outdoor Life, Mechanics Illustrated, Popular Science,* or *Popular Mechanics.***
43. **Read books or magazines on science and technology.**
44. **Read books on art or music that were not assigned in class.**
45. **Was selected by a group to buy a gift for someone like a friend, teacher, or club leader.**
46. **Sold tickets for activities like a play, sports event, or fun night.**
47. **Kept records of temperature, barometric pressure, or rainfall.**
48. **Helped change a part on a car engine.**

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49. Listened to "Meet the Press"on radio or TV.
50. Learned handicrafts such as carving wood, weaving, making jewelry or pottery, tooling leather, stringing beads, etc.

51. Worked on a neighborhood improvement project or charity drive.
52. Earned some of my school expenses through my own work.
53. Did lettering or drafting other than a class assignment.
54. Refinished, painted, or stained furniture.
55. Studied different cloud formations.

56. Had a speaking part in a play.
57. Helped friends with their problems.
58. Worked as an usher at school events.
59. Developed a system for sorting or storing things.
60. Changed a car or bike tire.

61. Read the editorial page of a Sunday newspaper.
62. Visited an art museum.
63. Gave first aid to an injured person.
64. Kept records of expenses for a club or group.
65. Planned a trip using a bus, train, or airplane schedule.

66. Took apart a machine to see how it operates.
67. Did a chemistry experiment outside of class.
68. Attended a symphony or rock concert.
69. Planned a school or church social event.
70. Promoted a money-making event in school.

71. Figured postage costs for a catalog order.
72. Developed pictures on my own.
73. Collected and studied things like rocks, shells, insects.
74. Performed in a variety show or skit.
75. Worked for a "cause" like fire prevention, ecology, or safety.

76. Helped sell things at a garage sale or bake sale.
77. Worked in a school with lunch tickets, filing, or sorting books.
78. Operated a movie projector, tape recorder, or loud speaker system.
79. Made a report or chart about parts of the body.
80. Did the art work or lettering for a greeting card.

81. Helped in a puppet show or play for children.
82. Encouraged people to join a club, team, or "gang."
83. Made charts to explain things like costs, rate of growth, population changes.
84. Made drawings to scale.
85. Studied (outside of a class assignment) diseases of humans, animals, or plants.

86. Drew or made designs for such things as clothing, buildings, or cars.
87. Visited an older person to cheer him up.
88. Handed out things like advertising circulars, political leaflets, and notices.
89. Took attendance or kept records for a teacher.
90. Raised animals to be sold.

APPENDIX D

THE GROSSE POINTE PUBLIC SCHOOL SYSTEM
Career and Vocational Education

CLASSROOM ADJUSTMENT SURVEY
(Front Side of 5x8 Survey Card)

Teacher:_____Student:_____

THANK YOU--WE APPRECIATE YOUR ASSISTANCE!!!

As a follow-up to the initial survey taken in late February, we are asking that you again evaluate this particular ninth grader in terms of his or her attendance, referral record, and classroom adjustment.

Evaluate the student on the basis of their performance for ONLY the second semester.

Complete the survey on the reverse side of this card; please be as accurate as possible.

RETURN BY FRIDAY, JUNE 7, 1974 TO:

Mrs. McIntosh, Social Worker, South High

CLASSROOM ADJUSTMENT SURVEY--Cont'd
(Backside)

Student:_____

1. ATTENDANCE: Periods
(2nd Semester) Absent:_____Excused:_____Unexcused:_____

2. REFERRALS: How many total referrals have you as a teacher
(2nd Semester) made to either Special Services, Counselors, or Asst. Principals concerning this student? _____

