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#### ABSTRACT

The internally developed career education program presented was implemented into the existing curriculum over a 3-year period at all grade levels in the Davis County school system (Utah), and included hands-on experience, on-the-job training, career information centers, and guidance and counseling activities. The report briefly describes the inservice training, elementary, junior and senior high school classroom activity, and other project components. Presented in narrative and tabular form are student evaluation data collected from pretests and posttests regarding self-awareness, decisionmaking, knowledge of occupations and the relationship of occupation and functions, appreciation for work, and economic concepts. Also reported are teacher evaluation data on teacher involvement and teacher assessment of the career education program and the results of a parent career education attitude survey. It was concluded that the project had some impact on the participating students and teachers which varied with schools and classrooms depending on the attitude of the administrator and teacher. It was also found that some teachers lacked a precise idea of career education and exhibited no desire to learn more due to a preconceived notion of its inapplicability to their teaching area. The project-developed questionnaires are appended to the report.

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Project Number 502A850004 Grant Number G381-75-0007

A CONTINUUM MODEL FOR CAREER DEVELOPMENT EDUCATION K-14

Exemplary Project in Vocational Education Conducted Under. Part D of Public Law 90-576

The project reported herein was performed pursuant to a grant from the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Bernell Wrigley, Superintendent Milford C. Cottrell, Evaluator Donald Wright, Project Director U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

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Davis County Board of Education 45 East State Street Farmington, Utah 84025

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#### SUMMARY OF REPORT

This is a report of a career education project conducted under Part D of Public Law 90-576. The project covered a three year period, beginning in June, 1973, and ending July, 1976.

The major goal of the project was to assist students to make a smooth transition from school life to adult life in the area of their chosen vocations. Subordinate to this was the program objective of implementing a career education program at all grade levels in all schools in the Davis County School System. Procedural and instructional objectives were established at each grade level as aids in achieving the major goals.

Basic to operational procedure was the philosophy that career education should be integrated in and become a part of the present ongoing school program. It was to require neither new classes nor subject matter. It was also to be part of the school experience for every child at every grade level. The project was to be organized in such a way that it would continue beyond the federally fund.

Because the project was to be developed internally, rather than be imposed, teacher training became a priority. Many types of workshops were used before a model involving local planning and the teachers' peers as consultants evolved.

The most desirable classroom activity consists of infusion of career education into the regular classwork, thus relating subject matter with real life situations. Various methods were used to do this including teaching moments, community resource specialists, audio visual presentations, mini-units, special study and reports, displays, field trips, and classroom discussions.

Hands on experiences were provided in many areas. A viable industrial arts program for junior high school has been developed. It consists of forty-four different skills

and crafts in four career clusters. Further development is needed in hands on exploratory activities in the junior high schools.

Student on-the-job training was provided for 983 high school students during the 1975-6 school year. This involved a great number of programs, sites, and careers.

Career information centers, and programs for their use, were established in all secondary schools. Guidance and counseling activities have been coordinated between the secondary level schools.

The career education program in the elementary schools has become a definite part of the social studies curriculum, and is written into the social studies guides.

A career education program has evolved from this project, that involves six high schools, nine junior high schools and thirty-five elementary schools. A majority of the teachers in these schools are doing some things in career education. Career education principles are being applied in all subject areas. The program is such that it will now continue beyond the funded project.

There is data to indicate that the project has had some impact on both students and teachers. This varies from school to school and from classroom to classroom.

We believe that for career education to have a permanent impact in a school system it must be internally developed rather than to have a superstructure imposed on an already over-crowded curriculum and overworked teachers.

#### REPORT NARRATIVE

# LOCALE .

Davis County, Utah, encompasses an area of two hundred and sixty square miles and has a population of 120,000 people. It is a rapidly growing area, reaching a growth peak of 109 percent during the 1950-60 decade. It was once a garden spot supplying fruit and farm produce. Now it has become a bedroom area resulting in a low per pupil tax base.

The two major employers in the county are Hill Air Force Base and the Clearfield Freeport Center. Nearly forty percent of the workers in Davis County are employed in the Salt Lake City and the Ogden City areas.

The population is mostly Caucasian with a small percentage of Spanish surnamed, oriental, black, and American Indian people. About five percent of the families of children attending school qualify as being economically deprived.

Because of the large number of federally employed families, and because of the low tax base quied by federal installations not subject to tax, the school district depends on P.L. 814 (Aid to Impacted Areas) for sufficient money to operate its schools.

# DAVIS COUNTY SCHOOL SYSTEM

Davis County School District encompasses the whole of Davis County. The district has an enrollment of 35,000 students attending six high schools, nine junior high schools, thirty-five elementary schools, a district vocational center, and a development center for the handicapped. These divisions involve students from kindergarten through post high school training. In addition to these divisions the adult vocational program and the community schools enroll about 20,000 people annually.

The district office is located in the center of Davis County at Farmington, Utah. The schools are located in

thirteen cities and towns all within 20 miles of the district center.

The district's philosophy is to be carefully innovative. New programs and projects must fit into the ongoing school offerings. The district opposes a potpourri of educational fragments.

### PROBLEMS OF CONCERN

The problems addressed by this project were the following:

- The lack of a positive attitude on the part of parents and children toward existing educational alternatives.
- 2. A need for students to have a purpose in their school activities.
- 3. The need for reliable career information early in a child's life.
- 4. The lack of career information and job skills acquired by students by the time they leave high school.
  - 5. The attrition rate of students from college. Many of these students have no planned provision for their vocational needs.
  - 6. College graduates who cannot secure employment in the area of their training and who have little knowledge of sources where they can secure career decision help.
  - 7. The need for skilled people to fill existing job openings.
  - 8. The demand for skilled workers created by specialization and technology.
  - 9. The breakdown of the work ethic by urbanization and the family disintegration.
  - 10. The need for education to prove accountable to the community.

### GOALS AND-OBJECTIVES

The major goal of the project is to assist students in making a smooth transition from school life to adult life in the area of their chosen vocations. In accomplishing this a subordinate goal is to implement a career education program at all grade levels in all schools in the district. Procedural and instructional objectives are established at each grade level to aid in the realization of the major goals.

The achievement of the procedural and instructional objectives during the three project years is reflected in the evaluation portion of this report.

### BASIC GUIDELINES

The following became basic guidelines within which this career education project was to be developed and operated.

- 1. The project was to carry over into the ongoing school program. It was to be a fine tuning of our present curriculum to include the dimension of the worker. Neither new courses nor new classes were to be created.
- 2. The project was to synthesize all facets of career education presently existing in the school district.
- 3. Every child in every grade level was to receive benefits from the career education project.
- 4. The project was to be organized so that it would transcend the project funding period and become a permanent part of the school program.
  - 5. The project staff was to be organized so that it could continue with local funding, and so that it would place the responsibility for career education on the local schools.
  - The project was to be developed internally with major teacher input.

The career education project was to begin in five pilot



schools - one high school, one junior high school, and three elementary schools. The high school students all came from the junior high school in the project, and the junior high students all came from the three elementary schools in the project, thus creating a continuum of students through the pilot schools. All of the students in these schools participated in the project activities.

It was intended to involve all schools in the district maring the third project year. However, other schools started to become involved before the end of the first year, and by the beginning of the second year all schools, with five exceptions, were moving into the program. All schools are now involved.

### SCOPE AND SEQUENCE

For the purpose of continuity and to avoid excessive duplication, the career education curriculum was divided into four components. The elementary (K-6) component, called "The World of Work," is concerned with awareness of self and others, appreciation of work and workers, familiarity with the magnitude of careers, and economic concepts.

The junior high school (7-9) component, called "The Career Exploration Program," involves interest and aptitude identification, exploratory career experience, and decision making techniques. This level component also continues the themes of the elementary grades.

In addition to the continuous themes of the two lower levels, the high school (10-12) component, called "The Career Preparation Program," assists students with career planning, pre-career experiences, job entry skills, background knowledge and skills for further career training, job hunting and maintenance skills, and placement.

The post high school component called "The Skills
Development Program," is centered at the district vocational

center and concentrates on the development and upgrading of salable skills.

# PROJECT DESIGN AND PROCEDURE

P.

Inservice Training. After consultation with the principals and others involved it was determined that for the first inservice training sessions each component could develop the type of workshop they desired. Comparisons were made and an inservice training model that seemed effective was developed.

Elementary School Inservice Training. The Utah State World of Work units were the basis for the beginning of the elementary component. Because some schools and teachers had used this program the first elementary inservice sessions were built around it. All of the teachers from the three pilot schools were participants in the workshop. Grade level sections were conducted by teachers experienced in using the World of Work units on that specific grade level. This proved successful and became the basis for later inservice lesions for the elementary schools, and gradually for the other components.

Junior High School Inservice Training. Our first inservice session for junior high school involved all teachers from the pilot school. It was in conjunction with the pilot high school and organized on a departmental basis. It was tonducted by departmental specialists from the State Superintendent's Office. There were two inhibiting factors. First, the goals of the two schools are not closely enough related to hold joint sessions. Secondly, the state specialists, at that time, were not wall enough grounded in career education (C.E.) to make a significant contribution.

The second workshop attempt for this component was conducted within the school. Selected teachers prepared specific C.E. units and trained the other teachers in using them. This was successful in helping teachers become involved in C.E. However, there was negative reaction among teachers because of the severe structure and the fact that the prepared units

were outside of some teachers' academic areas.

