The report describes a career guidance program for grade 10 students at Logan Senior High School involving parents, teachers, and guidance counselors. Parent and student occupational aspirations and knowledge of career development principles and planning were investigated with three groups—tutor-parent-student, parent-student, and student. All three groups received guidance materials and school counseling. The first two added direct solicited parental involvement, and the first also received home visits by guidance tutors (graduate students from Utah State University in Logan). Pretests and posttests of all groups revealed no significant differences in career development knowledge, but it appeared that parents had higher aspirations than their children. Recommendations based on the study data included: (1) establishing a career center at the school, (2) providing career counseling for sophomores in an English program, (3) employing guidance tutors (graduate students from the university) for home visits, (4) holding inservice programs for school faculty, and (5) providing career counseling to sophomore students using career files. About half of the document consists of an appended report on a previous study to ascertain the feasibility of conducting a career information education program with parents of grade 10 students at Logan Senior High School. Included in the appended report are questionnaires used in the study and samples of career information packages. (MP)
FINAL REPORT

THE EFFECTS OF A CAREER GUIDANCE PROGRAM INVOLVING TEACHERS
AND PARENTS OF TENTH GRADE STUDENTS

M. Larry Petersen
Logan City Board of Education
101 West Center
Logan, Utah
James C. Blair, Supt.

December 1974

U.S. DEPARTMENT OF HEALTH,
EDUCATION AND WELFARE

Office of Education
Bureau of Research
Summary

Purpose

The primary purpose of the study was to provide students in the 10th grade at Logan Senior High School the opportunity of participating in a career guidance program that involved their parents, community resource persons, teachers, and guidance counselors. It was also the intent of this study to ascertain the change between the parent occupational desires and those of their sons or daughters. Specifically, the purpose of the study was to answer the following question: What is the effect of the Career Education Program on the (1) Student's knowledge of reality factors in career development, (2) Student's knowledge of basic career development principles, (3) Student's knowledge of career planning, and (4) Occupational aspiration of the parent and child?

The study also attempted to identify specific techniques in the program that were considered to be the most successful with counselors and parents when counselors made visits to the home.

Methods of Research

This investigation was conducted with three groups of 10th grade students, all students had the opportunity of participating in a career guidance program at school. One group of students and parents worked directly with guidance personnel visiting the home.
Group 1 = Tutor-parent-student--N = 91
Group 2 = Parent-student--N = 82
Group 3 = Student (placebo)--N = 90

Treatments were administered to the experimental groups. Pre and post testing of parents and students at school was done followed by a statistical analysis of data. The American College Testing (Copyright) Assessment of Career Development was administered, which included knowledge of career development, knowledge of career reality factors and knowledge of career planning. The degree of parent-student career aspiration was ascertained, also an attempt was made to identify techniques of tutor-parent-student interaction that was felt to be successful by parents.

The analysis of variance and chi-square were utilized to test the main effects of the methods employed. The .05 level of significance was used as the standard for rejecting the null hypothesis in all statistical tests.

Conclusions

To the extent that the findings resulting from the research procedures employed in this study and the assumptions made are valid, the following conclusions may be drawn:

1. Since there was no significant difference in the statistical analysis on the Assessment of Career Development it may be concluded that either approach identified in the study could be used in a career education program.
2. Based on the differences occurring between the parents and the
child's career information needs, parents indicated more of a need for career
information than their sons or daughters.

3. Based on the cost of the tutor visiting the parents at their homes and
the cost of the regular school counselor, in terms of face-to-face counseling
the tutor visiting the home is approximately one-half the cost of the regular
school counselor.

4. Parents' reaction would conclude the program to be worthy of con-
tinuation with guidance contacts made to the home for the purpose of explaining
contents of a career file.

5. Reaction would conclude the career file to be a useful tool for
guidance counselors, students, and parents.

6. The school can initiate a career education program operating from
the school with counselors assisting the parents and their children with career
guidance information.

7. Parents' reaction indicated two, three, or four visits to be made to
the home by the guidance tutors with a 20 to 30 minute visit which parents indi-
cated to be sufficient to present the material.

8. Based on a Chi-square analysis of data, parents consistently have a
higher education aspiration for their sons and daughters.
9. Based on parent's indication, it may be concluded the DAT and the Kuder Interest Inventory contain information that parents feel important to aid them in their knowledge of their child.

Recommendations

The following recommendations are based on the statistical data derived in this study and the investigators' observation of a Career Guidance Program that involved (1) the establishing of a Career Center at Logan Senior High School, (2) sophomore students enrolled in an English program which provided one semester of career education 1 hour per week for 18 weeks, (3) a staff of guidance tutors employed to make home visits to parents.

1. Administrators anticipating a career guidance center in their school should initiate a seminar to acquaint all professional staff of the need for career education and the operation of the center in the school.

2. School administrators should consider releasing the counselors from the non-guidance activities and allowing them to make home contacts to inform parents of the student's interests and aptitudes.

3. Further study should be undertaken to ascertain the effect, if any on a parent having a higher occupational aspiration than those of their sons and daughters.

4. Due to the fact no significant difference occurred in the student's knowledge of career reality, planning, and career reality factors, further study is recommended involving guidance tutors, parents and their child.
5. It is recommended that administrators staff career centers with qualified counseling personnel experienced with career counseling technique, materials and programs.

6. Career programs being initiated in a school should be integrated with the present programs operating in the curriculum, such as English or social studies.

7. Career counseling programs beginning at the 10th grade should continue throughout the 11th and 12th grades with counselors providing face-to-face counseling.

8. A career file should be developed for each student to be used by the counselor, teacher, administrator, parent and student and the file be maintained and used each year to review career plans while the students are at the school and upon graduation or termination the file be presented to him.

9. The director of the Career Center should initiate a job placement service in cooperation with the Department of Employment Security and other civic groups for the purpose of assisting students with job placement based on their needs, interests and aptitudes.
Introduction

Career Education in the public schools of Utah has been initiated in the elementary, junior and senior high schools. Administrators, teachers, and students have been involved for the past number of years in the new thrust to provide students the opportunity to learn more about their interests and aptitudes and align these with the job opportunities in the world of work. One very important element of the career education program that has been receiving emphasis in Logan City Schools is the involvement of the parents in the career guidance program at Logan Senior High School. A number of educational leaders in the area of career education have suggested that parental involvement be included in the total school community career education program.

Schinburg (1972) states,

Unless career education planners take the parental equation into account and successfully modify the attitudes and expectations of parents, they are likely to discover that support for their programs can evaporate quickly.
Authorities writing in the field of education have indicated that the need for changing parental attitudes is imperative for the success of a school career education program. Hoyt (1972) indicates:

Basic attitudes toward career activity are developed in the home. The family experiences are major influences on the occupational aspirations. The school can identify and point out the meaning of ordinary experiences from which life long attitudes are formed.

**Motivation for Study**

The need for involving parents as a member of the career education program has been described by a number of leaders in education. It is the desire of the administration of the Logan City Schools to have a Career Education program that involves the community, the school system, parents, teachers, and students directed upon helping the parent understand the child and help the child to understand his interests, aptitudes, and special abilities as they relate to the opportunities in the world of work. Petersen (1972) conducted a study to ascertain the feasibility of a Career Guidance program with parents participating along with the students of the 10th grade of Logan Senior High School. Indications from this study were favorable and the conclusions indicated a program with parental involvement in a career education program could be undertaken. The study was designed to ascertain if parents would work with their children in dissemination of career information. In 1973 Petersen conducted a study entitled "The Effects of a Career Guidance Program Involving Teachers—Parents—10th Grade Students." The findings of the study concluded
that parent and teacher working together can have more effect than either the parent or the teacher working alone on a child's occupational aspiration. There was a significant difference in the informational achievement level of students in the teacher directed classroom, as compared to the parent working alone indicating that a teacher can disseminate more information than the parent are able to in an organized instructional program. Guidance tutors were employed to work with students and parents at home as part of the guidance program. Parents indicated two to three visits by the guidance tutor were the most efficient in the home counseling situation. One recommendation suggested in the study was continued research should be undertaken to study the effects of the methods used in working with students and parents and personnel from the school. Another recommendation was the high school originating a career guidance program should provide the opportunity for teacher to become more involved in a broader program of career education. One other major conclusion from an earlier study was the uncertainty of the parent involvement on a child's occupational goals or on the child's tentative career decision. There was also the need to continue the career education program for a longer period of time, to ascertain any change that might occur in parent and child's attitudes toward the world of work. Based on the conclusions and recommendations from the 1973 report, a study was designed and carried out to ascertain the effect of parental involvement in a broad approach to career education.
Purpose of the Study

It was the primary purpose of the study to provide students in the 10th grade at Logan Senior High School the opportunity to participate in a career guidance program that involved their parent, community resource persons, teacher and guidance counselors. It was also the intent of this study to ascertain the relationship between the parents' occupational desires and those of the sons or daughters. Specifically the purpose of the study was to answer the following question: What is the effect of the Career Education Program on the (1) Students' knowledge of reality factors in career development, (2) Students' knowledge of basic career development principles, (3) Students' knowledge of career planning, and (4) Occupational aspiration of the child as viewed by the parent and the occupational aspiration of the child.

The study also attempted to identify specific techniques in the program that were considered to be the most successful with counselors and parents in the visits made by the guidance tutor to the home.

Population

The program was undertaken in the Logan City School District, Logan, Utah, with a city population of 23,000 people. Logan Senior High School is the only senior high school in the Logan District with an enrollment of 964 students. The high school has the 10th, 11th, and 12th grades and employs 35 teachers.
Logan, Utah, is the home of Utah State University and the students represented in the study are from families that have an above average education for a city of this size. Students from Logan High School have a 68%-72% attendance to university educational programs.

The parent population shares in a cultural influence that fosters the belief that parents help and work with their child and in-turn the child will work with their parents.

The career guidance program required that a career center be organized and in operation at the Logan Senior High School. The career center was equipped with commercial filmstrips, audio tapes, facilities for resource persons, TV players and monitors, and other material and equipment necessary for its operation. A new packet was developed and identified as the Caripac which was used in conjunction with audio-visual presentation and resource persons visiting the center. It also allowed students to become involved in a number of activities as they moved about the career center during the duration of the project.

Definition of Terms

Career Development. — A lifelong process which involves a series of experiences, decisions, and interactions, and which, taken cumulatively, results in the formulation of a viable self-concept and provides the means through which that self-concept can be implemented both vocationally and avocationally (AVA, 1971).
Career Guidance. --Career guidance is the utilization of techniques including individual, group counseling and a variety of media for the dissemination of occupational information and modifications of existing curriculum to meet the student needs. Career guidance assists the student to view life styles and personal satisfaction; and investigates education, work, and leisure alternatives.

Caripacs. --A career instructional package containing directions, information, and the necessary materials to be used by the student in a career education program.

Guidance Tutor. --A graduate student from Utah State University, Department of Psychology, having had experience in counseling and guidance employed for the purpose of counseling high school students and their parents at home.

Project Description

The project was designed to provide a career guidance program based at the Logan Senior High School with guidance counselors operating in the school and guidance tutors visiting the parents at their homes for the purpose of helping parents to be better informed about the child and the world of work.

Students of the 10th grade were scheduled in their English classes in a manner allowing all students exposure to the career center and career counseling by the school counselor.

English teachers participated in a career seminar which did include all the teachers of the school. This was done to inform teachers of the career
education program and to extend an opportunity for other teachers to learn the operation of the career center and of the need for career education programs.

English teachers committed one class period per week to work with the counselors and provide students with a career education program. Teachers worked with the guidance counselors within the school to develop a program that allowed students from 9-10 visits to the career center during the regular English class time. Teachers of the English classes on an alternating schedule set aside the Monday class periods of 50 minutes each, for the purpose of participating in career guidance activities. Class would meet, roll would be taken, and then students would have the opportunity of attending one of the following areas:

1. Visit the counselor to discuss: (required of all students)
   a. Kuder interest inventory (previously administered to all 10th grade students)
   b. Class grades from grades 9-10
   c. Henmon Nelson (previously administered to students at the 9th grade)
   d. Career profile form
   e. Differential Aptitude Test (previously administered to students at 9th grade)

2. Complete a number of Caripaes (required of all students)

3. View filmstrips on careers
4. View a video tape on careers and participate in a class discussion.

5. Attend a discussion session with a resource person (example: nurse, M.D., forester).

Table I describes the activities pursued by each group.

<table>
<thead>
<tr>
<th>Student Groups</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>f</th>
<th>g</th>
<th>h</th>
<th>i</th>
<th>j</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Student</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Parent-student</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3. Tutor-parent-student</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Description of Activities:

a. Had a guidance tutor visit home

b. Received Career Education material mailed or carried home

c. Had a school counselor at school

d. Had access to career information

e. Were encouraged by parents to use school career center

f. Were in a captive career education program at school

g. Used a parent-child interaction packet

h. Received employment security job information

i. Were encouraged to visit the school counselor at school

j. Received information from the Kuder and Henmon Nelson instruments
Guidance tutors were employed and organized for the purpose of acquainting parents with guidance information that was available to them and their children. The guidance tutors employed were doctoral and masters candidates from Utah State University engaged in a counseling course of study.

Tutors visiting the home met periodically in a guidance seminar at Utah State University for the purpose of reviewing and interpreting guidance materials. Their efforts were spent in studying and interpreting the following:

1. Kuder DD interest inventories
2. Student grades
3. Differential Aptitude Test
4. Henmon Nelson
5. Career Profiles charts

Letters were sent to all parents indicating a career education program was to be initiated by the Logan City Schools and asked for their assistance. Guidance tutors made four to five visits to the home, depending on time needed to complete the specific task. Tutors would meet with either or both parents. It was not necessary for the child to be present during the discussion, although, he was welcome when the guidance tutor came to the home. The first visit was spent interpreting the Kuder DD Interest Inventory. The second visit was to explain results of the Differential Aptitude test and to plot these on a career profile sheet (Appendix A). In both visits, counselors:

1. Explained the career program at the senior high school.
2. Encouraged the parent to read career information materials that were left by the counselor or mailed or carried home by the child.

3. Discussed the use of the parent-child interaction packet which was designed to bring about parent-child discussion regarding the father's or mother's occupations and other pertinent information that either parent could provide.

A third visit was to explain the child's school grades received in the 9-10th grades, and also explain the Ihenmon Nelson results. A fourth visit was to acquaint the parent with the next year's registration procedures and materials, class offerings, and schedules. A fifth visit was made to the home answering any question parents might have regarding previous visits or interpreting career information left with parents. The guidance tutor administered a questionnaire during the fifth and final visit. Guidance tutors made no attempt to become involved in psychological counseling or deviate from the designed procedure—that of interpretation and dissemination of career information to the parent and the child. Guidance summary forms were maintained by each counselor on every home visit (Appendix B). These forms were completed and placed in the student's career file. Any special problems occurring in the home or observed by the guidance tutor were noted on the guidance referral form and this form was sent directly to the school counselor where the necessary action was taken to remedy the situation.
Parent and Community

A letter of introduction was sent to all parents participating in T₁ and T₂ groups, accompanied by another letter indicating support of the program signed by the Logan High School Parent-Teacher Association officers. The letters served as an introduction for the guidance tutors, and made it easier for them to make the initial contact and meet the families at home.

Weekly radio broadcasts over the local radio station provided an opportunity of explaining the role of the school based career guidance program. It also served to encourage parents to read and review career information mailed home or carried home by the child.