3. CLASSROOM ADJUSTMENT: Circle one response--10 being of
(2nd Semester) highest quality.

A. Promptness--getting to class on time.

0....1....2....3....4....5....6....7....8....9....10

B. Preparedness--brings necessary class materials and completes assignments on time.

0....1....2....3....4....5....6....7....8....9....10

C. Participates in class discussions and activities.

0....1....2....3....4....5....6....7....8....9....10

D. Demonstrates self discipline and control.

0....1....2....3....4....5....6....7....8....9....10

APPENDIX E

LIFE ROLES SURVEY

Complete by Parent:_____

High School your child attends:_____

Scale "a" measures "What Should Be" Scale "b" measures "What Is"

1. School should help students understand family relationships.
   a. strongly agree----agree----can't say----disagree----strongly disagree
   b. very much----much----some----little----none

2. School should help students learn how to get a job.
   a. strongly agree----agree----can't say----disagree----strongly disagree
   b. very much----much----some----little----none

3. School should help students to work together.
   a. strongly agree----agree----can't say----disagree----strongly disagree
   b. very much----much----some----little----none

4. How to use free time should be stressed in school.

   a. strongly agree----agree----can't say----disagree----strongly disagree

   b. very much----much----some----little----none

5. School should help students learn what is needed to support a family.

   a. strongly agree----agree----can't say----disagree----strongly disagree

   b. very much----much----some----little----none

6. Students should be informed about occupations in school.

   a. strongly agree----agree----can't say----disagree----strongly disagree

   b. very much----much----some----little----none

7. Students should learn how to register to vote while they are in school.

   a. strongly agree----agree----can't say----disagree----strongly disagree

   b. very much----much----some----little----none

8. School should provide less free time for student.

   a. strongly agree----agree----can't say----disagree----strongly disagree

   b. very much----much----some----little----none

9. School should help students in understanding the importance of the family.

   a. strongly agree----agree----can't say----disagree----strongly disagree

   b. very much----much----some----little----none

10. School should prepare people to make a living.

   a. strongly agree----agree----can't say----disagree----strongly disagree

   b. very much----much----some----little----none

11. School should teach students how a democracy works.

   a. strongly agree----agree----can't say----disagree----strongly disagree

   b. very much----much----some----little----none

12. School should help students explore different uses of free time.

   a. strongly agree----agree----can't say----disagree----strongly disagree

   b. very much----much----some----little----none

13. Students should study how different families live.

   a. strongly agree----agree----can't say----disagree----strongly disagree

   b. very much----much----some----little----none

14. How to get along better as a family member should be studied in school.

    a. strongly agree----agree----can't say----disagree----strongly disagree

    b. very much----much----some----little----none

15. Different kinds of occupations should be studied in school.

    a. strongly agree----agree----can't say----disagree----strongly disagree

    b. very much----much----some----little----none

16. School should teach students to be responsible for their own actions.

    a. strongly agree----agree----can't say----disagree----strongly disagree

    b. very much----much----some----little----none

17. Students should be informed about how much free time different jobs allow.

    a. strongly agree----agree----can't say----disagree----strongly disagree

    b. very much----much----some----little----none

18. Students should study different ways families live.

    a. strongly agree----agree----can't say----disagree----strongly disagree

    b. very much----much----some----little----none

19. Schools should help students explore what they want to become.

    a. strongly agree----agree----can't say----disagree----strongly disagree

    b. very much----much----some----little----none

20. School should offer a class in the use of free time.

    a. strongly agree----agree----can't say----disagree----strongly disagree

    b. very much----much----some----little----none

21. Different family roles (mother, father, son, etc.) should be studied in school.

    a. strongly agree----agree----can't say----disagree----strongly disagree

    b. very much----much----some----little----none

22. The values of work should be stressed in school.

    a. strongly agree----agree----can't say----disagree----strongly disagree

    b. very much----much----some----little----none

23. School should help students understand their individual rights.

    a. strongly agree----agree----can't say----disagree----strongly disagree

    b. very much----much----some----little----none

24. School should provide ways for students to use free time.

    a. strongly agree----agree----can't say----disagree----strongly disagree

    b. very much----much----some----little----none

THE BIBLIOGRAPHY

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