The third junior high C.E. workshops involved selected teachers representing all nine junior high schools in each of five academic areas. Brigham Young University personnel conducted the departmental sessions based on an agenda prepared by the district C.E. staff. An attempt was made to have this a "How To" experience. It was more successful than the other workshops in this component, and led to the final model for workshops used by both levels of the secondary schools.

High School Inservice Training. After the first experience with specialists from the state office, a second workshop was held at the pilot high school planned and directed by local school personnel, a representative of the Utah State University, and a member of the state student services department. Although well planned and executed, the focus of the workshop turned toward behavioral objectives and mini-units rather than the broad C.E. concepts. It did, however, provide an opportunity for teachers to become acquainted with C.E. materials, and involved teachers in C.E. experiences.

The final secondary workshops involved the heads of all academic departments of all fifteen junior high schools and senior high schools in the district. The teachers organized by academic departments and divided into junior and senior high school groups. The workshop sessions were conducted by district teachers and consultants who have shown success in infusing C.E. into the curriculum. The agenda was built around departmental guides that were developed following the previous workshops. The department heads returned to their schools and oriented the members of their departments in C.E. and in the use of the guides. This model, which evolved over a two year period was the most successful inservice effort we made.

Glassroom Activity. With the guidelines to make the

infusion of C.E. into the ongoing program the basic method of the project, all efforts in the classroom were to make C.E. an extension of what was being taught in the regular curriculum.

ponent was started by using prepared units of the Utah World of Work program. These were supplemented by teacher developed units. Both types of units required classroom study, field trips, resource visitors, student activity, displays, audiovisual media, and classroom discussion. Plans were for teachers, as they became more confident, to weave these units into their regular classwork, using only such parts of the units as were appropriate. This in turn evolved into C.E. becoming part of the regular curriculum and being written into the new social studies guides. The guides use the units as resource material and suggest activities, media, resources, both written and personal, objectives, and evaluation methods for teacher use.

The guides consist of eight themes that run through all seven elementary grades (K-6). Four of these themes - Personal Worth, Rights and Worth of Others, Value of Work, and the American Economic System - are C.E. themes. The guides have a conceptual structure, or a conceptual hierarchy, with each concept being built on the preceding one. They become more sophisticated as they move upward through the seven grades. The guides contain 556 concepts, 242 of which are C.E. related.

Junior High School Classroom Activity. The junior high school is the weakest C.E. component of the C.E. program. Infusion of C.E. into the regular classroom has taken place, and mini-units have been developed and used, involving resource visitors, research, and student activity. However, germane hands on and exploratory experiences have been largely lacking in most academic disciplines.

Hands on experience has been evident in art, music, business,



homemaking, and industrial arts. A model program called Occupational Versatility has begun in the junior high schools.

One school implemented it during 1975-6 and two more schools are scheduled to initiate the program during the 1976-7 school year.

The occupational versatility program is for all seventh grade students for one semester. Forty-four modules, each representing a different skill or craft, provide hands on experience in four job cluster areas - transportation, manufacturing, construction, and communication. Each student works in each module during the semester.

A three year project will start during the 1976-7 school year to develop similar exploratory experiences in all junior high school academic disciplines.

Mini-career days are part of each year's C.E. activity. Community people are brought in to discuss their vocations in formal group settings, available by choice to all students.

High School Classroom Activity. Because of the diversity of high school students' needs there are three phases in this component.

1) The general phase, that of relating classroom material to specific careers, uses resource visitors, special study and report activities, mini-units, and classroom infusion, which is the heart of this phase. It also involves career days for entire student bodies. General pre-vocational courses provide hands on exploratory experiences in a number of areas such as business, art, music, homemaking, and industrial arts.

A deer companion program, in which a student is assigned to a selected person in the community for the development of a background knowledge concerning a chosen career, is in operation at the pilot high school.

All high schools have career clubs such as FHA, FFA, DECCA, VICA, and FBLA.

- 2) A second phase is the preparatory program which gives stutents a background for further career training. This is provided through infusion in specific classes related to chosen careers. It applies to professional, business, trade and industry, or personal service careers. This phase also considers the basic educational background needed to gain admittance to institutions which provide the further career training.
- 3) The job entry skill phase is carried on through trade and industrial classes and through on-the-job training.

  O.J.T. has developed into a major program with 983 students gaining job experience in the community during the 1975-6 school year.

### CAREER INFORMATION CENTERS

Each high school has a career information center separate and apart from the library and media facilities. The C.E. information centers contain C.E. material and the equipment necessary for its use. Programs have been established for all tenth grade students to be introduced to the centers and the material they contain. Students of other grade levels also have access to and the use of the C.E. material. The centers are directed by a counselor with a para-professional as supervisor.

The junior high schools also have career information centers. These are primarily for teacher use in preparing C.E. classroom material. Students are permitted use of the center when they have special interests.

#### PLACEMENT

A program is in operation to assist all students who leave high school, at graduation or before, to move to the next step of their career plan. For a majority of students



this requires help in being admitted to institutions that provide further training - colleges, technical and vocational schools, special career training institutions, or apprenticeships. Others are helped to find employment or to select desired programs offered by the armed services. The same service is available to all who exit before graduation.

# AUDIO VISUAL MEDIA DEVELOPMENT

At the beginning of the project a media development technician was hired on a full time basis. It was for the purpose of developing career information media about local industrial, service and professional careers. Some materials were developed. By the middle of the second project year it became apparent that the costs of this activity exceeded the benefits, and it was discontinued. Media with a local flavor is a real asset to a C.E. program. It will be more desirable than commercially developed media when production costs can be brought into line.

# COUNSELING AND GUIDANCE

The school district subscribes to the philosophy that the best counseling of children in the self-contained elementary classrooms is provided by the classroom teachers. These teachers were assisted in improving their counseling skills through workshops. District specialists in the student support area are available to assist with students who need special attention. A resource team is assigned to each school. It consists of a psychologist, a social worker, a speech and hearing therapist, a nurse, the principal and teacher.

Each junior high school has a counseling program. Career counseling begins in the seventh grade and culminates in an extensive career and educational planning session before the student goes to high school. During the last year of junior high school students take either the D.A.T. or the G.A.T.B. test. They also complete, with the help of parents, a questionnaire indicating their career preferences, interests,



and aptitudes. In individual conferences with students and parents, the counselors, using the test and questionnaire results, helps students make educational and career plans.

The high school uses these plans in counseling students. Additional tests are administered during high school. The results of these and of student conferences are added to the student's file. These files are used in career counseling. One important role of the counseling department is the placement phase of C.E. mentioned above.

We envision a counseling program that has an instructional function. Our next three year plan includes the development of such a program.

### DISSEMINATION

The major dissemination activity was within the school district. Models and procedures flowed from the pilot school to other schools. There was little produced in the way of guides and explanatory material. Those that were developed have been circulated as a result of requests for information. The requests came from various places nation-wide and from as far away as Australia. Interm reports of the progress made by the project were prepared and circulated by the ERIC system.

Presentations of the project have been made at meetings on an area, state, and regional basis.

### ADMINISTRATION AND PERSONNEL

The C.E. Project was under the direction of the regular school line authority. A director of the district-wide program was selected, along with a curriculum specialist to work primarily with the elementary schools and a placement specialist working primarily with the secondary program.

In Davis County School District the school principal is the educational leader and responsible agent for the school. To be successful and permanent a program must have its roots



primarily in the school and with responsibility resting there. At the end of the first project year the project staff was reduced and the schools were to carry on with in school leadership. At the beginning of the third project year the only district project person involved was the director. The district elementary social studies consultant assumed leadership for C.E. in the elementary schools (see Elementary Classroom Activity above). Each of the fifteen secondary schools designated a regular teacher as C.E. facilitator. The facilitator was paid on an extra pay for extra time basis. The facilitator, along with the director and social studies consultant, are the permanent C.E. personnel. There is minimal additional cost to the district for this staff.

# RESULTS, RECOMMENDATIONS, AND CONCLUSIONS

Reference is made to the evaluation section of this report for statistical data concerning the project's accomplishments.

A program has evolved from the project involving all schools and all students in the district. Fifty to sixty percent of the teachers are incorporating C.E. into their classwork to some degree. Involvement of community resources has created a lay interest in the school' programs.

The program is such that it will continue at the school level now that the project funding has ended.

We were fortunate in having an administration that allowed gradual development over a period of three years. Crash programs or the imposition of super structures on the existing curriculum seldom have the same lasting effects as does gradual incorporation of C.E. into the school sistem.

We believe that the be model for teacher inservice training is one structured locally and using teachers' peers as consultants. Outside consultants tend to insert their own biases and philosophy, often neglecting or actually harming the development of desired C.E. concepts.



A need still exists to involve other teachers, and to encourage further commitment from the teachers already involved. Leadership in doing this is assured on the elementary level and, for at least three years, on the secondary level.

The greatest need for curriculum development lies in the junior high school area of hands on and exploratory experiences. This need will be addressed directly during the next three years. State cooperation will be given in this.

The involvement of counselors in an instructional function mode will also be a goal during the next three years.

It is the conclusion of the project director that the "soft sell" approach, encouraging the development of a career education program internally, is the most effective way to achieve C.E. goals and purposes. The program developed in Davis County should have continuing beneficial results in preparing students, to move smoothly to the next step of their career plans.