An invitation was extended to the investigator to speak to the Lions Club of Logan, to explain the role of the parent in parent-counselor program originating at Logan High School.

An information card of "Career Education" was designed and mailed home to parents describing a need for parental support in helping a child involved in the career decision making process. This card was mailed home to all parents in the tutor-parent-student group (T₁) and parent-student group (T₂).

Students in all 10th grade classes were informed of a continual effort on the part of the school to have the school and the parent work together in a cooperative career effort and it was suggested that students carry the message home to their parents requesting their assistance with the program.
The local newspaper (The Herald Journal) carried career information describing specific jobs and details of employment needed by a person interested in entering the World of Work.

Telephone contacts were made by regular Logan High School counselors answering questions of parents and students—questions that were referred to them by guidance tutors using the Guidance Summary Forms to the homes of parents and students participating in the project.

Contact was made with the local Department of Employment Security office asking for their assistance with employment information that could be mailed or taken into the home to help parents see the need for career education (Appendix C).

Research Methodology

Three groups were established (Table 2) by random assignment of classes among the eight sections of English taught at Logan Senior High School. Prior to school beginning it was the observation of the investigator that students were placed in the English sections by the school administration on a random basis, thus providing randomization of students among all classes.

All students were pre and post tested in their regular classrooms. Parents were also pre and post tested with instruments carried and administered in a doorstep interview by the guidance tutors.

Use of materials and interaction methods by parents were on a "volunteer" basis, especially among those in groups T₁ and T₂. The parent sample will, therefore, not be considered random.
Table 2

Treatment Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Test variables</th>
<th>Test variables</th>
<th>Student Common Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment (T₁)</td>
<td>Guidance tutor to assist at home</td>
<td>Direct solicited parental involvement</td>
<td>Use of all available interaction with school counselor available to home and parents</td>
</tr>
<tr>
<td>N = 91</td>
<td></td>
<td></td>
<td>Interaction packets available to home and parents</td>
</tr>
<tr>
<td>Treatment (T₂)</td>
<td>Direct solicited parental involvement</td>
<td>Use of all available interaction with school counselor available to home and parents</td>
<td></td>
</tr>
<tr>
<td>N = 82</td>
<td></td>
<td></td>
<td>Interaction packets available to home and parents</td>
</tr>
<tr>
<td>Placebo (T₃)</td>
<td>Use of all available interaction with packets available to home and parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 90</td>
<td></td>
<td></td>
<td>Interaction packets available to home and parents</td>
</tr>
</tbody>
</table>

T₁ group = tutor-parent-student
T₂ group = parent-student
T₃ group = students-placebo
Post testing of students and parents was carried out in the same manner as pre testing. In addition a "post test" instrument was designed and administered to (T₁) tutor-parent-student group to determine amounts and kinds of parent-child interaction that occurred.

Selection of Instruments

The following instruments were administered to ascertain the degree of effectiveness occurring among the solicited groups. The American College Testing Career Development Test (Copyright by ACT) were administered pre-post to all students in groups (T₁) tutor-parent-student, (T₂) parent-student, (T₃) student. A statistical analysis of these instruments was made and reported. A questionnaire designed by the investigators was used to ascertain the degree of agreement occurring between the parent and the child in relation to their occupation aspirations. This was administered pre-post to all students and parents in T₁-T₂-T₃. Those parents and children cooperating provided a matched comparison of agreement on questions regarding career education.

The assessment of materials, technique used by counselors visiting the home was undertaken using an instrument designed by the investigator. It was administered to the parents of the (T₁) tutor-parent-student group to ascertain the areas of importance as they relate to the total career education program with parent participation.

The information regarding reliability of the assessment of career development and other data with reference to the test is to be made to American College Testing Services, Box 168, Iowa City, Iowa 52240.
Statement of Hypotheses

The primary research hypotheses of this study were there would be a significant difference between the scores made by these students in three basic career counseling treatment groups in the career guidance program. The groups designed for use in this study were:

- $T_1$: Students, teachers, parents, home tutors, and school counselors working in a career program. (Parents were contacted directly by tutors four to five times during the project.)

- $T_2$: Students, teachers, parents, and school counselors working in a career program. (Parents were asked to assist by mail and use materials sent in the mail.)

- $T_3$: Students, teachers, and school counselors working in a career program. (No solicited parent involvement—placebo group.)

The research effort was interested in knowing is there a difference between the three groups in a student's knowledge of: (1) Career development principles, (2) reality in factors in terms of career development, and (3) knowledge of career planning process.

The null hypotheses were subjected to statistical analysis.

$H_0 1$. There is no difference between scores made by groups of students receiving different career counseling treatments on their knowledge of career development principles.

$H_0 2$. There is no difference between scores made by groups of students receiving different career counseling treatments on their career reality factors.
II.3. There is no difference between scores made by groups of students receiving different career counseling treatment on their career planning programs.

**Analysis of Results on Hypotheses**

American College Testing: The Assessment of Career Development

Data resulting from the administration of the American College Testing Instrument: (1) The assessment of career development—knowledge of basic career development principles, (2) reality factors, and (3) career planning were analyzed for differences which may have resulted from the treatment variables.

On the basis of the analysis of variance (Table 3) the analysis fails to show any significant difference on pre test scores on the assessment of career development principles. At the end of the treatment there is no difference occurring (Table 4) and when there was a control for pre test differences using analysis of covariances, there is no difference occurring between the groups as shown by Table 5. Table 6 shows no difference on the pre test of scores of the assessment of career development—knowledge of reality factors and no differences were registered on the post test (Table 7). There was no difference when there was control for pre test differences using analysis covariance as indicated in Table 8. Table 9 indicated no difference in the groups on the basis of career development principles—knowledge of career planning. At the end of the
Table 3

Analysis of Variance on Pre Test on ACT. The Assessment of Career Development (Knowledge of Basic Career Development Principles)

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor-Parent-Student</td>
<td>6.567</td>
</tr>
<tr>
<td>Parent-Student</td>
<td>6.299</td>
</tr>
<tr>
<td>Student</td>
<td>6.245</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>S. S.</th>
<th>M. S.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tot.</td>
<td>262</td>
<td>483.482</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRT.</td>
<td>2</td>
<td>5.280</td>
<td>2.640</td>
<td>1.436</td>
</tr>
<tr>
<td>ERR.</td>
<td>260</td>
<td>478.202</td>
<td>1.839</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.
Table 4

Analysis of Variance on Post Test on the ACT. (The Assessment of Career Development, Knowledge of Basic Career Development Principles)

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor-Parent-Student</td>
<td>6.634</td>
</tr>
<tr>
<td>Parent-Student</td>
<td>6.483</td>
</tr>
<tr>
<td>Student</td>
<td>6.756</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>S. S.</th>
<th>M. S.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tot.</td>
<td>262</td>
<td>475.733</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trt.</td>
<td>2</td>
<td>3.237</td>
<td>1.618</td>
<td>.890</td>
</tr>
<tr>
<td>Err.</td>
<td>260</td>
<td>472.496</td>
<td>1.817</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.
Table 5
Analysis of Covariance on the Post Test of the ACT. The Assessment of Career Development. (Knowledge of Basic Career Development Principles)

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor-Parent-Student</td>
<td>6.543</td>
</tr>
<tr>
<td>Parent-Student</td>
<td>6.518</td>
</tr>
<tr>
<td>Student</td>
<td>6.816</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>M:S.</th>
<th>Adj. F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trt.</td>
<td>2</td>
<td>2.366</td>
<td>1.664</td>
</tr>
<tr>
<td>Reg.</td>
<td>1</td>
<td>104.249</td>
<td>73.</td>
</tr>
<tr>
<td>Err.</td>
<td>259</td>
<td>1.421</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.
Table 6
Analysis of Variance on the Pre Test on the ACT. The Assessment
of Career Development. (Knowledge of Reality Factors)

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor-Parent-Student</td>
<td>6.600</td>
</tr>
<tr>
<td>Parent-Student</td>
<td>6.897</td>
</tr>
<tr>
<td>Student</td>
<td>6.559</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>S. S.</th>
<th>M. S.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tot.</td>
<td>262</td>
<td>680.806</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trt.</td>
<td>2</td>
<td>5.928</td>
<td>2.964</td>
<td>1.141</td>
</tr>
<tr>
<td>Err.</td>
<td>260</td>
<td>674.878</td>
<td>2.596</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.
Table 7

Analysis of Variance on the Post Test of the ACT. The Assessment of Career Development: (Knowledge of Reality Factors)

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor-Parent-Student</td>
<td>6.956</td>
</tr>
<tr>
<td>Parent-Student</td>
<td>6.782</td>
</tr>
<tr>
<td>Student</td>
<td>6.966</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>S.S.</th>
<th>M.S.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tot.</td>
<td>262</td>
<td>725.430</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trt.</td>
<td>2</td>
<td>1.861</td>
<td>930</td>
<td>.334</td>
</tr>
<tr>
<td>Err.</td>
<td>260</td>
<td>723.568</td>
<td>2.782</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.
Table 8

Analysis of Covariance on the Pre-Post of the ACT. The Assessment of Career Development. (Knowledge of Reality Factors)

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor-Parent-Student</td>
<td>6.988</td>
</tr>
<tr>
<td>Parent-Student</td>
<td>6.702</td>
</tr>
<tr>
<td>Student</td>
<td>7.013</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>M.S.</th>
<th>Adj. F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trt.</td>
<td>2</td>
<td>2.584</td>
<td>1.067</td>
</tr>
<tr>
<td>Reg.</td>
<td>1</td>
<td>96.433</td>
<td>39.825</td>
</tr>
<tr>
<td>Err.</td>
<td>259</td>
<td>2.421</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.
Table 9
Analysis of Variance on the Pre Test of the ACT. The Assessment of Career Development. (Knowledge of Career Planning)

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor-Parent-Student</td>
<td>14.623</td>
</tr>
<tr>
<td>Parent-Student</td>
<td>14.391</td>
</tr>
<tr>
<td>Student</td>
<td>14.628</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>S.S.</th>
<th>M.S.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tot.</td>
<td>262</td>
<td>2095.156</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trt.</td>
<td>2</td>
<td>3.194</td>
<td>1.596</td>
<td>.198</td>
</tr>
<tr>
<td>Err.</td>
<td>260</td>
<td>2091.961</td>
<td>8.046</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.
treatment there was no difference as indicated by Table 10. Controlling for
pre test difference, no difference among the groups was found as indicated in
Table 11.

The statistical analysis applied to the scores made on the American
College Testing Instrument—The Assessment of Career Development
(a) Knowledge of basic career development
(b) Knowledge of Reality Factors
(c) Knowledge of Career Planning
indicated that no significant difference occurred between the three groups.
Therefore the null hypothesis of no significant difference between scores made
by groups of students receiving different counseling treatments on:

H₀ 1. The knowledge of Career Development Principles
H₀ 2. The knowledge of Career Reality Factors
H₀ 3. The knowledge of Career Planning Process

was not rejected.

Summary of Data—Assessment of Career Development

The purpose of the study was to ascertain the effect of a career education
program on the student's knowledge of career planning, reality factors, and
career development principles. Hypotheses were formulated to answer questions
concerning the effect of treatment upon a student's knowledge of career develop-
ment principles, career reality factors and career planning processes.

Treatments were organized and administered and the data analyzed
and the data revealed no significant difference. Hypotheses were, therefore,
Table 10
Analysis of Variance on the Post Test of the ACT. The Assessment of Career Development. (Knowledge of Career Planning)

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor-Parent-Student</td>
<td>15.034</td>
</tr>
<tr>
<td>Parent-Student</td>
<td>15.345</td>
</tr>
<tr>
<td>Student</td>
<td>15.780</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>S. S.</th>
<th>M. S.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tot.</td>
<td>262</td>
<td>1719.977</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trt.</td>
<td>2</td>
<td>24.619</td>
<td>12.309</td>
<td>1.888</td>
</tr>
<tr>
<td>Err.</td>
<td>260</td>
<td>1695.357</td>
<td>6.520</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.
Table 11

Analysis of Covariance on the Pre Post of the ACT. The Assessment of Career Development. (Knowledge of Career Planning)

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor-Parent-Student</td>
<td>15.003</td>
</tr>
<tr>
<td>Parent-Student</td>
<td>15.409</td>
</tr>
<tr>
<td>Student</td>
<td>15.746</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>M.S.</th>
<th>Adj. F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trt.</td>
<td>2</td>
<td>12.205</td>
<td>2.343</td>
</tr>
<tr>
<td>Reg.</td>
<td>1</td>
<td>346.459</td>
<td>66.523</td>
</tr>
<tr>
<td>Err.</td>
<td>259</td>
<td>5.208</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.
accepted, stating no difference occurred within the groups of students participating in this study using the ACT Assessment of Career Development.

Analysis of Responses of Parent and Student Career Education

The degree of agreement on occupational aspiration between the parents and their child was ascertained by the use of a questionnaire designed to compare occupational aspiration responses of the parents and their son or daughter.

The following tables report the results of the questionnaires circulated to parents and their sons and daughters in each of the three groups participating in the study. The statistical application of the Chi-square test to the scores was made to ascertain any difference.

Table 12

If You (Parent--Choose a Career for Your Son or Daughter)
(Student--Choose an Occupation) What Occupation would You Select

<table>
<thead>
<tr>
<th>Tutor-parent-student group</th>
<th>Number Student-Parent Responses</th>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete</td>
<td></td>
<td></td>
<td>14</td>
<td>11</td>
<td>5.5</td>
</tr>
<tr>
<td>Area</td>
<td></td>
<td></td>
<td>14</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Mixed</td>
<td></td>
<td></td>
<td>9</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Disagreement</td>
<td></td>
<td></td>
<td>30</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.
Table 13

If You (Parent—Choose a Career for Your Son or Daughter)

(Students—Choose an Occupation) What Occupation
would You Select

<table>
<thead>
<tr>
<th>Parent-student group</th>
<th>Number Student-Parent Responses</th>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Complete</td>
<td>13</td>
<td>16</td>
<td>1.26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Area</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mixed</td>
<td>11</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagreement</td>
<td>34</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Significant</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 14

If You (Parent—Choose a Career for Your Son or Daughter)

(Students—Choose an Occupation) What Occupation
would You Select

<table>
<thead>
<tr>
<th>Student group</th>
<th>Number of Student-Parent Responses</th>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Complete</td>
<td>17</td>
<td>20</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Area</td>
<td>5</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mixed</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagreement</td>
<td>26</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Significant</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Table 15**

How Certain are You that (Parent--Your Child) (Student--You) will Choose the Occupation Selected

<table>
<thead>
<tr>
<th>Tutor-parent-student group</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Student-Parent Responses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of Agreement</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>Agree</td>
<td>34</td>
<td>27</td>
</tr>
<tr>
<td>Disagree</td>
<td>33</td>
<td>33</td>
</tr>
</tbody>
</table>

Not Significant.