### SOURCE OF FURTHER INFORMATION

More detailed information about the project objectives, organization, design and procedures, materials used, and results are recorded in the interm reports of the project for the years 1973-4 and 1974-5. The 1974 report is on the ERIC system, listed as Number ED 108003, page 91. The 1975 reports is also in the ERIC system, however, the number is not available at the time of this report.

# INTRODUCTION TO EVALUATION

The Career Education Project in Davis County
School District has had a number of objectives as noted
in the previous section of this report. The evaluation
procedure was designed to measure the achievement of
these objectives at each specified grade level. Instruments have been purchased where suitable instruments
were published and others were developed. Instruments
were modified as weaknesses became apparent. The following report is a compilation of the data assembled during
the third year of operation including comments of
observed strengths and weaknesses for the full threeyear period.

### DATA OF STUDENT ORIGIN

# Self Awareness

One of the important factors to be considered in the selection of an occupation is in an awareness of one's self. One's attitude towards himself and his place in the universe, towards others, things, ideas, and life in general, all play an important part in the selection of life's work. Davis County students of three elementary schools were administered instruments to determine their self awareness. Third grade students were administered "Self Observation Scales," a standard-ized instrument used with students in the earlier grades.

Third grade. Analysis of data in Table 1 shows the mean score, standard deviation, and mean percentile scores for the four categories: Self Acceptance (how students view themselves); Social Maturity (how students think and feel in social interactions); School Affiliations (how students view school experience); and Self Security (how students view the factors that affect their lives).

Three categories showed a significant gain in percentile from pre- to posttest. Social Maturity gained 15.6, Self Security gained 14.5, and Self Acceptance gained 8.4 percentile. Only in the category of School



Table 1

Responses of Third Grade Students of Davis County (Utah) School District Schools to Questions
Pertaining to Self-Awareness, 1975-1976

				Rlom	entary Sc	hools	<u> </u>					-
Components	Burto	an .	Parmington				Kaysville				•	
	Pro . N = 18	Post	tile Gain	Pre N = 17	Post N = 14	tile Gain	Pre N = 18	Post N = 17	%ile Gain	Pre N = 53	Post N = 49	Gain
Self Acceptance							4			48.9	51.4	•
Mean Score	49.8	53.9	1	46.4	48.9		50.4	51.5				
Standard Deviation	7.1	6.6		10.3	9.6	•	6.6	7.2		8.0	7.0	٧
Mean Percentile Score	49.4	63.6	14.2	42.8	49.3	6.5	52.2	56.5	4.3	48.1	56.5	1.4
								,		, 1		
ocial Maturity	50.6	54.2		45.8	. 50.7		53.0	52.7	•	49.8 ,	52.5	8
Mean Score	10.0	8.2		10.1	11.1		8.2	1,.8		9.4	9.1	
Standard Deviation	10.0	•••					*			<b>'</b>	4	
Mean Percentile Score	49.3	64.2	14.9	31.8	<b>∫</b> 55.4	23.6	51.0	60.1	1.3	44.3	59.9	15.6
School Affiliation						,		42.7	,	44.3	43.3	
Mean Score	44.9	48.1	. *	41.6		, ,	46.4			11.9	12.3	
Standard Deviation	11.3	9.9		10.6	13.5		13.8	13.5				
Mean Percentile Score	43.6	47.1	3.5	28.9	27.9	- 1.0	. 47.9	36.5	-11.4	40.1	37.2	- 2.9
Self Security	•	•		١.,		\ ·			•	52.6	57.4	
Mean Score	52.8	57.7	٠.	49.1	, 56.1	1	55.8	58.3			8.2	
Standard Deviation	<b>ف</b> و <b>0 . 8</b>	7.3	1	10,6	7.5	<b>}</b>	6.6	6.7		8.4	<b>4.4</b>	
Mean Percentile Score	58.9	74.1	15.2	48.4	69.4	21.0	68.4	75.9	7.5	58.6	73.1	. 14.

Affiliation was there a degrease (-2.9) between the preand posttests. In the category of School Affiliation
only Burton showed a gain of 3.5, while Farmington
decreased -1.0. Kaysville had the biggest drop (-11.4
percentile).

Burton Elementary students scored above sixty percentile in each of three categories and forty-seven percentile in the category of School/Affiliation.

fifty percentile in two of the four categories. School
Affiliation was lowest with 27.9 percentile on the posttest. This indicates some negative feelings toward
school.

Maysville Elementary students scored above the mean in three of the four categories with School Affiliation dropping from 47.9 percentile on the project to a 36.5 percentile on the posttest, again howing a negative feeling toward school.

# Decision-Making Skills

Self awareness, knowledge of work and decision-making skills are all important factors to be considered in the selection of an occupation. Davis County sixth, seventh, ninth, tenth, and twelfth grade students in project schools were administered the Career Maturity Inventory, a standardized instrument designed to measure competence in knowledge of work, decision-making skills

and self awareness. The inventory produces the following subscores: attitude, knowing yourself, knowing about jobs, choosing a job, looking ahead, and what should they do? The instrument was administered at the beginning and again at the end of the school year. Mean scores were calculated for each of the six components on a pre and post basis. Pre scores were subtracted from post scores to obtain a gain score.

Sixth grade. Responses of sixth grade students at Farmington Elementary and Kaysville Junior High to the Career Maturity Inventory have been placed in Table 2. At Farmington Elementary in five of the six categories the mean post score was higher than the mean pre score. Only in the concept of "Knowing Yourself" was there a negative gain, and this was small enough (.03) to be of little consequence. "Knowing about Jobs," "Looking Ahead," and "What Should They Do?" ranged from 1.07 in the category of "What Should They Do?" to 4.83 on the "Attitude" scale.

In comparing the pretest results with the posttest results at Kaysville Junior High the data indicate a negative gain in all six categories. However, the difference between pre and post mean scores was less than 1.0 in five of the categories. Only in the component labeled "Choosing a Job" did the post mean decrease by more than a point (1.12).



Table 2

Response of Sixth Grade Students at Davis County (Utah) School District Schools to Career Maturity Inventory, 1975-1976

,	Pa	rmington		Kaysvi	lle Jr.	Hi.	Total			
Concepts	- Pre (18)	Post (17) G	ain	Pre (38)	Post (35	Gain '	Pre	Post	Gain	
Attitude	29.41	34,23 4	.83	32.08	31,94	-0.14	30.75	33.09	2.34	
Inowing Yourself	11.50	11.47 -	.03	9,08	9.83	-0.25	10.29	10.15	-0.14	
nowing about Jobs 🙀	12.61	14.35 1	.74	11.34	10,77	-0.57	11.98	12.56	0.58	
hoosing • Job	11.83	12.59 0	.76	10.ຄື້	9.49	-1.1	11.22	11.04	-0.18	
ooking Ahead	11,28	12.53 1	.25	9.82	9.66	-0.16	10.55	11.10	0.55	
hat Should They Do?	7.28	8,35 1	. 07	6,53	'5.83	-0.70	6.91	7.09	0.18	
Overall Mean Score	13.99	15.59 1	.60	13.24	12.74	-4.96.	13.62	14.17	.56	

Differences of post mean scores of Farmington
Elementary sixth grade students when compared with
Kaysville Junior High sixth grade students show a substantial difference. Data indicate that in all six categories Farmington Elementary post mean scores were higher, ranging on the subscales 2.3 to 3.58 above post mean scores of Kaysville Junior High.

Overall mean scores showed Farmington Elementary sixth grade students averaging a gain of 1.60 points from pre to post measures while sixth grade students in Kaysville Junior High showed a drop of -.49 points from pre to post measures.

Seventh grade. Kaysville seventh grade students made positive gains in all six components of the Career Maturity Inventory as is shown in Table 3. In the three concepts: "Attitude," "Knowing Yourself," and "Choosing a Job," total mean gain scores were less than 1.0 point. Gains made in the categories of: "Knowing about Jobs," "Looking Ahead," and "What Should They Do?" were all in the 1+ range. The highest gains were in the latter two categories where gains were 1.48 and 1.49 respectively. Generally speaking, seventh grade students at Kaysville Junior High School made the highest gains on the part of the test designed to measure decision-making skills.

Table 3

Pre and Post Response of Seventh Grade Students of Davis County (Utah) School
District, Kaysville Junior High School to Career Maturity Inventory
1975-1976

	<u> </u>		
Concepts	Pre	Post	Gain
Attitude .	32.88	33.40	+0.52
Knowing Yourself	9.64	10.37	+0.73
Knowing about Jobs	11.32	12.58	+1.26
Choosing a Job	10.14	10.98	+0.84
Looking Ahead	10.12	11.60	+1.48
What Should They Do?	7.16	8.65	+1.49
	· ·		

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## Davis High School Responses

Over 130 students representing the ninth, tenth, and twelfth grades of Davis High School were administered the Career Maturity Inventory. Pre and post results of the inventory are shown in Table 4 with all three grades represented.

Ninth grade. The gain column indicates that all six components reflected increases in the post mean scores. Two components reflect self awareness: "Attitudes" and "Knowing Yourself." In these two areas students showed gains of .90 and 1.67 respectively. In the last component, "What Should They Do?" the ninth grade students made their highest gain (9.40 to 11.12).