**Table 16**

How Certain are You that (Parent--Your Child) (Student--You) will Choose the Occupation Selected

<table>
<thead>
<tr>
<th>Parent-student group</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Student-Parent Responses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of Agreement</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>Agree</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>Disagree</td>
<td>33</td>
<td>29</td>
</tr>
</tbody>
</table>

Not Significant.
### Table 17

How Certain are You that (Parent -- Your Child) (Student -- You) will Choose the Occupation Selected

<table>
<thead>
<tr>
<th></th>
<th>Student group</th>
<th>Number Student-Parent Responses</th>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agree</td>
<td>26</td>
<td>34</td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disagree</td>
<td>29</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Not Significant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 18

Which Education Program (Parent -- Would You like Your Son or Daughter to Complete) (Student -- Would You like to Complete)

<table>
<thead>
<tr>
<th></th>
<th>Tutor-parent-student group</th>
<th>Number Student-Parent Responses</th>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agree</td>
<td>22</td>
<td>23</td>
<td>.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disagree</td>
<td>44</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Not Significant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 19
Which Education Program (Parent—Would You like Your Son or Daughter to Complete) (Student—Would You like to Complete)

<table>
<thead>
<tr>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>14</td>
<td>24</td>
<td>2.29</td>
</tr>
<tr>
<td>Disagree</td>
<td>48</td>
<td>42</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

Table 20
Which Education Program (Parent—Would You like Your Son or Daughter to Complete) (Student—Would You like to Complete)

<table>
<thead>
<tr>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>20</td>
<td>26</td>
<td>.32</td>
</tr>
<tr>
<td>Disagree</td>
<td>35</td>
<td>34</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>
Table 21
Would You like Information Describing Jobs, Requirement for Entrance into Employment, Job Listings, and Career Counseling Information

<table>
<thead>
<tr>
<th>Tutor-parent-student group</th>
<th>Number Student-Parent Responses</th>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td>55</td>
<td>37</td>
<td></td>
<td>5.7</td>
</tr>
<tr>
<td>Disagree</td>
<td></td>
<td>12</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 22
Would You like Information Describing Jobs, Requirement for Entrance into Employment, Job Listings, and Career Counseling Information

<table>
<thead>
<tr>
<th>Parent-student group</th>
<th>Number Student-Parent Responses</th>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td>49</td>
<td>50</td>
<td></td>
<td>.05</td>
</tr>
<tr>
<td>Disagree</td>
<td></td>
<td>13</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Significant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 23
Would You like Information Describing Jobs, Requirements for Entrance into Employment, Job Listings, and Career Counseling Information

<table>
<thead>
<tr>
<th>Student group</th>
<th>Number Student-Parent Responses</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td>40</td>
<td>47</td>
<td>.24</td>
</tr>
<tr>
<td>Disagree</td>
<td></td>
<td>15</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.

Table 24
Do You Feel Vocational Education Programs are Adequate, Challenging and Rewarding Enough to Select Them as You Prepare for Your Vocation

<table>
<thead>
<tr>
<th>Tutor-parent-student group</th>
<th>Number Student-Parent Responses</th>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td></td>
<td>35</td>
<td>37</td>
<td>.8</td>
</tr>
<tr>
<td>Disagree</td>
<td></td>
<td></td>
<td>32</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.
Table 25

Do You Feel Vocational Education Programs are Adequate, Challenging and Rewarding Enough to Select Them as You Prepare for Your Vocation

<table>
<thead>
<tr>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>36</td>
<td>44</td>
<td>.71</td>
</tr>
<tr>
<td>Disagree</td>
<td>26</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.

Table 26

Do You Feel Vocational Education Programs are Adequate, Challenging and Rewarding Enough to Select Them as You Prepare for Your Vocation

<table>
<thead>
<tr>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>22</td>
<td>34</td>
<td>2.58</td>
</tr>
<tr>
<td>Disagree</td>
<td>33</td>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>

Not Significant.
Table 27

Have You Spent Time with Your (Parent—Son or Daughter) (Student—with Parents) Discussing Interests in School, Careers and Job Opportunities

<table>
<thead>
<tr>
<th>Tutor-parent-student group</th>
<th>Number Student-Parent Responses</th>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agree.</td>
<td>47</td>
<td>48</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>20</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Significant.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 28

Have You Spent Time with Your (Parent—Son or Daughter) (Student—with Parents) Discussing Interests in School, Careers and Job Opportunities

<table>
<thead>
<tr>
<th>Student group</th>
<th>Number Student-Parent Responses</th>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agree.</td>
<td>32</td>
<td>44</td>
<td>2.39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>30</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Significant.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 29

Have You Spent Time with Your (Parent--Son or Daughter) (Student--with Parents) Discussing Interests in School, Careers and Job Opportunities

<table>
<thead>
<tr>
<th>Student group</th>
<th>Number Student-Parent Responses</th>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agree</td>
<td>34</td>
<td>35</td>
<td>.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>21</td>
<td>25</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

### Table 30

Which Parent (Parent--Parent) (Student--Parent) Provided the Most Career Information--Discussing Your Career Interests, School Interests, Entrance Requirements for Employment, or Job Interests

<table>
<thead>
<tr>
<th>Tutor-parent-student group</th>
<th>Number Student-Parent Responses</th>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agree</td>
<td>32</td>
<td>37</td>
<td>1.95</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>35</td>
<td>23</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

Not Significant.
Table 31
Which Parent (Parent--Parent) (Student--Parent) Provided the Most Career Information--Discussing Your Career Interests, School Interests, Entrance Requirements for Employment, or Job Interests

Parent-student group

<table>
<thead>
<tr>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>32</td>
<td>39</td>
<td>0.45</td>
</tr>
<tr>
<td>Disagree</td>
<td>30</td>
<td>27</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

Table 32
Which Parent (Parent--Parent) (Student--Parent) Provided the Most Career Information--Discussing Your Career Interests, School Interests, Entrance Requirements for Employment, or Job Interests

Student group

<table>
<thead>
<tr>
<th>Degree of Agreement</th>
<th>Pre</th>
<th>Post</th>
<th>Chi-square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>35</td>
<td>33</td>
<td>0.57</td>
</tr>
<tr>
<td>Disagree</td>
<td>20</td>
<td>27</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Table</td>
<td>Group</td>
<td>Statement</td>
<td>Chi-square Values</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>-----------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>Occupational selection</td>
<td>5.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>&quot;     &quot;</td>
<td>1.26</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>&quot;     &quot;</td>
<td>0.35</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Certainty of selection</td>
<td>0.72</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>&quot;     &quot;</td>
<td>0.04</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>&quot;     &quot;</td>
<td>0.67</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>Educational program selection</td>
<td>0.09</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>&quot;     &quot;</td>
<td>2.29</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>&quot;     &quot;</td>
<td>0.32</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>Request for information</td>
<td>5.7</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>&quot;     &quot;</td>
<td>0.05</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>&quot;     &quot;</td>
<td>0.24</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>Vocational program adequate</td>
<td>0.8</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>&quot;     &quot;</td>
<td>0.71</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>&quot;     &quot;</td>
<td>2.58</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>Spent time on career education</td>
<td>1.13</td>
</tr>
<tr>
<td>17</td>
<td>2</td>
<td>&quot;     &quot;</td>
<td>2.39</td>
</tr>
<tr>
<td>18</td>
<td>3</td>
<td>&quot;     &quot;</td>
<td>0.04</td>
</tr>
<tr>
<td>19</td>
<td>1</td>
<td>Which parent assists in career education</td>
<td>1.95</td>
</tr>
<tr>
<td>20</td>
<td>2</td>
<td>&quot;     &quot;</td>
<td>0.45</td>
</tr>
<tr>
<td>21</td>
<td>3</td>
<td>&quot;     &quot;</td>
<td>0.57</td>
</tr>
</tbody>
</table>
Table 34

Analysis of Variance on the Type of Educational Program the Parents and Their Sons and Daughters Agree on

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor-parent-student</td>
<td>3.39</td>
</tr>
<tr>
<td>Parent-student</td>
<td>3.75</td>
</tr>
<tr>
<td>Student</td>
<td>3.7</td>
</tr>
<tr>
<td>Student</td>
<td>3.36</td>
</tr>
<tr>
<td>Parent</td>
<td>3.87</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SV</th>
<th>df</th>
<th>S.S.</th>
<th>M.S.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student-Parent</td>
<td>1</td>
<td>46.88</td>
<td>46.88</td>
<td>23.21*</td>
</tr>
<tr>
<td>3 Trt. Groups</td>
<td>2</td>
<td>19.02</td>
<td>9.51</td>
<td>4.71*</td>
</tr>
<tr>
<td>Pre-Post</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
<td>.54</td>
</tr>
<tr>
<td>Error</td>
<td>718</td>
<td>1450.26</td>
<td>2.02</td>
<td></td>
</tr>
</tbody>
</table>

*Significant beyond the .01 level.
Table 34 indicated there was no difference from the pre to post scores. A statistically significant difference occurs among the three treatment groups. Parents and their children in the tutor-parent-student group had a lower mean than other groups—3.39.

The mean for parents was higher with 3.87 mean as compared to 3.36 for students in the entire group.

On the basis of the analysis of the responses of parents and their child in the areas of career education, it was noted no change between the pre and post scores occurred. One exception was noted, Table 21, which states "Would you like information-describing jobs, requirement for entrance into employment, job listing and career counseling information?" A significant difference of 5.7 was cited. An analysis of the data revealed parents of the tutor-parent-student group were interested in more career information and as a result disagreed with their sons and daughters resulting in the difference.

It was concluded that parents working in the tutor-parent-student program were requesting career information and were not in agreement with their sons or daughters who felt they did not need additional career information.

Table 34 reflected a significant difference in occupational aspiration of a parent and their son or daughter. An analysis of the data indicated no change occurred from the pre to post testing. Parents' aspiration was considerably higher in all groups at all times during this project.

The significant difference occurring between student and parent cannot be attributed to the treatment since the aspiration level was preset on the pre
and post testing. It can be concluded that parents have a higher educational aspiration than those of their sons and daughters.

**Analysis of Counseling Techniques**

Questions regarding the attitudes parents reflect about the techniques used in aiding them with career information were sought. Parents of the \((T_1)\) tutor-parent-student group responded to the questions which were carried to the home by the guidance tutor.

Parents were asked to respond to the questionnaire in an attempt to identify those parts of the career education program that were most beneficial and most important to them in helping them in the dissemination of career information with their children.

Parents were asked the following questions.

1. How would you describe the overall contribution made by counselors visiting the home and presenting career-guidance information?

**Responses as to Usefulness**

<table>
<thead>
<tr>
<th>Essential</th>
<th>Useful</th>
<th>Interesting</th>
<th>Useless</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>32</td>
<td>24</td>
<td>6</td>
</tr>
</tbody>
</table>

**Presentation by Counselor**

<table>
<thead>
<tr>
<th>Very Clear</th>
<th>Moderately Clear</th>
<th>Unclear</th>
<th>Not Presented</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>22</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

\(^1\) Counselor as stated on the parent questionnaire throughout this section are the guidance tutors visiting the home.
The contribution made by the program to help parents was considered useful and interesting in assisting them with their discussions about careers with their sons and daughter—90% of the parents reported. The presentation by the counselors (tutors) was done in a very clear to moderately clear manner as indicated by 98% of the parents reporting.

2. Specific areas were presented to you during the counselor visits. Please rate these areas as most useful.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Essential</th>
<th>Useful</th>
<th>Interesting</th>
<th>Useless</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>44</td>
<td>67</td>
<td>20</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
<td>61</td>
<td>19</td>
<td>29</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>34</td>
<td>52</td>
<td>21</td>
<td>32</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>26</td>
<td>40</td>
<td>16</td>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>22</td>
<td>33</td>
<td>14</td>
<td>21</td>
<td>14</td>
</tr>
<tr>
<td>6</td>
<td>12</td>
<td>18</td>
<td>12</td>
<td>18</td>
<td>16</td>
</tr>
</tbody>
</table>

a. Counselor’s presentation of materials
b. The aptitude information (DAT) “areas of strength” for my son/daughter
c. The Interest Inventory describing areas of interest for my son/daughter
d. Printed materials about employment information left by counselor
e. The parent-son/daughter interaction packet
f. Career information mailed to the home: Cards, fact sheets, etc.

It may be concluded by the results of the questions that parents were impressed with the counselor presentation of the DAT and the Kuder Interest
Inventory as being essential and useful information for the parent. The parent-son/daughter interaction packed ranked low as did career education mailed to or left with the parent.

3. What are your opinions as to the importance of the following items when you discuss career opportunities with your son/daughter?

<table>
<thead>
<tr>
<th>Rank</th>
<th>Essential</th>
<th>Useful</th>
<th>Interesting</th>
<th>Useless</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>34</td>
<td>24</td>
<td>4</td>
<td>3</td>
<td>65</td>
</tr>
<tr>
<td>2</td>
<td>32</td>
<td>30</td>
<td>2</td>
<td>1</td>
<td>65</td>
</tr>
<tr>
<td>3</td>
<td>32</td>
<td>24</td>
<td>8</td>
<td>1</td>
<td>65</td>
</tr>
<tr>
<td>4</td>
<td>32</td>
<td>23</td>
<td>7</td>
<td>3</td>
<td>65</td>
</tr>
<tr>
<td>5</td>
<td>28</td>
<td>29</td>
<td>6</td>
<td>2</td>
<td>65</td>
</tr>
<tr>
<td>6</td>
<td>27</td>
<td>29</td>
<td>7</td>
<td>2</td>
<td>65</td>
</tr>
<tr>
<td>7</td>
<td>25</td>
<td>31</td>
<td>6</td>
<td>3</td>
<td>65</td>
</tr>
<tr>
<td>8</td>
<td>24</td>
<td>32</td>
<td>7</td>
<td>2</td>
<td>65</td>
</tr>
<tr>
<td>9</td>
<td>20</td>
<td>31</td>
<td>12</td>
<td>2</td>
<td>65</td>
</tr>
<tr>
<td>10</td>
<td>19</td>
<td>32</td>
<td>7</td>
<td>7</td>
<td>65</td>
</tr>
<tr>
<td>11</td>
<td>18</td>
<td>35</td>
<td>8</td>
<td>4</td>
<td>65</td>
</tr>
</tbody>
</table>

- a. How long will the preparation take?
- b. What does a person do in this career?
- c. What must one do to prepare for this career?
- d. Where must one go to get the training?
- e. What are the chances of being employed?
- f. What will it cost?
- g. In what areas of the country might one expect to find employment?
- h. What are some related careers one might consider?
- i. What vocational offerings leading to employment are available at the high school and post-high school levels?
- j. Are opportunities available locally in this career?
- k. What starting salary is it reasonable to expect?
What sort of training will be expected to gain promotions? How much change in "responsibility" should one expect in this career over his employable years?

How long is the preparation? What does a person do in the career and what must one do to prepare for this career? Where must one go for training all of the above ranked in the upper five areas of interest. One area of interest that ranked low was the item stating; "What are the related career opportunities one might consider?"

4. What was the most effective method used to reach your son/daughter with career information during the past semester. (Please rank 1 to 4, 1 being the most effective.)

<table>
<thead>
<tr>
<th>Rank</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26</td>
<td>25</td>
<td>10</td>
<td>4</td>
<td>65</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>19</td>
<td>17</td>
<td>4</td>
<td>65</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>15</td>
<td>25</td>
<td>11</td>
<td>65</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>4</td>
<td>23</td>
<td>36</td>
<td>65</td>
</tr>
</tbody>
</table>

- a. Materials mailed or left with the parent.
- b. The counselor going to the home and assisting the parent and son/daughter.
- c. The parents using the interaction packet.
- d. The parents attending school in a career program.

Materials mailed or left with the parent rank first with parents, followed closely by the counselor going to the home and assisting the parent. Parents attending a school program ranked lowest of the suggested methods.
5. What ways have you used to assist your child to gain the necessary information to adequately explore career opportunities? 

**Rank**

1. **52** Completed some of the materials left by the counselor.

2. **44** Encouraged my son/daughter to visit the Career Center at the high school.

3. **31** Reviewed articles on careers printed in newspapers or magazines.

4. **25** Told my child about my occupation with the use of an "interaction guide."

5. **13** Other: These included: talks with people in field, TV career programs, open discussions, more conversations.

6. **12** Worked with my child in completing a programmed course of instruction on career education.

7. **10** Attended career education programs with him at the school, at a business firm.

Parents completing some of the materials left by the counselor ranked as number one. It was followed by the item stating "parents encouraged by son or daughter to visit the career center at the high school." Ranking third was the item "parents used the interaction guide followed by reviewing articles found in newspapers and magazines."
6. Which of the following items do you think might be most useful with your son/daughter in exploring career education? Rank 1st, 2nd, 3rd, etc.:

<table>
<thead>
<tr>
<th>Rank</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>15</td>
<td>13</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>19</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>16</td>
<td>13</td>
<td>11</td>
<td>8</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>11</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>6</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>3</td>
<td>8</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

On the job tryouts ranked first in identifying the most useful way parents might explore career education with their sons or daughters followed by direct observation. Interviews with experts ranked third with publications describing employment demands ranked fourth.
7. How much time did you invest with your son/daughter exploring careers--talking about tentative occupational goals, child's likes or dislikes--during this program?

Rank

1. 42 a. 10-15 minutes per week (average)
2. 14 b. 30 minutes to 1 hour per week (average)
3. 4 c. 1 to 2 hours or more per week (average)
4. 5 d. None

Sixty-four percent of the parents indicated they spent some time talking with their sons or daughters about occupational information. Through the use of the information that was made available to the parents, parents were in a better position to intelligently discuss a student's interests, aptitudes, job information, and future educational opportunities. Seven percent of the parents indicated there was no interaction at all with their sons and daughters.

9. How would you react to the length of time the counselor visited the home (20-30 minutes)?

Rank

1. 56 a. Adequate
2. 5 b. Too long
3. 2 c. Too short

Counselors were instructed to stay approximately 20-30 minutes. This was sufficient time to present the necessary materials. Counselors reported in some cases they were detained as long as 1 hour or more answering questions.
about school programs that affect their child. Counselors reported the average time spent at the home was approximately 30 minutes. Appointments were made prior to going to the home allowing parents the opportunity to make arrangements for the meeting without any interruptions.

10. How many visits should be made during the school year?

<table>
<thead>
<tr>
<th>Rank</th>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22</td>
<td>a. 3 visits</td>
</tr>
<tr>
<td>2</td>
<td>19</td>
<td>b. 2 visits</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>c. 4 visits</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>d. 0 visits</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>e. 1 visit</td>
</tr>
</tbody>
</table>

Counselors made four to five visits to the home to accomplish the purposes of the program. In some cases the parents felt there was no need to have the counselor return for a fifth visit after the parents had received the program information as was outlined in previous visits. Parents indicated this was the first time a counselor had made the effort to inform the parents about their child's interests and abilities.

11. How would you describe the contribution of the program in helping you understand your son/daughter?

<table>
<thead>
<tr>
<th>Rank</th>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>48</td>
<td>a. Very good</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>b. Fair</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>c. Excellent</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>d. Poor</td>
</tr>
</tbody>
</table>
Seventy-three percent of the parents indicated the program was very good to excellent in assisting them in making a contribution to the better understanding of their son or daughter. In some cases, parents indicated they had discussed career goals with their son or daughter and the parent had a fair to good understanding of their child's occupational aspirations.

12. Would you recommend this program be continued next year?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>66</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

Ninety-two percent of the parents indicated the program should be extended for another year. Parents were very impressed with the career file that was made available to them and the fact that the counselor would visit the parents and discuss the child's aptitudes and interests.

13. How would you describe your attitude toward the career education program which included home visits and school assistance?

Rank

<table>
<thead>
<tr>
<th></th>
<th>Rank</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40</td>
<td>Very good</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>Excellent</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>Fair</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>Poor</td>
</tr>
</tbody>
</table>

Seventy-six percent of the parents indicated their attitude toward the career education program was very good to excellent.
14. As you now view your son/daughter, what appears to be the best alternative for your son/daughter after completing high school?

Rank

1. 32 a. To attend a university
2. 21 b. To attend a vocational school
3. 5 c. To get a job
4. 7 All of the above

Forty-nine percent of the parents indicated their son or daughter should attend a university after completing high school.

Summary of Data Counseling

Technique Questionnaire

Response recorded by the parents regarding their feelings toward the various techniques used in the tutor-home career program are concluded as follows:

1. Parents considered the program useful in helping them and their children with discussions on career education.
2. Career guidance tools specifically Kuder and the DAT were useful to the parent in helping them understand their child.
3. Guidance tutors can present materials in a clear and understandable manner to parents.
4. Parents feel it important to have answers to the following questions as they discuss career information with their sons and daughters. How long does it take to prepare for this career? Where must one go for the training and what are the chances for employment?

5. Materials mailed or left with the parent and the counselor going to the home and assisting the parent and their son or daughter with career information was ranked as the most effective method used to reach their son or daughter.

6. Parents spent time completing materials left by the guidance tutor and encouraging their son or daughter to visit the career center at the high school. This statement favored as the better way to help the child gain the career information.

7. On the job tryouts—Direct observation and interview with experts were considered useful in exploring career education.

8. Parents spent 10-15 minutes per week exploring careers with their son or daughter.

9. Twenty to 30 minutes was the suggested time limit for tutor to home visits.

10. The number of visits to the home for counseling purpose was two to three visits by a counselor.

11. The total program and the attitudes of the parent towards parent-child-school, the approach was stated as being very good.
12. It was suggested that the program continue next year with counselors visiting the parents with career information.

Cost Analysis

The costs of the program that would be applicable to other school districts are reflected in three major areas: (1) Costs of the guidance tutors. (2) Testing, writing and reproducing materials for use by the parent. (3) Administration cost. (1) The cost of the guidance tutor was set at $4.50 per home contract, which was designed to be 30 minutes per visit. The home tutor prepared all the profile charts in advance that were included at a cost of $4.50.

Each home contact was scheduled to receive up to five visits to complete the program, each counselor would receive five times $4.50 or $22.50.

Six counselors were employed in this project to assist in the tutor-parent-student program. They also assisted with making contacts to the home in order to gather data from other parents participating in this experiment.

Costs for travel were paid to the tutors at the rate of 10¢/mile

The guidance tutors met in seminars or counseling groups to coordinate the interpretation of the instruments and also the program for which they were reimbursed. The average cost for the four to five contacts would be approximately $26.25 per student.

(2) The testing program using Kuder-DAT all part of the regular counselors assignment and no cost was assumed. There was the need to assemble the students career file and have an extra copy available for the tutor to make the
home contact. The cost of each file to duplicate and assemble is approximately $1.15 per student.

Duplication of career information from agencies such as the Office of Employment Security was done on a Xerox 2600 Copier at a fee of 3¢ per page.

(3) Administration costs for this program required one director. In a normal school operation the school counselor could organize and administer the program which would substantially reduce the cost of the program.

Conclusions

To the extent that the findings resulting from the research procedures employed in this study and the assumptions made are valid, the following conclusions may be drawn:

1. Since there was no significant difference in the statistical analysis on the assessment of career development it may be concluded that either approach identified in this study could be used in a career education program.

2. Based on the differences occurring between the parents and the child's career information needs, parents indicated more of a need for career information than their sons or daughters indicated.

3. Based on the cost of the tutors visiting parents at their homes and the cost of the regular school counselor, in terms of face-to-face counseling the tutor visiting the home is approximately one-half the cost of the regular school counselor.
4. Parents' reaction would conclude the program to be worthy of continuation with guidance contacts made to the home for the purpose of explaining contents of a career file.

5. Parent reaction would conclude the career file to be a useful tool for use by the guidance counselors, student and parents.

6. The school can initiate a career program operating from the school with counselors assisting the parents and their children with career and guidance information.

7. Parents' reaction indicated two, three, or four visits to be made to the home by the guidance tutors. A 20 to 30 minute visit to be sufficient to present the material.

8. Based on an analysis data, parents consistently have a higher educational aspiration for their sons and daughters.

9. Based on parents' response, the DAT and the Kuder Interest Inventory contain information that parents feel important to aid them in their understanding of their child.

**Discussion of Findings**

Although no significant results occurred as the result of the statistical analysis some significant observations were made by the investigators, they are directly related to the program and could well be part of other guidance programs.
1. In-service career education programs are essential to inform faculties of schools sponsoring career education programs. Faculty members of a school fail to become involved in career education programs and many are not knowledgeable of a career center operation.

2. A cooperative effort must exist between principal, school career education coordinator and media personnel and others assisting with the career center operation.

3. Counselors visiting the home were accepted as an innovative approach to the present high school career guidance program. Parents reacted, "This is the first time anyone has contacted me at home to help understand my child and I hope it can be continued."

4. Counselors in the school program felt part of their day could be spent visiting the home and working with parents if their assignment at school were re-defined.

5. Counselor aids could be employed to carry out a home counselor program at a cost of $4.50 per contact (could be applicable to other districts) for a class size of 350 students for a cost of less than $2,000.00.

6. The image of the counselor was reinforced. A counselor doing career counseling with sophomore students--face-to-face counseling and discussing a student's interests, aptitudes, and special abilities.
7. Parents are interested in career information and should receive supportive materials to help them in their parent son/daughter career discussions.

8. A counseling program functioning in the school should provide face-to-face counseling and provide parents with information to help them be better informed about world of work requests and opportunities.

Recommendations

The following recommendations are based on the statistical data derived in this study and the investigator's observation of a career guidance program that involved: (1) The establishing of a career center at Logan Senior High School, (2) Sophomore students in an English program providing one semester of counsel 1 hour per week for 18 weeks, (3) A staff of guidance tutors employed to make home visits, (4) An in-service program for all faculty of the school, and (5) Counselors providing career counseling to sophomore students using a career file.

1. Schools anticipating a career guidance center should initiate a seminar to acquaint all professional staff of the need for career education.

2. Schools administrators should consider releasing the counselor from the non-guidance activities and allowing them to make home
contacts to inform parents of the students, the students' interests and aptitudes.

3. Further study should be undertaken to ascertain the effect, if any, on a parent having a higher occupational aspiration than those of their sons and daughters.

4. Due to the fact no significant difference occurred in the students' knowledge of career reality, planning, or career-development principles, further study is recommended.

5. It is recommended that administrators staffing career centers use qualified counseling personal experiences with career counseling techniques, materials and programs.

6. Career programs being initiated in schools should be integrated with the present programs operating in the present curriculum, such as English or social studies.

7. Career counseling programs beginning at the 10th grade should continue throughout the 11th and 12th grades with counselors providing face-to-face counseling.

8. Career files should be developed for use by the counselor-teacher-administrator, parent and student and the file be maintained and used each year to reserve career plans while the students is at the school and upon graduation or termination the file be presented to him.
9. The Director of the Career Center should initiate a job placement service with cooperation of the Department of Employment Security and other civic groups for the purpose of assisting students with job placement based on their needs, interests, and aptitudes.
Selected Bibliography


Barlow, Melvin L. Just try to find a job without it. American Education, 1967, 3(10), 5.


Hoyt, Evans, Mackin, and Mangum. Career education--What is it, how to do it. Salt Lake City, Utah: Olympus Publishing Co.


Petersen, M. Larry. *A study to ascertain the feasibility of conducting a career information program with parents of tenth grade students at Logan Senior High School.* Salt Lake City, Utah: Utah State Department of Public Instruction, 1972.


Roth, Robert M. *The psychology of vocational development.* Boston, Massachusetts: Allyn & Bacon, 1970.

Shimberg, Benjamin. *Stop the wagon I want to get off.* AVA Journal, 1972, 47(7), 49.


Appendix A: Career Profile Form

Name______________________________

OCCUPATIONAL INTEREST SURVEYS

<table>
<thead>
<tr>
<th>ACT</th>
<th>Kuder DD</th>
<th>Occupational Categories (Rankings from ACT and Kuder)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Social Service</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Business Contact</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Business Detail</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Trades</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Science/Technical</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Arts</td>
</tr>
</tbody>
</table>

Preferred Working Conditions (Student Rating)

<table>
<thead>
<tr>
<th>Indoor</th>
<th>Working with Others</th>
<th>Varied Work</th>
<th>Physical Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outdoor</th>
<th>Work Alone</th>
<th>Routine Work</th>
<th>Non-Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Job Values (Student Rating)*

<table>
<thead>
<tr>
<th>VI</th>
<th>I</th>
<th>UI</th>
<th>VIU*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Co-Workers, Independence, Interest, Job Security, Pay, Responsibility

Job Values (Parent Rating)*

<table>
<thead>
<tr>
<th>VI</th>
<th>I</th>
<th>UI</th>
<th>VIU*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Co-Workers, Independence, Interest, Job Security, Pay, Responsibility
Appendix B: Guidance Summary

GUIDANCE SUMMARY

Student's Name ___________________________ Interview No. ___________ Date ___________

1. Additional information requested by student:

2. Additional information requested by parent:

3. Counselor/student/parent comments:

4. Additional help wanted:

5. Follow-up plans:

6. Summary implications (counselor):

7. Parent/student questions and/or recommendations:
Following is a list of selected occupations and their expected number of job openings each year. Job openings include new job openings plus replacement openings that occur due to persons either dieing, retiring or leaving their employment for other reasons.