Tenth grade. A sharp contrast is shown in the gain column of the tenth grade responses when compared to the ninth. In every category there is a negative gain indicated. The concept labeled "Attitude" stands out as the component making the sharpest decrease going from a pre score of 36.60 to a post score of 34.54.

Overall the negative gains ranged from -.47 in "Knowing about Jobs" to -2.06 in "Attitude."

Although the tenth grade results show negative gains in all six components, comparisons show that their pretest means are higher in every category than those of the ninth and twelfth grades. A close inspection also indicates that the tenth grade post mean



Pre and Post Response of Ninth, Tenth and Twelfth Grade Studente at Davis High School, Davis County (Utah)
School District to Career Maturity Inventory 1975-1976

								$\overline{}$			
		9th Grade				10th Grad		12th Grade			
Concepts.	Pre	Post	Gain		Pre	Post	Gain	Pre	Post	Gain	
Attitude	34.00	34.90	+ .90%		36.60	34.54	-2.06	34.17	35.70	+1.53	
Knowing Yourself	12.65	14,32	+1.67	•	15.28	14.50	78	13.29	14.33	+1.04	
Knowing about Jobs	15.51	16.39	+0.88		16.55	16.08	47	16.14	15.50	64	
	13.21	14.27	+1.06		15.49	14,32	-1.17	13.14	14.08	+ .94	
Looking Ahead	12.67	13.37	+ .70	•	15.34	13.80	-1.54	11.74	11.50	24	
What Should They Do?	9.40	11.13	+1.72		11.70	10.92	.78	9.20	9,10	<b>10</b>	
Overell Mean Score	16.24	17.40	1.16		18.49	17.36	1.13	16.28	16.70	.42	

results, with the exception of "Attitude," are higher in every category than those of the twelfth.

Twelfth grade. In the concepts "Attitude" and "Knowing Yourself" which reflect an individual's self awareness twelfth grade students were found to make their most substantial gains. The only other positive gain was found in the component "Choosing a Job." In the remaining three concepts the gains were negative, but relatively small. Though not significant, the students made no positive gains in the part of the test reflecting decision-making skills. In the two components making up this area ("Looking Ahead" and "What Should They Do?") twelfth grade students post mean scores were lower than both those of the ninth and tenth grades.

Overall mean scores showed Davis High minth grade students averaging a gain of 1.16 points going from pre to post measures while tenth grade students showed a drop of -1.13 points from pre to post measures. The twelfth grade students made an average gain of .42 points from pre to post measures.

### Knowledge of Work

An awareness of the duties required by various occupations is essential in the intelligent selection of one's occupation. One must align his attitude and abilities with job requirements as a part of the selection process. Fourth grade students were administered



a standardized instrument, "Comprehensive Career Assessment Scale," to determine their familiarity with and interest in selected occupations.

Fourth grade. For each of the seventy-five occupations considered, fourth grade students were to check one of three options for familiarity: "Know a lot about," "Know a little about," or "Know nothing about." The interesty scale required students to select one of three responses for the same occupation:

"Interesting," "Not interesting," or "In-Between." Each response was given one, two or three points, with

"Knowing a lot about" and "Interesting" garnering three points each.

According to data analyzed in Table 5, the interest for the aggregate total was higher for all career clusters than was familiarity. High interest and lower familiarity indicated that benefits would be accorded students by involving them in field trips, class visitors, and other awareness activities that would provide enrichment and fulfillment of their needs.

Five areas showed a negative gain in familiarity:
Environment, Fine Arts and Humanities, Hospitality/
Recreation, Manufacturing, and Marketing/Distribution.
A gain in interest from the pre- to the posttests was found in all areas.

Table 5

An Evaluation of Career Interest and Familiarity (of Selected Occupations) of Fourth Grade Studenta of Davis County (Utah) School Dietriot, 1975-1976

			<del></del>		<del></del>	<del>,</del> , , , , , , , , , , , , , , , , , ,	******		T				
		Burton Hean			"Parmington <b>Mea</b> n			Kaysville <b>Hee</b> r			TOTAL Nean		
CAREER CLUSTERS	Pre N = 17	Post N = 18	Gain	'Pre N = 16	Post N = 18	Gain	Pre N = 16	Post N = 18	Gain	Pre**	Post N = 54	Gain	
Agribueiness and Natural Resources		~								1		<b>,</b>	
Pamiliarity Interest	9.7 ° 9.2	10.4	.6 1.9	10.3 10.7	10.3 11.8	1.1	9.9 9.9	10.1	.2 2.0	10.0	10.3 11.6	1.7	
Business and Office			•			•	•						
Pamiliarity Interest	7.6 7.8	8.4 9.8	.8 2.0	7.5 8.6	8.8	7	7.1 8.4	7.8 9.3	.7 .9	7.4 8.3	7.7 9.3	.3 1.0	
Communications and Me	dia												
Familiarity Interest	10.6 10.3	10.4 11.0	2	9.9 9.4	9.9 10.8	1.4	10.1 9.2	10.3 11.2	.2 2.0	10.2	10.2	1.3	
Construction	•			,									
Pamiliarity Interest	9.1 7.7	\$.0 8.0	1.1	10.1	10.6	.5 .9	9.8 8.6	10.3 10.8	.5 2.2	9.6 8.5	10.0	1.4	
Consumer/Homemaking Education		į.											
Pamiliarity Interest	7.6 8.2	7.8 9.8	1.6	7.5 7.8	6.9	1.8	6.9 8.0	7.7 9.8	1.8	7.3 8.0	7.5 9.7	1.7	
Environment		•								,			
Pamilierity Interest	9.4 8.2	9.2 8.4	2	9.8 8.8	9.3	·5	. 8.9 8.4	9.2 10.6	.3 2.2	9.4 8.5	9.2 9.4	7 :2	

Teble \$ (continued)

,	BURTON			Parkin Med			RAYSVILLS Hean				TOTAL (			
CAREER CLUSTERS	Pro H = 17.	Post N = 18	Gain	Pre N = 16	Post N = 18	Gain	Pro H = 16	Post N = 18	ànin	Pro H = 49	Post N = 54	- Gain		
Pine Arts/Numanities				•′		i	•			v	. 4	`		
Familiarity . Interest ;	10.6	(11:3	٠.٠٠	1:1	9. <b>6</b> 9.4	- :4	. / 10.4	9.9	.7	10.5	9.6 10.7	2,		
Mealth		,				1	,			7				
Pamilierity Interest	, 10.3 10.7	10.2 11.9	1.2	9.7 10.5	9.9 10.7	.2 .2	9.2	10.3 11.6	1.1 2.0	9.7 10.0	10.1 11.4	1:4		
Mospitality/Recreation	<b>.</b>													
Pamiliarity . Interest	9.8 9.1	9.6 10.1	- ,2 1.6	10.3 10.3	9.2	-1,1	9.9	9.8 11.7	1.0	10.0	. 9.5 10.9	<b>5</b> 1.1		
Manufacturing						1					·			
Pamiliarity Interest	7.3 6.0	7.1 4.9	"2.2 2.1	7.4 7.1	6.7 10.3	7 1.2	6.6 7.4	7.3 10.1	2.7	7.1	7.0 9.8	1 2.0		
Marine Science			•			1					,			
Familiarity Interest	7.2 7.9	7.7 9.2	1.3	7.2	7.4 10.3	1.5	7.3 0.2	7.1 10,1	1.9	~ 7.2 ′ 0.3	7.4 9.8	1.4		
Marketing/Distribution	•			F	· .		,	4						
· Familiarity Interest	9.3 0.7	0,0 10.3	5 1.6	9.0 8.7	9.4 9.8	7.1	8.3 0.1	10.4	.5 2.3	0.9 0.5	8.7 10.1	1.6		

Table 5 (continued)

CAREER CLUSTERS	BURT , Nea		,	Parmington Mean				KAYSVILLE, Head			TOTAL Mean			
	Pre N = 17	Post N = 18	Gain	Pre N = 16	Post N = 18	Gain	Pre N = 16	Post N = 18	Gain	Pre N = 49	Post N = 54	Gain		
Personal Service	28,0													
Pamiliarity Interest	10.9 8.1	10.6 9.3	3 1.2	9.9 8.3	9.4 8.2	5 1	10.6 8.3	12.1 10.8	1.5 2.5	10.5	210.7 9.4	1.2		
Public Services				٠.	•						e ·			
Pamiliarity Interest	10.6 9,6	10.9	.3 1.3	10.6	11.3 10.8	1.	11.2 9.4	11.6 11.9	.4 2.5	10.8 9.6	11.3 11.2	.5 1.6		
Transportation								. ,						
Pamiliarity Interest	9.5 8.5	9.9 9.1	.4	10.2 10.2	10.7 11.1	7:5	10.3 9.3	10.9 10.9	.6 1.6	10.0	10.5 19.4	.5 1.1		

Only in the cluster of Hospitality/Recreation did all three schools show a negative gain in familiarity. Greatest interest was shown in the cluster of Manufacturing, although a negative gain in interest was observed in this cluster. Agribusiness and Natural Resources, and Consumer/Homemaking Education were close behind in interest. Four clusters received no negative gains from any of the schools: Agribusiness and Natural Resources, Health, Public Service, and Transportation.

# Magnitude and Interrelationship of Careers

People are sometimes unable to equate occupations with their functions. Moreover, the relationship which exists between different occupations remains ever more elusive.