<table>
<thead>
<tr>
<th>Occupational Title</th>
<th>Average Annual Job Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountants and Auditors</td>
<td>100</td>
</tr>
<tr>
<td>Assemblers, Electrical Equipment</td>
<td>50</td>
</tr>
<tr>
<td>Attendant, Auto Service Station</td>
<td>600</td>
</tr>
<tr>
<td>Barber</td>
<td>50</td>
</tr>
<tr>
<td>Bookkeeper 1 &amp; 11</td>
<td>200</td>
</tr>
<tr>
<td>Carriers, Mail</td>
<td>50</td>
</tr>
<tr>
<td>Cashiers 1 &amp; 11</td>
<td>200</td>
</tr>
<tr>
<td>Cement Mason</td>
<td>50</td>
</tr>
<tr>
<td>Clerk, Account</td>
<td>100</td>
</tr>
<tr>
<td>Clerk, General</td>
<td>300</td>
</tr>
<tr>
<td>Clerk, General Office</td>
<td>300</td>
</tr>
<tr>
<td>Clerk, Post Office</td>
<td>50</td>
</tr>
<tr>
<td>Clerk, Shipping &amp; Receiving</td>
<td>100</td>
</tr>
<tr>
<td>Clerk, Stock</td>
<td>100</td>
</tr>
<tr>
<td>Clerk, Typist</td>
<td>800</td>
</tr>
<tr>
<td>Construction Worker</td>
<td>100</td>
</tr>
<tr>
<td>Cook, Hotel &amp; Restaurant</td>
<td>100</td>
</tr>
<tr>
<td>Cook, School Cafeteria</td>
<td>200</td>
</tr>
<tr>
<td>Cook, Short Order</td>
<td>100</td>
</tr>
<tr>
<td>Cosmetologist</td>
<td>200</td>
</tr>
<tr>
<td>Counselor</td>
<td>50</td>
</tr>
<tr>
<td>Draftsman</td>
<td>50</td>
</tr>
<tr>
<td>Driver, Light Truck</td>
<td>100</td>
</tr>
<tr>
<td>Driver, Passenger Transportation</td>
<td>100</td>
</tr>
<tr>
<td>Driver, Trailer-Truck</td>
<td>100</td>
</tr>
<tr>
<td>Driver, Truck Heavy</td>
<td>100</td>
</tr>
<tr>
<td>Electrician</td>
<td>50</td>
</tr>
<tr>
<td>Engineer, Mechanical</td>
<td>50</td>
</tr>
<tr>
<td>Engineer, Operating</td>
<td>200</td>
</tr>
<tr>
<td>Engineer, Stationary</td>
<td>50</td>
</tr>
<tr>
<td>Guard</td>
<td>50</td>
</tr>
<tr>
<td>Janitor</td>
<td>200</td>
</tr>
<tr>
<td>Key Punch Operator</td>
<td>100</td>
</tr>
<tr>
<td>Kitchen Worker</td>
<td>400</td>
</tr>
<tr>
<td>Laborer, Stores</td>
<td>100</td>
</tr>
<tr>
<td>Lawyer</td>
<td>50</td>
</tr>
<tr>
<td>Machinist</td>
<td>50</td>
</tr>
<tr>
<td>Manager, Office</td>
<td>100</td>
</tr>
<tr>
<td>Manager, Personnel</td>
<td>50</td>
</tr>
<tr>
<td>Material Handler</td>
<td>100</td>
</tr>
<tr>
<td>Occupational Title</td>
<td>Average Annual Job Openings</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Mechanic, Auto</td>
<td>200</td>
</tr>
<tr>
<td>Mechanic, Diesel</td>
<td>50</td>
</tr>
<tr>
<td>Mechanic, Maintenance</td>
<td>50</td>
</tr>
<tr>
<td>Medical Technologist</td>
<td>100</td>
</tr>
<tr>
<td>Nurse Aids</td>
<td>400</td>
</tr>
<tr>
<td>Nurse, General</td>
<td>300</td>
</tr>
<tr>
<td>Nurse, Licensed Practical</td>
<td>200</td>
</tr>
<tr>
<td>Packer, Hand</td>
<td>50</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>50</td>
</tr>
<tr>
<td>Plasterer and Related</td>
<td>50</td>
</tr>
<tr>
<td>Plumber, Gas &amp; Steam Fitter</td>
<td>50</td>
</tr>
<tr>
<td>Porter 1 &amp; 11</td>
<td>400</td>
</tr>
<tr>
<td>Purchasing Agent</td>
<td>50</td>
</tr>
<tr>
<td>Receptionist</td>
<td>100</td>
</tr>
<tr>
<td>Research &amp; Teaching Assistant (Graduate Assistant)</td>
<td>1000</td>
</tr>
<tr>
<td>Repairman, Auto Body</td>
<td>50</td>
</tr>
<tr>
<td>Roofer and Related</td>
<td>50</td>
</tr>
<tr>
<td>Salesman, Insurance</td>
<td>50</td>
</tr>
<tr>
<td>Salesman &amp; Salesperson</td>
<td>1700</td>
</tr>
<tr>
<td>Secretary</td>
<td>400</td>
</tr>
<tr>
<td>Social Worker</td>
<td>100</td>
</tr>
<tr>
<td>Stenographer</td>
<td>300</td>
</tr>
<tr>
<td>Structural Steel Worker</td>
<td>50</td>
</tr>
<tr>
<td>Teacher, Elementary</td>
<td>500</td>
</tr>
<tr>
<td>Teacher, Secondary</td>
<td>600</td>
</tr>
<tr>
<td>Telephone Operators</td>
<td>100</td>
</tr>
<tr>
<td>Typist</td>
<td>100</td>
</tr>
<tr>
<td>Waiter &amp; Waitress, Informal</td>
<td>800</td>
</tr>
<tr>
<td>Welder Combination</td>
<td>100</td>
</tr>
<tr>
<td>Worker, Sheet Metal</td>
<td>50</td>
</tr>
</tbody>
</table>
APPENDIX 1

A study to ascertain the feasibility of conducting a career information education program with parents of 10th grade students at Loga. Senior High
Final Report on: A study to ascertain the feasibility of conducting a career information education program with parents of 10th grade students at Logan Senior High School

Submitted by: James C. Blair, Superintendent
Logan City Board of Education
101 West Center
Logan, Utah 84321

Project Director: M. Larry Petersen, Ed. D.
Director; Career Education
Logan City Schools
Logan, Utah 84321
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>5</td>
</tr>
<tr>
<td>PROBLEM</td>
<td>6</td>
</tr>
<tr>
<td>PURPOSE</td>
<td>8</td>
</tr>
<tr>
<td>ACTIVITIES</td>
<td>9</td>
</tr>
<tr>
<td>LOCALE</td>
<td>10</td>
</tr>
<tr>
<td>PROCEDURES</td>
<td>10</td>
</tr>
<tr>
<td>Questionnaires</td>
<td>15</td>
</tr>
<tr>
<td>SUMMARY OF FINDINGS</td>
<td>19</td>
</tr>
<tr>
<td>Discussion of Findings</td>
<td>21</td>
</tr>
<tr>
<td>SUPPORTIVE ACTIVITIES</td>
<td>23</td>
</tr>
<tr>
<td>CONCLUSIONS</td>
<td>26</td>
</tr>
<tr>
<td>RECOMMENDATIONS</td>
<td>27</td>
</tr>
<tr>
<td>LITERATURE REVIEWED</td>
<td>30</td>
</tr>
</tbody>
</table>
A STUDY TO ASCERTAIN THE FEASIBILITY OF CONDUCTING A CAREER INFORMATION EDUCATION PROGRAM WITH PARENTS OF 10TH GRADE STUDENTS AT LOGAN SENIOR HIGH SCHOOL

INTRODUCTION

The pool of unemployed youth in Utah 16-24 years of age has increased significantly from 1969-71. During 1971 an average of 28,000 people were unemployed in the State of Utah. This was 6.3 percent of the labor force. Of this group, 11,500 were young people 19-21 years old. The unemployment rate for this group is about 13 percent or approximately twice as high as the rate for the total labor force. This pool is significantly larger than it was last year and has continued to grow during the past five years, not only in total numbers, but as a percent of the total labor force and as a percent of the total population of young people 16-24.

In addition to this increasing unemployment rate, school-aged young people are leaving school in large numbers. Last year the drop-out rate from high schools ranged from 6.9 percent in San Juan County to 1 percent in Daggett County.

Recent increases in enrollments in high school vocational education programs, so long thought to be an important factor in keeping young people in school, do not seem to have had any appreciable impact on either unemployment or dropping out of school.
PROBLEM

The problem is to find ways to improve the lot of young people, to provide them with the skills with which to make the best post-high school decisions, and thus be better prepared to enter their next step in life, whether that step is regular employment, getting further training for employment, or going to college. At the least, they should be sufficiently prepared to avoid dropping out of school or college or of remaining unemployable because of a lack of needed skills or information.

Recent thrusts in legislation and executive mandate are prompting a great deal of emphasis in career educational programs concentrating on a world-of-work orientation and vocational guidance at the junior high and even the elementary level.

Career education provides for the focus of the educational system upon career development, thereby expanding options for individuals and helping them achieve self-determined objectives. Career education will require significant changes in the total educational program. These changes will occur only through the cooperation of all educators, helped by parents and community leaders. (AVA, 1971)

It is increasingly apparent that educators, parents, and the community need not only provide excellent skills training during a child's later secondary years, but that they provide early opportunities to young people to acquire the skills and experiences needed to make more intelligent choices as to which specific work training areas they will enter, whether it be to have a marketable skill after high school or to go on and develop highly sophisticated skills through
extensive university post-graduate education.

Programs to give students these skills have begun to proliferate and have met with varying degrees of success. Most of them have been aimed exclusively at the student and have attempted to provide him with knowledge about the world-of-work and new attitudes toward work and training. They are especially designed to acquaint students with career opportunities that require less than baccalaureate level preparation. In spite of these programs, however, children are still leaving high school with the attitude that a college program is the only course open to them which will provide a rewarding and economically satisfying future. The fact is that only a small number (about 14 percent) of available careers require a college level education. On the other end of the spectrum, a regularly declining number of jobs require less than a high school education. The bulk of careers in our society are in trade and technical fields that require from one to three years of post-high school education. Yet 60-80 percent of our high school graduates enter baccalaureate programs after high school. Much of the responsibility for this condition must be accepted by parents who, according to some research, are wielding a great deal of influence over the child's career planning. This influence has generally been in the form of encouraging the child to "go to college and get a good education"—whether or not that is the best program for that child. It would seem that if these parents were more fully appraised of the real situation, perhaps the influence they exert could be changed to be in a more realistic direction.
It is generally accepted that vocational interests are learned and necessarily reflect the previous experience of the person. Of these experiences, the early interpersonal relationships undoubtedly play an important part in determining those likes and dislikes of the individual which eventually crystallize in the form of vocational interest. Since the single most constant, continuous, and predominant influence in a person’s development is that of the parents, it is further logical to assume that vocational interests cannot but reflect the parental influences. (Roth, p. 163)

PURPOSE

The ultimate purpose of this program was to investigate the potential for changing students’ career attitudes and aspirations through programs of parent participation in a career education program. Specifically, this study attempted to answer the general question of whether it could be considered feasible, in the opinion of recognized experts in relevant fields, to secure the parents’ participation in a career educational program using a variety of instructional packets designed to develop parent/child interaction. The purpose of the study was to ascertain whether an effective program of career education for parents could be devised and carried out. Attempts were made to answer the following operational questions:

1. What grade level students (from those in grades 9-12) and hence, which parents, are the most appropriate target.

2. What are the most appropriate and effective methods that should be employed in soliciting the cooperation and interest of the target parents to participate in a program designed to
broaden their awareness of career options for their children and to education opportunities related to these options?

3. What are the most appropriate information, work values, and attitudes about the world-of-work and post-secondary education that should be conveyed to parents in the areas of career and educational opportunities for their children?

4. What are the most appropriate and effective procedures to prepare parents to use in interacting with their children with reference to helping a child assimilate knowledge and attitudes and make decisions in career and educational planning?

5. What are the most appropriate and effective methods to use to reach the instructional goals stated in #3 and #4?

6. What are the most appropriate (valid, reliable, etc.) methods of measuring the extent of achievement of proposed goals and program effectiveness?

ACTIVITIES

The major activities undertaken in this feasibility study involved interviewing consultants, parents, and students to obtain their recommendations for approaches suggested in the parent program. Parents and 10th grade students were surveyed through questionnaires and interviews of small groups of the target population to gather the data needed to achieve the operational objectives.
The consultants contacted were experts in the fields of advertising, social surveying, psychology of vocations and vocational choice, as well as educators well versed in adult education, measurement and testing, curriculum planning and related areas.

LOCATE

This feasibility study was directed towards parents of students and students at the Logan Senior High School, Logan, Utah. The Logan Senior High School has an enrollment of 999 and it is the only school serving Logan City with a population of 28,000. Approximately 15% of the population of Logan is employed at Utah State University. The city of Logan has an expanding industrial area and is anticipating further growth. There are approximately 4% welfare "ADC" cases and an unemployment rate of approximately 4.8%, Chart 1. A large percentage of the Logan Senior High School's graduating students have attended a university. In 1969, 83% and in 1972, 67% of the graduating students attended a university some place in the United States.

PROCEDURES

A needs survey was initiated through the use of a career questionnaire, (Appendix 3). Interviews were completed with parents and a review of the current career education materials was made in an attempt to assess the needs of parents and their sons and daughters of the 10th grade at Logan Senior High.
### Chart 1


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Civilian Work Force</strong></td>
<td>15,980</td>
<td>15,914</td>
<td>15,300</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total Unemployed</strong></td>
<td>760</td>
<td>795</td>
<td>780</td>
<td>0</td>
</tr>
<tr>
<td><strong>Percent Unemployed</strong></td>
<td>4.8</td>
<td>5.0</td>
<td>5.1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Employed</strong></td>
<td>15,220</td>
<td>15,119</td>
<td>14,519</td>
<td>21</td>
</tr>
<tr>
<td><strong>Agricultural Employment</strong></td>
<td>1,054</td>
<td>1,304</td>
<td>1,450</td>
<td>1</td>
</tr>
<tr>
<td><strong>Nonagricultural Employment</strong></td>
<td>14,166</td>
<td>13,815</td>
<td>13,069</td>
<td>20</td>
</tr>
<tr>
<td><strong>Self-Employed</strong></td>
<td>1,446</td>
<td>1,385</td>
<td>1,400</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Nonag. Payrolls</strong></td>
<td>12,700</td>
<td>12,430</td>
<td>11,669</td>
<td></td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
<td>2,510</td>
<td>2,545</td>
<td>2,111</td>
<td>3</td>
</tr>
<tr>
<td><strong>Mining</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td>640</td>
<td>631</td>
<td>659</td>
<td>2</td>
</tr>
<tr>
<td><strong>Transportation, Public Utilities</strong></td>
<td>370</td>
<td>392</td>
<td>336</td>
<td>1</td>
</tr>
<tr>
<td><strong>Trade</strong></td>
<td>2,480</td>
<td>2,369</td>
<td>2,364</td>
<td>2</td>
</tr>
<tr>
<td><strong>Finance, Real Estate</strong></td>
<td>390</td>
<td>313</td>
<td>286</td>
<td>0</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td>1,400</td>
<td>1,361</td>
<td>1,274</td>
<td>2</td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td>5,020</td>
<td>4,819</td>
<td>4,639</td>
<td>7</td>
</tr>
</tbody>
</table>

*Numbers shown are estimates.

**The distribution of occupations of those parents participating in the feasibility study**

Source: Utah Department of Employment Security
School. The questionnaires were administered to random classes of tenth
grade students at the Logan Senior High School, Logan, Utah, and to parents
of students in the 10th grade.

The tenth grade students were selected as the target group to work with
in a parent program for the following reasons:

1. Curriculum offerings available through the 11th and 12th
grades can be more realistic in terms of career education
programs.

2. A continued follow-up of these students can occur for the next
two years to ascertain the effectiveness of the 10th grade parent-
child career education program in terms of the number of stu-
dents in the vocational program and retention of students in the
10th, 11th, and 12th grades.

A very intense effort was made by the investigator and the consultants
to search for commercial materials that could be used as packet materials
for the parents and their children. Our efforts yielded a very limited amount
of materials due to the guidelines previously established which required mater-
ials to be below a set cost factor and that would include an interaction design.
Contact was made with Educational Testing Services, Newton, Massachusetts,
prime contractor for the Home Base Model in Career Education, for the pur-
pose of securing information that would aid our program. Their effort is
directed toward the adult homebound group providing direction and career
information by use of telephone and referrals. Their program is just beginning and they were unable to assist us at this time. A review of the Denver Satellite program revealed little, if any, information available or possible duplication of programs at this time as their program is designed to begin in 1974. Numerous contacts were made with persons developing career materials. One specifically was at the University of Illinois, Charleston, Illinois. Dr. Marla Peterson, Director of the Center of Educational Studies, was developing a series of self-contained units called "occupacks" used to support concepts drawn from the needs of a career education program for junior high students. The occupacks were not available for distribution at the time for review.

After reviewing the materials, it was the decision of the consultants to prepare new packets for the program to convey information designed to generate interaction between school, parent, and child. The consultants felt very confident that it was possible to design a model packet (Appendix 2) that could be tested and modified where needed for different parent-child situations. It was the feeling of the consultants that many approaches (programmed units, television, programmed packets, visits, etc.) of different levels of abstraction be designed from actual hands-on activities to the written page approach.