Students of the fifth, seventh, and eleventh grades in the schools were administered the same instrument (Appendix A) pertaining to the magnitude and interrelationship of careers, except for necessary vocabulary adjustments for the different reading levels, to determine student understanding of the functions of one hundred different occupations.

standing of relationships from the elementary up through high school for the most part increased. The number of correct responses of inter-relationships of a beautician ranged from an elementary low of 81 percent to 93 percent for the seventh grade to 100 percent for the high school.

All high school students gave correct answers to 15 of the 100 occupations, while the junior high students all gave correct responses to two of the occupations and the elementary students were unanimous in none of the , possible career choices. In approximately all 100 career choices there was definite improvement in the correct answers relating to the knowledge of the skills from elementary to junior high to the high school.

# Need for Education and Training

A part of the function of choosing one's career is that of determining the type and amount of training or schooling is required. Lack of awareness of educational factors leads some to dwell on the "something for nothing" philosophy and to dwell in a state of non-reality. Many students daydream about their desires without considering the price that must be paid for such ventures.

Students in fourth, eighth, and tenth grades were asked to respond to a questionnaire on Education



Number of Correct Responses of Students of Davis County (Utah) School District to the Magnitude and Inter-Relationships of Careers, 1975-1976

		_ `							
-			Grade	7th	Grade	1	lth Grade		.•
	Occupation	-	= 54)	`*(N	. •		(N = 49)		
		No.	- 8	No.	<b></b>	No.			
1.	Missionary	44	82	41	93	48	98 ,		
2.	Rabbi 🐞	32	59	39	77	44	90	· *** · · · · · · · · · · · · · · · · ·	
3.	Nun	48	<sup>4</sup> 89	43	98	48	98	•	•
4.	Bishop	42	78	40	91	. 49	100		
5.	Reverend	26	48	30	68	44	90	<u>.</u>	* * ** **
6.	Undertaker	40	74	39	89	48	98		•
7.	Social Worker	32	59	38	"8 <del>6</del> " •	A7.		14 -0 FO 20	C
8.	Upholsterer	36	67	37	84	48	98		
9.	Beautician	44	81	41	93	49	100	\ 	
10.	Insurance Agent	40	74	40 /	91	48	98	$= - \sqrt{z_i}$	
11.	Psychologist	34	63	26	59	47	96	1	46
12.	Veterinarian	52	96	44	100	49	100		- •
13.	Hospital Orderly	37	69	. 28	64	:43	88	•	Ÿ.
14.	Nurse	28	52	37	84	46	94		<u></u>
15.	Laboratory Technician	29	59 :	32	73	42	86 .	•	\ .
*	are!								- \



Table 6 (continued)

		5th	Grade	7th	Grade	11th Grade (N = 49)		
4,		(N	= 54)	(N	= 44)			
		No.	. <b>.</b>	No.		No.	. 8	
16.	Medical Secretary	. 42	7.78	34	77 .	46	94	
17.	Optometrist	33	/ <b>61</b>	<b>31</b> ,	70	46	94	
18.	X-Ray Technician	51	94	41	93	48	98	
19.	Chiropractor	24	44	22	50	44	90	
20.	Bacteriologist	24 /	44	32	73	47	96	
21.	Architect	43	79	41	93	46	94	
22.	Plumber	48 /	89	44	100	48	98	
23.,	Carpenter	36/.	67	38	86	40	82	
24.	Electrician	49	91 😲	43	98	47	96	
25.	Printer	45	83	42	95	) <b>47</b> .	96	
26.	Welder	47	87	38	86	47	96	
27. (	Chemist	<b>48</b>	89	38	86 -	47	96	
28. ု	Sheet Metal Worker /	45	83	36	82	46	94	
29. 1	Machine Maintenance/ Man	41	76 .	37	84	45	92	
30. 1	Assembly Line Operator	33	61	29	66	47	96	



Table 6 (continued)

<i>1</i> .								
	0 ,		Grade		Grade (5)	. 1	Grade = 49)	c.
	*	No.	. 8	No.	8 W	gNo.	8	
31.	Brakeman	33	61	27	61/	35	71	
32.	Truck Driver	<b>50</b> .	93	43	<b>98</b>	47	96	
33.	Locomotive Engineer	32	<b>*</b>	35	80 0	46	94	
34.	Service Station Manager	\ 41	76	36	82	<b>41</b>	84	
35.	Station Agent	36	67	27	61	38	78	
36.	Dairyman *	31.	57	38	86	46 '	94	
37.	Rancher	41	76	35	80	44	90	
38.	Agricultural Farm Agent	39	72	33	75	41	84	
39.	Poultryman	26	48	38	86	43	88	
40.	Agronomist	20	37	28	64	34	69	
41.	Soil Conservationist	49	91	37°	84	44	90	50
42.	Fish & Game Manager	46	85	39	89	46	94	
43.	Miner	48	89	41	93	45	92	. /
44.	Petroleum Worker	44	. 81	<b>37</b> ·	84	45	92	`
45.	Farm Manager	48	89	41	93	42	86	

Table (continued)

,		5th	Grade	7th	Grade	11th	Grade
		(N :	= 54)	(N	= 44)	()	4.391
		No.	8	No.	. <b>.</b> .	No.	\$\$\ \$\ \ \ <b>\ 8</b> \ \
46.	Pilot	50	93	43	98	38	78
47.	Stewardess	48	89	43	98	46	94
48.	Navigator	46	85	<b>42</b>	1 95	36	74
49.	Body & Fender Repairman	43	80	* 28	63	45	92
50.	Auto Mechanic	47	87	29	.66	48	98
51.	School Teacher	40	7.4	39	89	47	96
52.	Counselor	34	63 -	39	89	47	96
53.	Fireman	50	93	43	98	47	96
54.	Refuse Collector	38	70	37 . ,		46	.94
55.	Principal	48	89	. 42	35	46	94
						•	
56.	Policeman	40	74	. 35	80	47	96
57.	Court Recorder	49	• 91	40	.91	49	100
58.	Lawyer	37	697	35	80	47	96
59.	Librarian	51	94	41	93	49.	100
60.	Soldier	. 49	91	37	84	47	. 96

Table 6 (continued)

	5th	Grade	7th G	rade	llth	Grade
,	(N	= 54)	/ (N =	44	(N	= 49)
,	No.	8	No.	8	No.	- 8
61. Forest Ranger	45	83	35	~ 80	44	90
62. Range Manager	41	76	28	64	42	86
63. Gardener	49	91	38	86	49	100
64. Meteorologist	- 43	. 80 -	33	75	49	100
55. Biologist	39	72	32	73	49	100
66. Travel Agent	43	80	40	91	49	
67. Hotel-Motel Manager	41	76	40	91 *	48	98
68. Waitress	49 🕟	91	39	89	. 49	100
9. Short Order Cook	43	80	35	80	46	94
70. Cashier	47	87	40	91	49	100
71. Author	50	93	, 41	93	49	100
72. Actress	44	81	38	86	49	100
73. Actor	47	87	38	86	49	100
74. Jeweler	45 -	83	40	91	49	100
75. Conductor	51	94	40	91	47 '	96

Table 6 (continued)

				<del></del>				
			Grade = 54)		Grade	11th Grade		
,		•		, (N		· · ·	= 49)	
<u>.                                    </u>		No.	<b>&amp;</b>	No.	8	<b>N</b> 6.	. , <b>.</b>	
76.	Photographer	45	÷83	<b>37</b> -	84	48	98	
77.	Radio Announcer	49	91	38	86	48	98	
78.	Reporter	42	78	36	82	45	92	
79.	Printer	31	57	38	86	47	96	
80.	Lecturer	38	70	35	80	48	98	
81.	Clerk	21 ·	39	17	. 39	<b>25</b>	51	
82.	Salesman	43	80	5	. 11	28	57	
83.	Sales Supervisor	23	43	. 4	, 9	32	65	
84.	Retail Distributors	8	15	7	16	14	29	
85.	Wholesale Distributor	16	30	8	18	20	41	
86.	Marine (Sea) Biologist	37	69	27	61	48	98	
87.	Ship Captain	50	93	35	80	49	100	
88.	Scuba Diver	49	<b>.</b> 91	34	<b>*</b> 77	48	98	
89.	Commercial Fisherman	89	<b>\$</b> 1	27	61	46	94	
90.	Seaman	21	39	21	48	43	88	
					15	_	•	

Table 6 (continued)

	.b.	5th (	Grade	7th	Grade	llth G <u>r</u> ade		
		(N =	(N = 54)		= 44)	(N	(N = 49)	
		No.	8	No.		No.	. 8	
91.	Office Manager	33	61	34	77	45	92	
92.	Bank Teller	<b>46</b>	85	34	77	47	.96	
93.		18	33	27-	<b>e</b> f .	40	82	
94.	File Clerk	45	83	31	70 a	48	98	
95.	Secretary	27	50	31	70	45	92	
96.	Model	45	. 83	37	84	49	100	
97.	Seamstress	40	74	31	70	44	90	
98.	Homemaker	18	33	29	66	47	96	
99.	Nutritionist	30	56	36	82	48	98	
00.	Interior Decorator	33	61	35	80	49	100	

and Training (see Appendix B). The questionnaire asked a number of questions regarding requirements of selected jobs and students' job preparation plans.

Table 7 contains a tabulation of responses of students regarding requirements of several jobs within each of fifteen different job clusters. Elementary students selected over 50 percent of the correct answers in thirteen of the fifteen cluster areas. The category of "Health" gave them the most consistent problem with only 15 percent of the students selecting the correct answer. The "Health" area was also low cluster for both the junior high and high school students who gave only 17 and 53 percent correct responses, respectively. The area of "Marine Science" was chosen correctly 100 percent of the time in the three elementary schools, whereas the junion high and high school were only 96 and 98 percent correct. "Personal Services" rated in the 90 percent plus area for all schools.

Students tended to become more optimistic towards more college education as they progressed from elementary through junior high to the tenth grade. Numbers of students planning to graduate from college jumped from approximately 19 percent in elementary school to 37 percent in junior high to 39 percent by the tenth grade. Conversely, 6 percent of elementary students desired to attend technical school, 2 percent in junior high, and

Correct Responses of Davis County (Utah) School District Students to Questions Pertaining to Workers, Their Functions, and Preparation Requirements in Fifteen Career Clusters, 1975-1976

	• _				.,					· <u> </u>			
· · · · · · · ·	-			Elementary	Soh	ools				Jr. Hi	gh	Hi Sch	1001
CAREER CLUSTERS	- المراجعة المراجعة	BURTON 4th Grade (N = 18)	P;	ARMINGTON th Grade (N = 17)	Ţ	KAYS	VILLE Grade - 18)	TOT		(N =	LLE ade 46)	(N =	IS Grade 51)
•	£ 1	No.	n n	ó. I	٠,	No.	•	No.		No.		No.	•
Personal Services	<del>]</del>	17 v 9	H 1	7 100	,	17	. 94	51	96	44	96 }	46	90
Health		1	6	7 41	ì	0	. 0	8,	15	8	17	27	53
Construction		11 .	51 1	4 82	2 .	16	89 '	41	77	43	93	50	98
Manufacturing A		15	33 1	1 69	5	. 8	44	34	64	41	89	49	96
Transportation (4)			15 1	3 20	5	15	83,	41	77	38	83	ຼ 50 ຶ່	98
atural Resources		15	33 1	6 9	1	11	61	42	79	39	85	₹ 46	90
Public Service		181	۱ ۱	7 100	ı (	14	. 78	49	92	44	96	51	100
Invironment				7 100	] .	18	. 100	52	98	42	91	. 48	94
Recritation			12 , 1	8.		13:	72	39	- 74	41	89	4.7	.92
.* <b>x</b> * -/		R	14 1			.10	56	34	64	42	91	49	96
rine Arts Compunications		11	i & .1	· /		13	• 72	- 38	72	41	. 89	47	92
1				5/- 1- 81		13	72	44	83	35	7Ĝ	48	94
Mirketing	ا ٠ - من		00 1	-	_	18	100	53	100	44	96	50.	98
Mrine Science	-4		57.	8 47		13	*/ 72	33	62	39	85	48	96
Business	• •	· . 4 · Ł .		370		. 12 🦖	, , , -	38	72	34	74	44 *	. 86
Consumer/Homemaking	•	13	72 1	.a/(	1	3	• • • • • • • • • • • • • • • • • • • •		••				



Table 7 (continued)

				Ele	mentary 8	chools				Jr. H	igh	H1 80	hool '
CAREER CLUSTERS		4th	URTON Grade = 18)	4th	INGTON Grade = 17)	KAYSV 4th G (N = No.		4th G	TAL rade 53)	KAYSV Sth G (N =			/IS Grade   51) /
nec	amount of education idents feel they will id to accomplish teer goal:	•			4							•	
٨.	10th Grade	2	11	1	6	0	0	.3	. 6	0	0	o	0
b.	High School Graduate	0	0	1	, 6	0	0	1	2	6	13	8	16
c.	Technical School Graduate	0	. 0	0	a	1	6	1 .	2	1	2	10	20
đ.	College Graduate	1	6	4	24	-5	28	10	19	17	37	20	39
•.	Professional School after College	6	33	3 .	10	3	17	12	23		17	4	
f.	I don't know yet	9	50	•	47	•	50	26	49	12	26		16

20 percent of the tenth grades selected this option.

Students planning to terminate their formal education
after graduation from high school ranged from 2 percent
in elementary school to 13 percent in junior high to
16 percent in tenth grade. Professional school hapefuls
dropped 9 percent from eighth grade, to tenth grade from
17 to 8 percent. Students uncertain about their plans
dropped from 50 percent in elementary school to 16 percent in the tenth grade.

## Appreciation for Work

Society has traditionally placed, degrees of value to occupations. Some are highly esteemed and are sought by individuals desiring recognition or need fulfillment for one reason or another. Some jobs are considered menial and without status and are avoided.

Decisions for employment are affected by a variety of internal as well as external factors. The career education program has sought to teach students that all work is honorable and meaningful if consistent with one's abilities and desires.

A revised instrument of "Career Maturity Inventory" was developed (see Appendix C) for fourth grade students to coincide with the Career Maturity Inventory Scale.

Analysis of the data in Table 8 showed some interesting answers as to one's self. Students in all



Table 8

umber and Percentage of Correct Responses of Fourth Grade Students of Davis County
(Utah) School District to the Value of Work 1975-1976

	FARMI	NGTON	BURT	MON	KAYSV	ILLE	TOT	'AL
	N =	: 17	N =	18	N ==	18	NO.	53
	No.	8	No.	8	No.	•	No.	•
. Can't change mind about	`	٠,		•			<del>.</del> .	
job	2 را	12	2	11	5	28	9	17
Know self to choose job	15	<b>\88</b>	18	100	15	83	48	91
Parents suggest job	8	47	7	1 39	8	44	23	43
. don't want to work	2	1/2	0	. 0	2	11	4 (4	. 8
Any job is possible Decide on job after	16 '	· 94	16	89	14	78	46	.87
completed school	8	47	9	50	11	61	28	53
Job determines salary	12	71	7.	. 39	14	77 •	33	62
Work permits purchase of		•	_			•		
desired items	11	64	12	72	12	67	36	68
. Best job pays best	6	35 `	9	· 50	8	44	23	43
Haven't decided on a caree Talent most important job	r 14	82	18	100	16	88	48	91
criteria	<b>15</b> .	88	12	67	13	72	40	75
Parents know best what I								
can do	8	47	4 .	28	6	33	19	36
Helping others brings		- 1						
happiness	16	94	18	100	16	89	50	94
. Work is distasteful Career selection is con-	0.	Q	2	11	0	0	2	4
fusing Don't know how to find	4	24	12	67	12	67	28	53
job I want	5	29	6	33	0	0 ==	11	21

Table 8 (continued)

	FARM	INGTON	·BUI	RTON	KAY	VILLE	10	TAL	
	N No.	<b>=</b> 17	N •	18	No.	= 18 *	No.	8	
World problems affect job selection Want jobs I couldn't	2	12	6	; <b>33</b>	0	0	8	15	*
handle	3	17	8	44	6	33	17	32	
. Hard to choose school courses Do as well in one job as	<b>6</b>	35	12	67	6	33.	24	45	
another	13	76	,2	11	' <b>6</b>	33	21	40	
When 15 I'll know what job I want	14	82	11	61	15	83	40	75	
Many factors affect job selection I think little about my	, 15	88	15	. 83	17	ø 94 .	47	68	
future job	1	6.	3	· 17	0	0	4	8	
. Money, not the job, is what counts Take parents' advice	5	29	. 3	17	. 0	. 0	8	15	
about choosing job	11	65	15	83	14	78	40	75	
Working is like going to school Trouble preparing onself	11	65	7	39	9	50	27	51	68
for career	9	53 ,	7	39	4	22	20	38	.`
Don't know how a person keeps a job	8	47	12	67 ·	8	. 44	28	53	•

Table 8 (continued)

	•	-	• "		•	•	1.	
. \ .	FARMI	NGTON	BUI	RTON	KAYSV	TLLE	тол	AL
•	N =	17	N =	· 18	N =	18		
	No.	8	No.	8	No.	.8	No.	8
55. Do as one pleases at v	ork 15	88	15	. 83	14	78	44	83
Select job one pleases								
at work	12	71	1.7	94	13	72	42	.79
Only one job for each	•	• ;	×				9	
person	2	12	0	. 0	Ω	0	2	4
Importance about job i		è			. 🐙		• ,	•
ability	13	76	13	72	12	67	38	72
How some people know	( in	<i>;</i> :						
desired career	्री 🖟 3	18	· 9	50	10	, 56	22	42
0. Always know what job 1					•	•		
want .	8	47	8	44	6	32	44	83
Help people, large sal	ary,	•		;				_
great discovery	14	82	13	72	17	94		
Person gets a jcb by o	hance 2	12	10	56	3	17	14	28
Who, not what you know	,			•		•		
gets job	3	18	6	33	6	· <b>33</b>	15	28
Choose job without out	:side	1			. •			
help	<b>8</b>	47	6	33	11	61	25	47
5. Choose work so as to h	elp	. •	•		<b>V</b> .			
others	16	94	16	89	16	89	48	91
Too often think of fut	-							
job	8	47	. 12	67	8 .	44	28	53
Don't know what working	g					1 1	<b>A</b>	
will be like	11	65	11	61	8	44	30	57
Choose and plan to do	job 8	47	-8	44	5	28	21	40
No jobs are appealing	• 1	6	2	11	3	17	6	11
		, .	•	As .	. ,		•	