Consultants for this program who collaborated in packet preparation were:

Dr. Glenn Casto, Social Director, Exceptional Child Center,
Utah State University
Dr. Austin Loveless, Professor and Acting Head, Department of Industrial and Technical Education, Utah State University

Dr. David Stone, Professor of Psychology, Utah State University

Dr. Whorton Allen, Assistant Professor Psychology, Utah State University

Dr. Keith Cheeketts, Associate Professor of Psychology, Utah State University

Dr. William Mortimer, Acting Emeritus Professor, Department of Industrial and Technical Education, Utah State University

Contact was made with Dr. Dan Jones, Assistant Professor of Political Science, Utah State University, Dr. Don Carter, Professor and Head, Department of Family and Child Development, and Dr. Carol Lambert, Associate Professor of Family Life and Child Development, at the onset of the program. At that time they were able to give only limited advice and assistance due to their very tight time schedule, but they felt the project to be very timely and feasible.

The packets were prepared by the consultants and were tested on parents and students. Parents of 10th grade students were randomly drawn by selecting every fifth student from the registrar at the Logan Senior High School. Telephone contacts (25) were made to ask for the parent's willingness to participate in a school-parent-child program (Chart 1). All of the parents called indicated they would be willing to participate in a survey and the implementing of the program. Appointments were made when a parent could see a guidance tutor. Guidance tutors (graduate students at Utah State University) visited
the home to (1) secure opinions regarding the usefulness and appropriateness of the packets prepared by the consultants, and (2) secure answers to a survey instrument about career programs, effectiveness of the newspaper, and the career cards advertisement. Guidance tutors explained the career program--how it would function, the role of the school in preparing the information activities and/or packets, the role of the parent in assisting the son or daughter, the role of the son or daughter working in the suggested activities, goal setting of the son or daughter--all cooperating with the parent and the schools. Twenty-one contacts were completed of the twenty-five scheduled. Conflict in scheduling, parents leaving for out of town holiday visits were reasons given by the parent for not being able to complete the schedule.

Questionnaires

A total of 15 tenth grade students from the Logan Senior High School, Logan, Utah, participated in the survey. Two classes of students were randomly selected for the purpose of answering the student questionnaire (Appendix 3). The parent questionnaire (Appendix 3) was also developed in like form to the student questionnaire and was administered to 21 parents of 10th grade students.

The responses to the questions are presented below. The items have been rewritten to make it possible to identify and compare the parent and student ranking. The question as it is written will include both the parent and student item that normally would appear on separate questionnaires.
### ATTITUDES ABOUT CAREER EDUCATION

1. How would you describe your attitude toward work:

   - Work should be an enjoyable part of the total life experience (c) of questionnaire.
   - Combination of (a) and (c).
   - It is important that we work whether or not we need the money (a) of questionnaire.
   - I wouldn't work at all if I didn't need to.

2. How would you describe your child's attitude toward work?

   - Work should be an enjoyable part of the total life experience.
   - It is important that we work whether or not we need money.
   - I wouldn't work at all if I didn't need to.

3. Have you decided what you want to do for a career? Has your child decided what he wants to do for a career?

<table>
<thead>
<tr>
<th>Parents Rank</th>
<th>Parents Responses</th>
<th>Students Rank</th>
<th>Students Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13</td>
<td>1</td>
<td>36</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parents Rank</th>
<th>Parents Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>16</td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students Rank</th>
<th>Students Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>21</td>
</tr>
<tr>
<td>Yes</td>
<td>24</td>
</tr>
</tbody>
</table>
(All values are expressed in percentages of responses)

### Information about Careers

Here are some kinds of questions often asked. Which of these represent the kind of information which would be useful in helping (you, student question) (your son or daughter, parent question) best select and prepare for his career?

- What must I do to prepare for this career?
- What does a person do in this career?
- What are the chances of being employed?
- Where must I go to get the training?
- How long will the preparation take?
- Are the opportunities available locally in this career?
- What will it cost?
- What sort of training will be expected to gain promotions?
- In what areas of the country might I reasonably expect to find employment?
- How much change in "responsibility" should I expect in this career over my employable years?
- What are some of the related careers I might consider?
- What kind of salary increases is it reasonable to expect as a starting salary?
- What kind of salary increases is it reasonable to expect?

### Information about the Individual

- What is (my child) (am I) interested in?
- What would he/I be good at?
- How can he know if he'll be successful?
- When does he/I really need to make his decision?
Parents | Students
<table>
<thead>
<tr>
<th>Rank</th>
<th>Response</th>
<th>Rank</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5. What would be the most effective methods to (help me) (help your child) with career information?
   - My parents and the school working together
   - The school counselor
   - There should be a special course in school
   - My parents

6. Assuming necessary information could be made available to me, please check the ways below that (I would be willing) (I could assist my child) to gain the necessary information to adequately explore career opportunities.
   - Let someone from the school come into our home and discuss this information with us (Work with my parent) (work with my child) in completing a programmed course of instruction on career education.
   - Attend career education programs with a parent/child at the school.
   - Remind (me or him) when a TV program on career education starts.
   - Listen to my parents discuss their occupation. (student question) (parent question) Tell my child about occupations.
   - Listen to others tell about their occupations.

7. Below are some methods of providing information in the home about careers which are being developed by Logan City Schools. Please rank these methods. Mark 1 by the method you think might be most useful, Mark 2 by the next most useful, 3, 4, 5, etc.

<table>
<thead>
<tr>
<th>Method</th>
<th>Parents</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews with experts. Questioning representatives of occupations; career days, meetings.</td>
<td>2.94</td>
<td>4.11</td>
</tr>
<tr>
<td>On-the-job tryouts: part time; summer jobs; work study programs.</td>
<td>3.18</td>
<td>2.83</td>
</tr>
<tr>
<td>Audio Visual Aids: film, tapes, slides, radio, television, etc.</td>
<td>4.24</td>
<td>5.43</td>
</tr>
</tbody>
</table>
Parents

<table>
<thead>
<tr>
<th>Rank</th>
<th>Response</th>
<th>Rank</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.71</td>
<td>2</td>
<td>2.95</td>
</tr>
<tr>
<td>5</td>
<td>4.81</td>
<td>6</td>
<td>5.49</td>
</tr>
<tr>
<td>6</td>
<td>5.38</td>
<td>7</td>
<td>6.39</td>
</tr>
<tr>
<td>7</td>
<td>6.29</td>
<td>8</td>
<td>6.49</td>
</tr>
<tr>
<td>8</td>
<td>6.37</td>
<td>10</td>
<td>7.26</td>
</tr>
<tr>
<td>9</td>
<td>7.57</td>
<td>9</td>
<td>6.51</td>
</tr>
<tr>
<td>10</td>
<td>8.29</td>
<td></td>
<td>5.47</td>
</tr>
</tbody>
</table>

Students

- Direct observation: visits to work settings.
- Directed Exploratory Experiences: Work samples, work evaluation tasks.
- Publications: Books, monographs, charts, pamphlets, newspapers, etc.
- Programmed instructional materials: books, work books, career kits.
- Computer based systems: computer systems which store and retrieve, and process occupational data in response to individual request.
- Synthetically created work environments: combination of stimuli and environmental manipulation.
- Simulated situations: career games, role playing.

8. How much time a week would you be willing to invest in exploring careers with (your parent) (your child)?

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19</td>
<td>1</td>
<td>28</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>–</td>
<td>–</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

As much as is necessary.
Thirty minutes
None
Ten to fifteen minutes.

SUMMARY OF FINDINGS

(1) Both parent and student agreed that work should be an enjoyable part of the total life experience reflecting a positive attitude towards work (Question 1).

(2) Parents and students both share an understanding of the other’s attitude towards work and the necessity of work in a person’s life as indicated by the rankings in Question 2.
Parents (18) identified "The parent and school working together" as the most effective method used to reach the child with career information. Students (21) indicated that they prefer a special course in school to convey career information (Question 5).

(8) Parents ranked as their first choice while students ranked it as their fifth choice, "Someone from the school visit the home and discuss career information. Parents and students ranked as their first choice "Work with the child on a programmed course of instruction in career education (Question 6).

(9) Ranking of the Methods of Providing Information in the Home About Career was in close agreement. Parents identified "interviews with experts" as their first choice while the students ranked it third. "On the job tryouts" was
ranked first by the students and second by the parents. Audio visual aids was ranked third by the parents and fourth by the students (Question 7).

(10) How much time would you be willing to spend together in career education exploration? Parents (19) ranked as number one, "as much time as necessary." The students (23) also ranked it first from a selection of 4 items (Question 8).

Discussion of Findings

During the pursuit of this feasibility study, some significant observations were made by the investigator. They are as follows:

(1) Through this study it was possible to demonstrate the feasibility of securing and presenting to parents career packets that could be reproduced at a low cost. Four Car-Pacs (career information packets) were used to ascertain parents' opinions. Parents were asked to identify the Car-Pac that they felt to be a suitable model for other packets. Their responses were as follows:

(a) Packet No. 3 (a cosmetology instruction unit which contained a self-programmed form and audio cassette tape. This was the model most desired).

(b) Packet No. 2 (teaching interaction style received favorable comments).

(c) Some indicated a "combination of packets should be used—one packet model would be tiring or boring".

(2) Parents (25) reflected a complete agreement when asked to participate with the guidance tutors at their home. Parents (19) did indicate they
would spend all the necessary time with their child if career informational packages (Cari-Pacs) were readily available.

(3) Parents are most interested in helping their children by working with the school in this undertaking. Parents also indicated they would like their children to pursue a program of instruction designed to help them through a career education unit. The students indicated a program at the school to be their first choice.

(4) Students were very concerned by identifying the response, "What to do to prepare for a career," yet their choice of least interest was identifying related careers in the event their first choice was not attainable. This points out the need for more career information and methodology needed to help a child arrive at his chosen occupation and identify alternate occupations.

(5) Parents and students participated in a "hands on" experience at Utah State University. This was a laboratory experience where students participated in many areas of activity. Example: a student riveted some aluminum in the aircraft shop. Parents were most impressed with this activity and other activities. The responses to the questionnaire cited "on-the-job, field trips, and interviews" as the better methods to learn about jobs. More of these activities could be implemented as laboratory activities at USU.

(6) Methods using audio-visual techniques were ranked third by students and fourth by parents. During the project, cable TV was tried and
reviewed by students and a limited number of parents. The comments were "an excellent to very good approach to inform me about job skills and career information." Responses from viewers on cable TV stated a "great way to inform me about jobs." Audio cassette programs were used in the Cari-Pacs and were ranked no. 1 when they accompanied a self-contained programmed instructional unit. (7) Parents expressed a need for a career program to help their children and a desire to be involved in career decisions that would realistically aid their child. They also expressed an interest and praise for the Logan City School's parent-child feasibility study in career education.

SUPPORTIVE ACTIVITIES

No. 1 - Radio: An attempt was made to use radio media in disseminating information about career education programs in Logan City. On November 28 on both radio stations (KBLW and KVNU) 20 minutes was provided to discuss career education and the need for the increased parental involvement in a school-son or daughter program. The time of the broadcast was 9:00-9:20 a.m. on KBLW and 10:00-10:20 a.m. on KVNU. KBLW shows a survey indicating 50% of the valley listen to their station. A spotcheck following the show indicated 25% of the people polled heard the program.
No. 2 - Audio Visual: Video taped career programs were placed on the Northern Utah Cable system Wednesday, December 13, 1972, from 9:30 a.m. to 11:30 a.m. for the purpose of testing the compatibility of equipment and to secure a reaction from a viewing audience. The weather channel was interrupted and used for the two-hour period. A pre-arranged viewing audience was contacted at the Logan Senior High School and they were asked to react to the TV program as to the content being interesting, its possible use at home, use at school, and as a means of providing information about careers. Their reactions in all cases registered from "Excellent" to "Very Good." Prior to and after viewing time the cable company solicited responses from the viewing audience asking viewers to call the cable company. Personal reactions registered were: "Great, where can I get a job as a power sewing machine operator?" "An excellent way to show people and tell them what is going on in industry." "I would rather know the temperature so I can finish my Christmas shopping." The video tapes were prepared locally in the Mode-O-Day garment factory and the Budge Medical Clinic under the direction of Larry Petersen. Since this was the first time for an educational institution in Logan to use the cable system, it proved to be very useful and has the capability of reaching at the present 2400 homes in the Logan area. TV teacher guides were prepared to aid the video career programs (Appendix 5):

No. 3 - Programmed Instructional Materials: A programmed instructional package was developed using an audio cassette recorder which played back an interview with a cosmetologist. The programmed study unit was answered
while the parent and son or daughter listened to the tape describing the job of the cosmetologist. Other program materials were found to be available for future programs (Appendix 4).

No. 4 - Direct Observations: Direct observation was undertaken with a father and mother and their sons and daughters. Fifteen parents participated in visits to the LDS Hospital, Wurlitzer Plant, Gossner's Cheese Plant, Hessco Equipment Company, and Mode-O-Day Sew Center for the purpose of viewing industrial areas and to see the actual business in operation. These persons visiting these areas were first oriented to those things they should know when considering this occupation as one's chosen work.

No. 5 - Direct Exploratory Experiences: Hands-on activities were provided by numerous departments at Utah State University. Twenty parents participated with students in engine repair, horticulture, meat cutting, woodwork,acro- and auto mechanics programs. A very high percentage of parents indicated this approach to learning about careers was "great."

No. 6 - Publications: During the month of November and December, 1972, a number of articles appeared in the Herald Journal and it was ascertained that approximately 60% of the people subscribing to the paper read the articles. Advertisement cards were developed and mailed to all those parents interviewed prior to their interview. (Appendix 6). The cards were considered to be most effective in conveying a message describing problems involving career education.

No. 7 - Meetings: General meetings were not held although they were considered. Consultants and others of the staff of the Logan Schools felt that less than 15% would attend. Other supportive evidence was considered and it was indicated the meeting would not be effective at this time.
CONCLUSIONS

The following conclusions may be drawn based on the findings and observations that occurred in this study:

1. The parents' and student's attitude towards work are in agreement that work should be an enjoyable part of life.

2. Parents and students indicated a definite need for a career information program designed to help a child make a realistic career choice. The program could be either at home with a parent or a special class on careers at school.

3. Career information packages can be successfully developed for parent and child interaction using a variety of methods: interviews, hands-on activities, field trips, audio visual-TV-audio cassette, and filmstrip approaches. The Cari-Pacs could be used either at home by the parent and child or at school by a teacher and a student.

4. The preferred arrangement as indicated by parent response was the parent working with the child at home using Cari-Pacs with a guidance tutor available to visit them when needed for the purpose of career counsel.

5. It was the consensus of consultants and parents that a program be designed to help parents understand their child's interests and aptitudes and how they relate to career opportunities in the world of work. This could be developed and successfully operated by the schools working with the parents and their child.
6. It was the consensus of the consultants and parents that a program be developed on career education so parents will have an exposure to the many facets of career education.

7. Parents indicated that their children have not made a career choice by the tenth grade. The parents' advice and influence on the child either direct or indirect need to be reinforced with career materials and information that is current and informative.

8. The tenth grade students were identified by the consultants as the target group. Parents are in a better position to relate work experiences to the child and children are most desirous of securing work information and experiences. A child's plans about work can be influenced by parental counsel in regards to work experience and possible vocation programs for the child in grades 11 and 12.