Table 8 (continued)

		FARM:	INGTON	" BU	RTON	KAYSV	ILLE	TOT	TAL '
		No.	± 17	N =	18	N =	18	No.	9
					<u> </u>		· · · · · · · · · · · · · · · · · · ·		. •
50.	Job chosen should make								
	one famous	3	18	4	22	3	* 17	10	18
	Parents, teachers, and			•					
	friends make job	- 16 ·			. 9	` .		1	
	suggestions	16	94	18	100	16	89	50	94
٠.	Job should be expression			•					,
	of belief	15.	88	16	89	17	94	48	91
	Happiness should result					7- n			
	from work	17	100	18	100	17 ∤	94	52	98
ı	Often change mind about	12	73	13	72	1.2	72	20	70
	job	14	71	13	72	13	72	38	72
53.	Choose job before too long	12	71	14	78	15	83	41	77
	Worry useless as no	. *		ŧ	•	. (20)			
	choice in job	2	12	0	0	3	. 16	5	9
				. :			•	•	

three elementary schools agreed that "Happiness should result from work" in which one is engaged. For the lowest percent on the scale there was a tie between "Work is distasteful" and there is "Only one job for each person," which was 4 percent. Eighty-nine percent of the students agreed that there are many factors that affect job selection. Yet 9 percent say that it is useless to worry in the job selection. Ninety-one percent of the students in the elementary haven't decided on a career at this time. Forty-three percent said that they will select jobs relating to parental suggestions. Ninetyfour percent say that helping others brings happiness, and 91 percent want to choose a career designed to help others. Ninety-four percent state that if they can't make a career choice that they want parents, teachers, and friends to make job suggestions. Three-fourths of the students stated that after a career selection has been made that they may change their minds about the job. When elementary students reach fifteen, 75 percent say that they will know what job they want. Approximately 53 percent say that career selection is confusing, 8 percent of the elementary students don't want to work at all, and 11 percent of the elementary say that "no jobs are appealing."

Economic Concepts

An understanding of economic concepts is an integral part of the world of work. Every citizen should be knowledgeable in the use and value of money.

Fifth grade students at the three elementary schools were administered an instrument (Appendix D) late in the school year, to determine their understanding of economic concepts. Analysis of data in Table 9 revealed that Farmington Elementary students scored highest with a 72 percent correct response. Burton and Kaysville students scored a combined score of 65.3 percent correct responses. The overall mean was slightly higher with a 67.6 percent compared with the 66.6 percent correct response in 1974-75.

Farmington Elementary students had five questions in which all students responded correctly. Burton and Kaysville had no questions which all students responded to correctly. Question eleven concerned with describing a good watershed land and question twelve concerned with the cost of shoes made in large quantities caused the greatest problem for all students. Question eleven had 17 students answer correctly for 31 percent, while question twelve had 16 correct responses for 30 percent. Questions seven and twenty, concerning natural resources and physical dangers, received the highest number of correct responses, fifty-two or 96 percent correct.

Table 9

Number of Correct Responses of Fifth Grade Students of Davis County (Utah) School District to Economic Concepts Quiz 1975-1976

·			;			
	Farm	ington		n and	To	tal
·Item	(N	= 18)		= 36)	(N =	= 54)
	No.	8	No.	8	No.	<b>8</b> .
1	°12	67	29	81	.41	76
2	17	94	19	53	36	67
3	14	78	30 /	83	. 44	81
4	14	78	28	78	42	78
5	12	67	13	36	25	46
6	13	72	21	58	34	63
7	18	190	34	· 94	42	96
8 ,	14	78	32	89	46	85
9	18	100	`32	89	50	93
10	, 18	100	34	89	50	° 93,
11	5	"/ <b>28</b>	12	33	17	/ 31
<b>12</b> .	• 7	<b>39</b> .	´ 9 ·	25	16	30
13	6	33	13	36	19	35
14	12	67	24	67	<b>36</b> ′	67
15	14	78	27.	75	41	76
16	9	50	21	58	30	56
	. 8	44	26	72	34	63
18	9	50	21	58	30	56
19	12	67	19	53	31	57
20	18	100	34	94	52	96
21	17,	94	34	94	51	94
22	11	<b>61</b>	21	58	32	59
23	16	89	28	78	44	81
24	16	89	32	89	48	89
25	17	94	32	89	49	91
26	14	78	20	56	34	63
27	. 8	44	20	56	28	52 <sup>.</sup>
	•	P) =				•



Table 9 (continued

	<u> </u>			<u>* .                                   </u>		
	Farm	ington		on and	To	tal
Item	(N	= 18)	(N	= 36)	(N	= 54)
	No.	*	No.	8	No.	8
28	15	83	27	75	42	78
29	17	94	. 30	83	47	87
30	14	78	22	61	36	67
<b>8</b> 1	. 13	72	20	- 56	33	61
<b>32</b>	18	100	27	75	45	83
33	12	67	29	81	41	76
34	14	78	20	56	34	63
35	16	89	21	58	37	69
36	14	78	19	53 🌞	33	61
37	7	39	12	33	19	35
38	14	78	16	44	30	56
39	10	56	19	∍ <b>5</b> 3	29	54
40	. <b>5</b> .	28	16	44	21	39
Mean	12.95	72.0	23.5	65.3	36.5	67.6



#### DATA OF TEACHER ORIGIN

## Teacher Involvement

Teachers play a primary role in career education.

The degree to which they employ the different teaching techniques advocated by career education concepts greatly influences the success or failure of the program. Davis County teachers were presented with two opportunities to evaluate their involvement in career education, activities: high school teachers at mid-year, and all teachers at the end of the school year.

At mid-year of the 1975-1976 school year career education program the teachers completed a brief question-naire, Teacher Involvement (Appendix E), as to their frequency in applying various concepts advocated by the career education program. Analysis of data in Tables 10 and 11 revealed that only in the area of assisting students with decision-making skills were 68 percent of the teachers frequently engaged. Ninety percent of the teachers frequently taught subject matter related to educational concepts and 74 percent of those reachers frequently taught directly to usable skill training.

Approximately 4 percent of the teachers reported that they seldom employed the concepts of career education, while 48 percent reported occasionally participating in those concepts. Only 48 percent of the teachers used



Table 10

Responses of 94 Elementary and Secondary Teachers Regarding Teacher Involvement in Career Education Programs in Davis County (Utah) School District 1975-1976

	0	No Res	ponse	Prequ	ently	Occes.	lonally	Seld	OM	Nev	er	Mean	
;	Concept	No.	•	No.	•	No.	Ĭ	No.		Ņo.	١,		
1.	Using teaching moments releted to subject matter	. 0	0	38	41	50	53	6		· 0.	0	1.7	
2.	Using teaching moments related to subject matter	1 .	1	23	25	55	59	15	167	0	0	1.9	
3.	Assist students with decision-making skills	<u>.</u> 0 .	0	64	68	26	28	4	4		0	1.4	
4.	Help students increase understanding of economic concepts	<b>3</b> 0	0	36	40	45	48	10	*	1	1	1.7	*
5.	Discuss training necessary to achieve competency	0	Q	31	33	46	49	16	17	1	1	1.9	
7.	Subject matter I teach relates to career education concepts	0	0	85	90	8	9	. 1	1	0	0	1.1	
8.	Subject matter I teach directly related to usable skill training	2	2	· 69 ·	74	21	22	2	2	0	0	1.2	
9.	Invited resource people into classroom to discuss their careers	1	1	17	18	52	55	14	15	10	11	2.2	
ĺ0.	Used eudio-visual media to emphasise career opportunities	0	. 0	23	25	50	53	14 -	14	7	7	2.1	τ,



Table 10 (continued)

COMPONENT	Did not	Respond	Respond	ed YES	Respon	on bet
	No. 1		No. 1		No.	•
used part of World of Work units in connection with other units	33	35	45	48	16	17.
sed career hands-on experiences in your classes	64	68	20	21	10	11
leed material from the Career Education Guide in classroom	63	67	15	16	16	17

Table 11
Teacher Career Reducation Rating Sheet 1975-1976

	16001161 Ca		THE CITY DIGGE 137		_ <del>_</del>		1
		Slementary PARMINGTON N = 17	XAYSVILLE	Jr. High  KAYSVILLE  21	High School DAVIS N = 14	TOTĂL 88	
E PUBLIC SCHOOLS (K-12) SHOULD:					•		
Prepare all students for placement in post-high school treining or employment	1.63	2.00		2.10	1.74	1.78	
. Prepare students for careers	<b>1.75</b>	2.56	1.42	2.30	2.21	2.05	
. Prepare graduates for college entrance	1.75	2.11	2.50	2.60	2.53	2.36	
Provide students with guidance and counseling for career development	1.75	1.89	1.50	1.50	1.47	1.59	
. Use parents, employers, and community for sources of learning	1.63	1.89	1.33	; 1.70	1.47	1.57	
Assist graduates in job and post-secondary school entrance	2.88	2.33	1.75 %	2.10	2.11	2.17	
Be responsible for following the progress of all students after they leave school	3.50	3.56	3.42	4.00	3.53	3,59	
		*		v.			ten V

Table 11 (continued)