RECOMMENDATIONS

Based on the findings and the conclusions of this feasibility study, the following recommendations appear to be in order.

1. The need is apparent for a career education program designed to help parents and their children understand the child's role as he selects, prepares, and enters an occupation of his choice. The need has been expressed by the parents and students and this would suggest a program to be developed and operated by a local school system for the purpose of involving parents and their child in a parent-child career education program.
2. Parents and students agreed on a number of audio-visual approaches to be used in a parent-child school career education model. This would suggest that a local school system design career curriculum materials using the previously ranked methods and apply them in the dissemination of career information to the parent-child program.

3. Career packets designed to create child interaction with parents were developed in this study. It would be the recommendation that a local school district expand the development of the career information packets for use by parents, a child, or a student to satisfy the need for career information.

4. Based on the review of literature, authorities have stated the need to involve parents in a career education program which will definitely lend to the success of a like program for children. Many career education programs are in operation without the parents' involvement or awareness to the undertaking. This would suggest a research study be initiated to assess the effectiveness of those programs in operation without parent involvement.

5. The real effectiveness of the parents' role in aiding the child needs to be ascertained for the purpose of providing evidence about future career programs. Results of such an undertaking would be available to provide direction to other programs as needed, such as the Denver Satellite Project which is to begin in 1974 on career education, the Home Base Model on career education, Newton, Massachusetts, and other institutions interested in parent participation in career education programs. This suggests a school district carry on a research project with the parent, child, and school and make an assessment
of the parental impact on the child’s career development.

6. Administrators of local school systems are seeking alternate ways of involving parents in the teaching process so they could assist in the teaching of their own children. Parents need to assume more of this responsibility in helping with the child’s education. This suggests a full scale program for parents and their children be initiated in a local school district with parents, children, and school personnel participating and to assess the effect of the parents’ role in the educational process.
LITERATURE REVIEWED


Hoyt, Evans, Mackin, and Mangum, Career Education--What It Is, How to Do It, Olympus Publishing Co., Salt Lake City, p. 10.


APPENDIX 2

Samples of Career Information packages and outlines
An Interactive Package

for Parents and Child

CAREER EDUCATION

Subject: COSMETOLOGY

Logan City Schools

Logan, Utah
INTRODUCTION:

This is a programmed instruction package designed to be used by a parent and a son or a daughter. This instruction packet contains a booklet and a cassette tape. The taped program consists of an interview with a person employed as a cosmetologist. This programmed booklet contains a series of frames (questions-answers) that impart new knowledge and causes you to review previous information. Writing answers to the statement is the way you learn from this program. If you follow the instructions, you may not realize that you are studying.

DIRECTIONS:

Both parent and a son or a daughter should complete the following packets. The procedures for marking and answering the frames are as follows.

Example:

1. The shape of the world is ________
2. The world ________ flat.
   is is not

After answering all the questions, return to the beginning of the questions, open the flap, and check your answers against those found under the folded flap. Count the number correct and place it at the end of this program on the follow-up form.
MATERIALS:
1 cassette play-back unit "Panasonic"
1 cassette tape
2 program packets (one for each participant)
2 pencils

TIME REQUIRED: 15-20 minutes

OBJECTIVE: To be able to identify job requirements for a person working as a cosmetologist.

DIRECTIONS: You should be ready to begin with the cassette in the recorder. Proceed with the following.

1. Sit down and relax.
2. Understand the instructions for marking the program. Fill in the blanks as you listen.
3. Place the volume control at a setting of 5.
4. Push the play button and listen closely.
   Read the text quickly and provide answers to the questions during the presentation.

Do not raise the flap until you are ready to check your answers.
1. This person received job information from:
   - [ ] Friend

2. Cosmetology calls for a person who is:
   - [ ] artistic

3. What kind of training is needed to become a cosmetologist:
   - [ ] 8 Hrs/Day
   - [ ] 5 Days/Week
   - [ ] 11-12 Mont.

4. Where is training available?
   - [ ] University

5. Requirements to get into the training:
   - [ ] Good Moral Character

6. A license [ ] needed to hold a job.
   - [ ] is
   - [ ] is not

7. A practical and written test [ ] administered in the examination period.
   - [ ] is
   - [ ] is not

8. To start a business in cosmetology would cost [ ]

9. Verbal skill [ ] necessary.
   - [ ] is
   - [ ] is not

10. The physical requirements for this job are a [ ] back and legs.

11. The work requires someone who is dedicated and [ ]

12. The tiring phase of this job is [ ]

13. The training program for this job is [ ] year.

109
14. The beginning income for this job ranges from ______/week to ______/week.

15. There ______ areas of specialization, and are not

16. There are related jobs such as

17. Wigs are helping the profession since they need a ____________

18. Updating your skill is done by attending ____________

19. Age ______ a factor.

20. There ______ a large turn-over in this profession.

21. Sources of job information are from ____________ and ____________

22. A person working ______ gain much satisfaction from this work.

23. This job ______ require a college education.

24. The hours ______ long.

25. Strong legs ______ required.

26. A person ______ work on weekends.

You are finished. Return to Question 1 and check your answers with those found under the answer fold. Count the number correct and place on the next page.
Please complete this sheet.

How many questions did the parent get correct? ______

How many questions did the child get correct? ______

Would you like more information about cosmetology? ______ Yes ______ No

Sources of information are the school counselor, Department of Employment Security, private beauty college, OTAT Trade List, Salt Lake City, Utah.

Complete the following: Parent and child please check the following items.

This cosmetology packet has helped me describe the:

1. entry requirements
2. job description
3. advantages of the job
4. education requirements
5. salary offering
6. alternate occupation
7. sources of occupation information
8. disadvantages of the job
9. physical demand
10. Would you like this job?

YES NO
Introduction

When you master this set of materials you will be able to discuss with your son or daughter and help him become more aware of the many careers open to him. In doing so you will be expanding your son's or daughter's horizons in the career information area in an organized, meaningful way. You will also be giving him tools to explore career information on his own.

Objective: To be able to discuss with the child the daily work tasks of a parent.

Instructions

In planning your time with your son or daughter you need some guidelines to follow. Consider these materials as your guidelines to career exploration. You are now about to begin an instructional sequence. The language you use in the script may sound different to you. It is based on the following principles:

1. Strong emotions are sometimes raised when parents instruct children. The script is designed to prevent this.

2. We want to reinforce or praise the child's comments. Therefore, in the act of answering, you will say "good".

3. The script will follow a sequence in looking at your occupation which can be followed in looking at other career areas. This session will discuss the following:
   a. Identification of occupation
   b. Job analysis
   c. Equipment, hardware, or special machinery used

You need only six more rules and you will be able to handle any instructional emergency. They are:

1. Stick to your script! This will ensure that you follow the instructional sequence.
2. Avoid any statements which are derogatory of the child, person, or occupation.

3. If strong emotions are shown, communicate understanding only by stating, "Yes, you are partially correct." Don't lecture or find fault.

4. Praise your son or daughter for responding. Don't lecture if he finds it hard to respond.

5. Have a well-established time in which to conduct your instructional sequence.

6. Don't be afraid to use the resources of your school counseling program if you have questions. Encourage your child to utilize their services also.

Step 1. Plan for an instructional sequence which lasts no more than 15-30 minutes. About 20 minutes appears to be a suitable length of time for getting and maintaining interest.

Step 2. Be sure you understand thoroughly the career information area to be presented before you begin.

Session No. 1: Explain your role carefully. Say, "I have been asked to explore some career information areas with you. I volunteered because I think it is an important part of your education. Let's make our 20 minutes together as useful as possible. Let's begin by exploring my job. Later we will consider other areas."

Parent Information

To prepare a youth to make a tentative occupational choice, the requirements for a successful worker in that occupation must be identified. These requirements usually fall into three main categories:

1. The knowledge required of a successful worker in that occupation.

2. The ability he must possess (examples: manipulative, speaking skills)

3. Behavioral characteristics he must display (examples: outgoing, aggressive, reserved)

A broad pattern for analyzing your occupation with your son or daughter (or any occupation where appropriate) should include a review of the following
nine major areas: (write down and discuss ideas under each item if appropriate to your occupation).

A. Say, "What do you think I do at my place of employment?"

B. If your son or daughter responds with the correct description, say "Good!"

C. If he gives an incomplete answer or fails to respond, describe the tasks you do in your daily occupation.

D. Say, "Now let's do an analysis of my job. We can do one together, then later you will be able to do your own for other areas you may be interested in."

Nine Major Areas for Analyzing an Occupation

1. Related science, mathematics, and psychology that is needed in your job.
   Such as:
   - Computing interest
   - Figuring cost of material
   - Reacting with people
   - Designing structure

2. What equipment, tools, instruments, and materials do you use on your job?
   Such as:
   - Operating a backhoe
   - Operating a calculator
   - Operating a dentist drill

3. What safe practices and work precautions must be considered in your job?
   Such as:
   - Working with high voltage equipment
   - Operating equipment around others
   - Wearing special safety clothes
   - Working around atomic reactions
4. What special work habits and attitudes are necessary for your job?

Such as:
Regular starting and quitting times (8-5, etc.)
Punctuality
Cooperation with fellow workers

5. Are there any special physical capabilities needed for your job?

Such as:
Lifting heavy items
Long periods of standing
Walking
Good eye sight

6. What special occupational terminology does your job require you to learn?

List some of the special terms.

Such as special terms or words used by:
Doctors
Lawyers
Farmers
Auto Mechanics
7. Do you need to use specifications, charts, tables, graphs, and drawings in your job? Identify.

8. Kinds of interpersonal relationships encountered on your job:

9. What "hand movement" practices and skills does your job require? List them.

Now take a moment to review this session with your son or daughter. You may discover that your occupation is more involved than you thought at first.
Outlines
Session No. 7: Use the same instructions as you did for the previous session.

Step 1. In a previous discussion we analyzed my job with respect to the skills I needed, the knowledge I needed, and special behavioral characteristics needed. Say, "Do you have any further questions or comments about these things?" Answer if your son or daughter has a question. If it is a question you cannot answer, say, "I'll have to find the answer," and then check with a school counselor.

Step 2. Say, "Where would a person learn the things we listed in the analysis?" Get your son or daughter to respond if possible. After their response say, "Good," and then you explain the training requirements they may have overlooked. (Be brief.)

Step 3. Say, "Where can a person get the training to do my job?" Let him/her respond and then you add to their response if necessary.

Step 4. Say, "How much would it cost to get the necessary training to start as a beginner and how long will it take?" Again let him/her respond and you add what needs to be added.

Step 5. Say, "What are the advantages and disadvantages of my job as you see them?" Accept any answer the child gives by saying, "Yes, and a good way to do this for any occupation is to use a simple thing called force field analysis. Let's do it for my job. On one side of this paper we'll list forces for entering my occupation and on the other side forces against; then we can see them clearly." Complete the graph below starting with his suggestions and adding your own.

For

Against
Session No. 3:

Step 1. Introduction - Build on previous two sessions.

Step 2. Say, "What are some other careers you can think of that fit in the same category as mine?" After your son or daughter responds, say, "Yes, and here are some others." (List them.)

Say, "What we have just completed is a career cluster. We can do others by going through the following steps."

A.

B.

C.

D.

Step 3. Say, "Now that we're taken a brief look at my job, do you think you would be interested in doing something like it yourself?" Respond to either a yes or no answer with the following question, "Why?" Respond to his explanation with "Good, you already have begun thinking about the kinds of occupations you might enter. Let's try looking at another area _ _______ _ (Set a definite time). You can use the skills you have developed in looking at my job to look at other possibilities."
Session No. 4: Labor Unions

(IF father's occupation is not one that is unionized, pertinent information will need to be provided to make this session meaningful.)

I. Typical Occupation Requiring Union Membership
   A. List of unions active in local area
   B. List of unions active at the state level

II. How a Person Joins a Union

III. Advantages and Disadvantages of Belonging to a Union

IV. Cost Involved

Session No. 5: Employer-Employee Relations

I. Introduction
   A. Importance of employer and employee relations

II. Factors affecting good employer-employee relations

III. What an employee needs to do to maintain good relations with his employer

IV. What an employee needs to do to maintain good relations with his fellow workers

Session No. 6:

I. Introduction
   A. Have son/daughter identify a tentative occupation

II. How an occupation affects:
   A. Where a person lives
   B. Friends
   C. Vocabulary
   D. Social status

III. Overall life style affected by career choice

IV. Outcomes of work that exist in our society
APPENDIX 3

Questionnaire:
Parent form and Student form.
ATTITUDES ABOUT CAREER EDUCATION

1. How would you describe your attitude toward work:
   a. It is important that we work whether or not we need the money.
   b. I wouldn't work at all if I didn't need to.
   c. Work should be an enjoyable part of the total life experience.

2. How would you describe your parent's attitude toward work:
   a. It is important that we work whether or not we need the money.
   b. I wouldn't work at all if I didn't need to.
   c. Work should be an enjoyable part of the total life experience.

3. Have you decided what you want to do for a career? (Circle) Yes  No

4. Here are some kinds of questions often asked. Which of these represent the kind of information which would be useful in helping you best select and prepare for a career?

This information would be:

Information about Careers

Directions: Place an "x" in the appropriate box.

This information would be:

- What does a person do in this career?
- What are the chances of being employed?
- Are opportunities available locally in this career?
- What must I do to prepare for this career?
- How long will the preparation take?
- What will it cost?
- Where must I go to get the training?
- In what area of the country might I reasonably expect to find employment?
- What kind of salary increases is it reasonable to expect as a starting salary?
- What kind of salary increases is it reasonable to expect?
- What are some of the related careers I might consider?
- How much change in "responsibility" should I expect in this career over my employable years?
- What sort of training will be expected to gain promotions?

Information about the Individual

- What am I really interested in?
- What would I be good at?
- How can I know if I will be successful?
- When do I really need to make my decision?
Directions: Circle the appropriate answer.

5. What would be the most effective methods to help me with career information:
   a. the school counselor
   b. there should be a special course in school
   c. my parents
   d. my parents and the school working together

6. Assuming necessary information could be made available to me, please check the ways below that I would be willing to gain the necessary information to adequately explore career opportunities.
   a. Remind me when a TV program on career education starts.
   b. Attend career education programs with a parent at the school.
   c. Let someone from the school come into home and discuss this information with us.
   d. Listen to my parents discuss their occupation.
   e. Listen to others about their occupations.
   f. Work with my parent in completing a programmed course of instruction on career education.

7. Below are some methods of providing information in the home about careers which are being developed by Logan City Schools. Please rank these methods. Mark 1 by the method you think might be most useful. Mark 2 by the next most useful, 3, 4, 5, etc.
   a. Publications: Books, monographs, charts, pamphlets, newspapers, etc.
   b. Audio Visual Aids: Films, tapes, slides, television, radio, etc.
   d. Computer Based Systems: Computer systems which store, retrieve, and process occupational data in response to individual requests.
   e. Interview with Experts: Questioning representatives of occupations; Career Days, meetings.
   f. Simulated Situations: Career Games; Role Playing.
   g. synthetically Created Work Environments: Combination of stimuli and environmental manipulation.
   h. Direct Observation: Visits to work settings.
   i. Directed Exploratory Experiences: Work Samples; Work Evaluation Tasks.
   j. On-the-Job Tryout: Part time; summer jobs; work-study programs.

8. How much time a week would you be willing to invest in exploring careers with your parent?
   a. none
   b. 10-15 min.
   c. 30 min.
   d. as much as is necessary
1. How would you describe your attitude toward work:
   a. It is important that we work whether or not we need the money.
   b. I wouldn't work at all if I didn't need to.
   c. Work should be an enjoyable part of the total life experience.

2. How would you describe your child's attitude toward work:
   a. It is important that we work whether or not we need the money.
   b. I wouldn't work at all if I didn't need to.
   c. Work should be an enjoyable part of the total life experience.

3. Has your child decided what he wants to do for a career?

4. Here are some kinds of questions often asked. Which of these represent the kind of information which would be useful in helping your son or daughter best select and prepare for his career?

   This information would be:

   Information About Careers

   Essential
   Useful
   Interesting

   Need
   Knowledge
   Skills
   Interests
   Personal
   Characteristics

   a. What does a person do in this career?
   b. What are the chances of being employed?
   c. Are opportunities available locally in this career?
   d. What must I do to prepare for this career?
   e. How long will the preparation take?
   f. What will it cost?
   g. Where must I go to get the training?
   h. In what areas of the country might I reasonably expect to find employment?
   i. What kind of salary increases is it reasonable to expect as a starting salary?
   j. What kind of salary increases is it reasonable to expect?
   k. What are some of the related careers I might consider?
   l. How much change in "responsibility" should I expect in this career over my employable years?
   m. What sort of training will be expected to gain promotions?

   Information About the Individual

   a. What is my child really interested in?
   b. What would he be good at?
   c. How can he know if he'll be successful?
   d. When does he really need to make his decision?
5. What would be the most effective methods to reach your child with career information?

a. the school counselor
b. there should be a special course in school.
c. his parents.
d. his parents and the school working together.

6. Assuming necessary information could be made available to you, please check the ways below that you would be willing to assist your child gain the necessary information to adequately explore career opportunities.

a. Remind him when a TV program on career education starts.
b. Attend career education programs with him at the school.
c. Let someone from the school come into our home and discuss this information with us.
d. Tell our child about my occupation.
e. Tell others about my occupation.
f. Work with my child in completing a programmed course of instruction on career education.

7. Below are some methods of providing information in the home about careers which are being developed by Logan City Schools. Please rank these methods. Mark 1 by the method you think might be most useful in your home with your child. Mark 2 by the next most useful, etc.

a. Publications: Books, monographs, charts, pamphlets, newspapers, etc.
b. Audio Visual Aids: Films, tapes, slides, television, radio, etc.
d. Computer-Based Systems: Computer systems which store, retrieve, and process occupational data in response to individual requests.
e. Interviews with Experts: Questioning representatives of occupations; Career Days, meetings.
f. Simulated Situations: Career Games; Role Playing.
g. Synthetically Created Work Environments: Combination of stimuli and environmental manipulation.
h. Direct Observation: Visits to work settings.
i. Directed Exploratory Experiences: Work Samples; Work Evaluation Tasks.
j. On-the-job Tryout: Part time; summer jobs; Work-study programs.

8. How much time a week would you be willing to invest in exploring careers with your child.

a. none
b. 10-15 min.
c. 30 min.
d. as much as is necessary
APPENDIX C:

Audio Cassette tape programs
# Career Development Laboratory

## Placement Chart: Form Y

Categories: I. Law answer the question: "What kind of career?" Following each career title are letters which indicate satisfaction do you want from your career. For example, an architect makes something (category A), and a nurse helps others (category B).

### A - Making Something
- Architect
- Auto Mechanic
- Civil Engineer
- Dentist
- Electrician
- Engineer
- Electronic Technician
- Firefighter
- Food Service Worker
- Graphic Designer
- Machinist
- Nurse
- Park Director
- Personal Consultant
- Pharmacist
- Physical Therapist
- Physician
- Police
- President
- Secretary
- Social Worker
- Telephone Operator
- Tool and Die Maker

### B - Creating Something
- Account Executive
- Actor
- Architect
- Builder
- Chef
- Comm. Artist
- Cosmetologist
- Dentist
- Fashion Model
- Photographer
- Record Producer
- Theatrical Artist
- Tool and Die Maker

### C - Traveling Around
- Buyer
- Commercial Pilot
- Driver
- Military Personnel
- Secretary
- Stewardess

### D - Helping People
- Banker
- Cosmetologist
- Dental Hygienist
- Dentist
- Electrician
- Fireman
- High School Teacher
- Insurance Salesman
- Lawyer
- Teacher
- Tool and Die Maker

### E - Being Physically Active
- Auto Mechanic
- Civil Engineer
- Driver
- Fashion Model
- Freeman
- Forester
- Golf Professional
- Military Personnel
- Park Director
- Physical Therapist
- Veterinarian

### F - Solving Problems
- Accountant
- Architect
- Auto Mechanic
- Banker
- Business Consultant
- Civil Engineer
- Computer Programmer
- Cost Analyst
- Dentist
- Editor
- Electrician
- Engineer
- Electronic Technician
- Insurance Salesman
- Lawyer
- Medical Technologist
- Nurse
- Pharmacist
- Physical Therapist
- Physician
- Research Scientist

### G - Communicating Effectively
- Account Executive
- Actor
- Business Consultant
- Court Reporter
- Director
- High School Teacher
- Insurance Salesman
- Lawyer
- Librarian
- Minister
- Personal Consultant
- Photographer
- Professor
- Radio Broadcaster
- Record Producer
- Reporter
- Salesman
- Social Worker
- Technical Writer

### H - Being a Part of the Business World
- Accountant
- Actor
- Architect
- Banker
- Business Consultant
- Buyer
- Commercial Artist
- Computer Programmer
- Cost Analyst
- Court Reporter
- Driver
- Editor
- Forester
- Golf Professional
- Insurance Salesman
- Lawyer
- Librarian
- Military Personnel
- Personal Consultant
- Radio Broadcaster
- Record Producer
- Reporter
- Salesman
- Social Worker
- Technical Writer

---

*For duplication is granted by Educational Progress Corporation.*
APPENDIX 5

Television Guides
TITLE OF OCCUPATION: Field of Cosmetology

LENGTH OF TIME: 25 minutes

AUDIENCE: Boys and Girls

PRE-PROGRAM INSTRUCTIONS: Explain the overview of the video lesson, the objectives and the introduction to the students.

OVERVIEW OF VIDEO LESSON: The tape discusses the duties, responsibilities, opportunities, and performance of the cosmetologist who styles, cuts, curls hair, gives manicures, facials, and other personal services.

OBJECTIVES: The student should be able to identify entrance requirements, needed skills for completion of the training program, and what is necessary to enter and advance within the occupation.

INTRODUCTION: Utah has approximately 1300-1500 Cosmetologists working within the state, with about 700-900 self-employed. There is a real opportunity for employment for those with initiative and drive to succeed. The occupation is open to both boys and girls. The salaries range from $15.00 to $100 per day. Most employers prefer mature persons who have graduated from high school. Beauty salon operators seek job applicants of a neat, pleasant appearance with the ability to meet and converse with patrons and one who can perform his or her duties professionally.

The Utah Law requires that a cosmetologist be at least 16 years of age and have completed 1500 hours of instruction. The occupation is classified as a skilled occupation due to the training requirements and duties performed. Please note a high percentage are not in the profession after one year.

Please don't take notes as you view the tape. Questions will be answered at the end of the tape.

POST-PROGRAM ASSIGNMENT:

Part I. Ask students if there are any questions they would like to raise before proceeding with the TV follow-up questions. (Allow 10-12 minutes to answer Part II of the Post-TV assignment.)

Part II. Hand each student a set of questions. The student should have a correct answer to the questions before they leave class. If time allows students could group themselves and work together or teacher may provide short answers to the questions.

Part III. Have students return questions with answers.
COSMETOLOGY QUESTIONS

1. Name two sources of training for this occupation.

   Ans. Private schools such as those in most large cities. Also state schools--Utah Trade Tech College, SLC and Provo.

2. List three classes suggested on the tape that will help one to succeed in the field of cosmetology.

   Ans. Math, typewriting, art, health

3. List entrance requirements for this occupation.

   Ans. A total of 1500 hours of instruction--classroom and laboratory
   A state license--cost $23.00

4. What are the costs of this educational program.

   Ans. Cost--$100 per quarter. Three quarters of training are required. Most students can secure a tuition waiver by applying for a scholarship.

5. Name a good source for learning more about the field of cosmetology.

   Ans. Schools offering the training, school counselors or the Occupational Outlook Handbook.

6. What personal qualities are suggested to enter the occupation?

   Ans. Neat appearance, ability to communicate intelligently, a pleasant attitude, good health free from allergies caused by chemicals. Good study habits to ably handle the classwork required.

7. How much money can a person make during the year.

   Ans. From $5,000--$10,000 annually depending on one's ability and their length of service.

8. What are some advantages of this occupational field?

   Ans. Opportunity to work with people in styling and designing hair. Short training program. Opportunity to participate in local and national hair styling contests. May provide an income either on part-time or full-time basis.
TITLE OF OCCUPATION: Medical Technologist

LENGTH OF TV TIME: 18 minutes

AUDIENCE: Boys and Girls grades 9-14

PRE-PROGRAM INSTRUCTIONS: Read the overview of the video lesson, the objectives and the introduction. Explain these to the students.

OVERVIEW OF THE VIDEO LESSON: Many people have been in a small laboratory located in a clinic or in a hospital for an analysis to aid a doctor in medical diagnosis. The presentation takes us into a small laboratory to learn more about the duties that one needs to perform, what educational requirements are needed to enter the occupation, also the advantages and disadvantages one should consider concerning the job of a medical technologist.

OBJECTIVES: The student should be able to:

1. List the duties of a laboratory technologist.

2. Explain the advantages and disadvantages of the occupation.

3. Identify the entrance requirements necessary for a medical technologist to be employed.

INTRODUCTION: The medical technologist uses a microscope to examine cultured samples, determine blood coagulation time and sedimentation rates, analyses water, food products and other material for bacteria. Body tissue is examined to determine the presence of bacteria, fungi, or other organisms. The samples are then analyzed for specific reactions, chemical content and other factors to assist the physician in the diagnosis of his patient's disease. The medical technologist may, in addition to assisting the pathologist or physician concerned with diagnosing a patient, do research on the improvement of laboratory techniques or new drugs. Teaching in a college or school of medical technology, performing administrative and executive duties, acting as sales representative for a pharmaceutical firm or hospital equipment and supplies manufacturer, are other areas of possible employment.

POST-PROGRAM ASSIGNMENT:

Part I. Ask students if there are any questions they would like answered before proceeding with the TV follow-up questions.

Part II. Hand each student a set of questions for discussion purposes.

Part III. Have the students answer the questions and return the answers at the end of the period.
1. List the duties of a Laboratory Technologist?

Ans. To draw blood and make sugar test, blood typing, urine analysis, use and understand special equipment, all to assist a doctor in establishing a diagnosis.

2. List the requirements necessary to become a medical technologist.

Ans. Three to four years of college, one year internship at an accredited college, and pass the test (national registry)

3. What are some advantages of this occupation?

Ans. There is a demand for technologist both male and female. It provides a good salary compared to other occupations. Working conditions are always comfortable, warm, clean.

4. What are the opportunities in the state of Utah and also the nation?

Ans. There is a great need for medical technologists here in Utah. Opportunities are available in research, laboratories, and managerial positions across the nation.

5. What is the salary range for this occupation?

Ans. In the state of Utah the salary will range from $400.00 to $600.00 per month, in the state of California it can be as high as $900.00 per month starting salary.

6. List the High School programs that a student can take to prepare for this kind of work.

Ans. Science, Zoology, Bacteriology, Biology, Physics, Chemistry and Math.

7. Identify the sources of information concerning the Medical Technologist.

APPENDIX 6

Career Card
CAREER EDUCATION
"A WAY OUT"

CAREER EDUCATION "A PROGRAM FOR EVERY CHILD"
LOGAN CITY SCHOOLS, LOGAN, UTAH
POOL OF UNEMPLOYED YOUTH 16-24 YEARS OF AGE

1971 - 14,368

1980 - 20,280

THE UTAH POOL IS GETTING LARGER

WHAT CAN WE DO?

SOLUTION — CAREER EDUCATION

SCHOOL — PARENT — COMMUNITY
APPENDIX 7

Available video tapes and TV guide (sample)
LIST OF TAPES AVAILABLE

VIDEO TAPES FOR BROADCAST

Telephone Operator
Electrician
Secretarial Science
Cashier-Receptionist
Electronic Technician
Medical Occupations
Medical Technologist
Cosmetologist
Sewing Machine Operator
Auto Mechanic
Computer Operator and Programmer
Elementary School Teacher
TITLE OF OCCUPATION: Telephone Operator

LENGTH OF TIME: 20 minutes

AUDIENCE: Boys and girls

PRE-PROGRAM INSTRUCTION: Explain the overview and introduction of the video tape and the objectives to be attained by the students.

OVERVIEW OF VIDEO LESSON: An interview is conducted with the chief operator of the Mountain Bell Telephone company in Logan, Utah. An explanation of the different classifications of operators and their duties is given. The advantages and disadvantages are explained by the various operators with reference to their respective positions.

OBJECTIVES: The student should be able to:
1. Identify the entrance requirements and opportunities for a telephone operator.
2. Realize the importance of the high school records when applying for a job with the telephone company.

INTRODUCTION: Telephone operators work with the local telephone companies; they also work as PPX (Private Branch Exchange) operators in medical clinics, stores, and large businesses. Utah employs approximately 1700-1800 telephone operators and there will be an increase in this number even with automation carrying more of the load. Salaries range from $3500 to $4500 per year. For people working on a weekly basis they can expect $70 to $100 to start. A good source for more information concerning opportunities as a telephone operator would be the local employment security office and the telephone company. As you view the tape, make note of the entrance requirements and what educational programs are available to prepare for this occupation.

POST-PROGRAM ASSIGNMENT:
· Part I. Ask the students if there are any questions they would like to ask before proceeding with the TV follow-up questions.

Part II. Provide each student with a set of questions which are to be answered. Students may work together or in groups or the teacher may direct the discussion.

Part III. Have the students return the questions at the end of the class period.
1. What does PBX mean with reference to a telephone service and where are these people employed?
   Ans. Private Branch Exchange
   Businesses, Clinics, other than telephone company

2. How has automation affected the occupation of the telephone operator?
   Ans. It has lowered the number of operators. Eleven years ago there were 100 operators, today there are 35 in the Logan office.

3. Do telephone operators receive vocational training. If so where?
   Ans. Yes, at company training programs prior to being employed.

4. What skills are needed by the telephone operator?
   Ans. Communication skill, math skills to figure rates, spelling and legible handwriting.

5. What is a split shift, and is it a disadvantage or an advantage?
   Ans. 8-12 then 4-8 or 10-2 then 6-10
   It is a disadvantage (open for discussion)

6. Does it require a lot of skill to be a telephone operator?
   Ans. No, but it does require training and practice.

7. List the advantages of being a telephone operator?
   1. Limited training
   2. Salary
   3. Leave
   4. Transfer
   5. Part-time work when needed
   6. Benefits, medical, etc.
   7. Opportunity for advancement

8. What classes in school help in preparing for this occupation?
   Ans. Communication classes:
   a. Listening skills
   b. Shorthand
   c. Math
   d. Typing

9. What are the entrance requirements?
   Ans. High school graduation and fair grades with desire to work.

10. List three sources of information telling about telephone operators.
    Ans. Employment Security; Telephone Company; Business (PBX)