BURTON FARMINGTON KAYSVILLE KAYSVILLE DAVIS N = 18 N = 12 N = 18 N = 21 N = 10	B TOTAL	· ·
	· · · · · · · · · · · · · · · · · · ·	,
TRACHERS SHOULD;		
8. Appreciate the values of many types of work 1.25 1.78 1.33 1.50 1.33	2 <sub>F</sub> 1.41 N	· · · · · · · · · · · · · · · · · · ·
9. Relate classroom inetruction to use in the world of work 1.88 2.11 1.50 1.90 1.50	3 1.72	
10. Assist students in a developing the ability to get along with people 1.50 1.56 1.42 1.50 1.3	7 1.45	
11. Be responsible for assisting students to develop stritudes hecessary for career advancement 2.38 2.11 1.75 1.70 1.5	] 1.01	· .
12. Assist students in making decisions about careers 1.88 2.22 2.00 1.90 2.00	0 2.00	: /
13. Be responsible for teaching career awareness to tudents 2.00 2.00 1.75 \$\frac{1}{2}\$ 1.90 1.75	9 1.86	
STUDENTS SHOULD:		•
14. Study their interests and abilities to determine	•	
their fitness for specific Careers 1.50 1.78 1.92 3.70 .60	3 1.71	
15. Learn how to cope with the economic world 1.13 1.56 1.75 1.50 1.4	2 1.48	. (
16. Learn techniques for using their leisure times 1.00 1.56 1.75 1.60 1.60	1.57	
17. Maye the opportunity to learn vocational skills 1.38 1.56 1.52 1.80 1.55	3 1.64	

Table 11 (continued)

	- 1		4 to 5 to 4.	Jr. High	High Sc	<b>4</b> (4)	
	BURNAL N. 14	PARIE METCH	N → 10 KYABAITTH	N = 21	DAVIS N = 14	TOTAL 86	·
18. Have the opportunity for hands-on experience part of the school	18					R Company	
curriculum	1.63	1.33	1.67	2.10	1.53	1.64	·
19. Demonstrate appropriate attitudes concerning to dignity and importance work	<b>10</b> .	1,56	1.42	1.60	1.58	1.48	•
20. Develop pride in accomplishment, loyalty, and dependability		1.33	1.42	1.50	1.37	1.34	
CHARACTERISTICS OF CAREER EDUCATION	ia.		ŧ	·	•	,	* *.
21. Motivation for teaching can be stimulated through career education		1.89	2.00	2.30	+ 1.89	2.05	•
22. Career education will enable students to see why should acquire esse tiel academic skills		1.89	1.58	1.80	2.05	/ 1.83 ⋅∞	
23. Career education can en each individual to deve e self-identity as a wo	able lop **	2.11	2.00	. 2.20	2.00	2.05	
in a work-centered soci 24. Career education goes beyond the school, and emire community may be	the	4.11	2.00		·2.00	1	
resource for career development	1.50	2.22	1.83	1.70	1.74	1.79	87



Table 11 (continued)

	. 🔻		Elementary		Jr. High	High School	- <b>-</b>
		BURTON N = 18	PARMINGTON N = 17	KAYSVILLE N = 18	KAYSVILLE N = 21	DAVIS N 14	TOTAL 88
25.	It is important for an individual to know and understand himself	1.00	1.44	1.25	1.20	1.53	1.33
<b>26.</b>	Many jobs are not being filled because the unem- ployed person does not have the required skills to meet the job require-		·			• •	A
	ments	<b>91.63</b>	2.00	2,00	1.90	1.89	1.90
27.	One of the goals of edu- cation is to prepare individuals for employment	1.13	1,44	1,33	1.70	1.68	1.50
28.	Many counselors, teachers and principals are academic collegenoriented and tend to over encourage students	s- ,					<b>(4</b> )
	to preserve for college	2.38	2.11	2.42	2.50	2.00	. 2.24
29.	Career ducation is a new term of vocational education	1.63	3.11	3.67	3.90	3.26	3.21
<b>.</b>	Public education should have the responsibility of planning new programs which would give students the opportunity of explor-				•	* *	* **
	ing the world of work and assisting them in making satisfying decisions	2.38	2.33	2.17	2.20	1.89	2.14

ERIC Fruitbax Provided by ERIC

Table 11 (continued)

		<u> </u>				
\$	Elementary		Jr. High	High School	<u>.</u>	1
BURTON N = 18	FARMINGTON N = 17	XAYSVILLE	KAYSVILLE N = 21	DAVIS W = 14	TOTAL 88	<u> </u>
1.25	2.33	1.92	1.90	A.68	1.81	
2.50	3.11	4.00	4.20	3,58	3.55	o
	2.11	1.25	1.90	1.74	1.03	
-3.25	3.56	3.05	4.20	3.09	3.79	
•				1 43	1.78	
	N = 18	BURTON PARMINGTON N = 18  1.25  2.33  2.50  3.11  1.75  2.11  3.25  3.56	BURTON H = 18  1.25  2.33  1.92  2.50  3.11  4.00  1.75  2.11  1.75  3.25  3.56  3.85	BURTON PARMINGTON KAYSVILLE RAYSVILLE N = 21  1.25  2.33  1.92  1.90  2.50  3.11  4.00  4.20  3.25  3.56  3.85  4.20	BURTON FARMINGTON KAYSVILLE KAYSVILLE DAVIS N = 18 N = 17 N = 18 N = 21 N = 14  1.25 2.33 1.92 1.90 1.68  2.50 3.11 4.00 4.20 3.58  1.75 2.11 1.75 1.90 1.74  3.25 3.56 3.85 4.20 3.89	BURTON PARMINGTON RAYSVILLE RAYSVILLE DAVIS TOTAL 88  1.25 2.33 1.92 1.90 1.68 1.81  2.50 3.11 4.00 4.20 3.58 3.55  1.75 2.11 1.75 1.90 1.74 1.83  3.25 3.56 3.83 4.20 3.88 3.79

historic values easigned to responses ranges from 1 - trongly Agree to 5 - Strongly Disagree.



part of the World of Work units in connection with other units. The use of resource people in the classroom to assit the career concepts was reported by 55 percent of the teachers. The use of audio-visual aids was reported by 53 percent of the teachers.

At the end of the school year teachers of all schools were administered a questionnaire (Appendix E) to determine their evaluation of career education and of the career education program as conducted in Davis.

County. These results are reported in Table 10.

Teachers do not feel that it is the public schools' responsibility for following the process of all students after they leave the school. They do, however, feel strongly that the public schools should provide students with guidance and counseling for career development, along with using parents, employers and the community for sources for learning.

Teachers felt that they should assist students in making decisions about cameers and be aware of and be responsible for teaching career awareness to the students. Teachers felt quite strongly that they should assist students in developing the ability to get along with people.

Teachers strongly agreed that students should learn how to cope with the economic world; also, that students should learn techniques for using their leisure

time wisely. Teachers strongly agreed that students should develop pride in accomplishment, loyalty, and dependability.

All teachers agreed that career education goes beyond the school, and the entire community may be a resource for career development. The teachers agreed that career education goes beyond a concern for preparing a person to enter into a chosen vocation other than that for which a baccalaureate degree is required. They also disagreed with the concept that a college degree is the best and surest route to occupational success. They reported that career education should be a continuing process from first grade through senior high school and beyond.

#### DATA OF PARENT ORIGIN

The role of parents in career educated activities plays a significant part in the selection of occupations by their children. Questionnaires (Appendix G) were mailed to selected parents of Davis School District students to determine freely feelings and understanding accareer education. Self-addressed, stamped envelopes accompanied each questionnaire to enhance the return of the instruments. Responses of parents were generally favorable as noted in Table 12.

Parents' Evaluation of the Career Education Program for Davis County (Utah) School Children Grades 1-12

*			men	tary			Jr. i	ligh	High	School	1900	11. 65
PONENT	Bur N =	TON .	FARMIN N =	GTON 15	KAYSVI N = 1		KAYSV N =		DA'	VIS 14	1 1	AL"
•	No.	•	No.	. 1	No.	•	No.	•	No.	1	NO	311
he present school ave visited in the uring regular day												
of ours or less hours 0 hours than 10 hours	9 2 2 0 1,46	69 16. 16	7 3 2 3 2.07	47 20 13 20	13 5.5.7 0 0 1.28	72 28 0 0	18 3 0 0 1.14	86 14 0 0	9. 5 0 0	64 36 0	56 18 18 3 1,43	, 69 22 22 4
ducation is erm I know little nothing about cod pogram and uld be retained as	4	31	6	40	5 .	28	3	. 14	2	14	20	, <b>1</b> 25
is in the schools the district rogram to which e emphasis should	<b>,5</b>	, 38	<b>5</b> .	<b>33</b> .	6	33	10	- 48	5 .	. 36	31	38
given rogram to which too h time and energy	3	<b>'23</b>	. 4	27	. 8	44	6	29	. 5	36		32
being devoted Mean*	1 2.08	9	0 1.87	0.	2.25	6	2.33	10	2 2:50	14		7
g my child's ties in career ion I know	4	, 	· . •		.•				¥ ,			<b>લ</b> ઇ
y little	<b>3</b> v	. 27	В	<b>5</b> 3	. 4	22	6	29	5	36	26	32
y of some units t have been taught y about some out- resource people	7	54 }	<b>2</b> 4 ′	.13	7	39	,11	* 52	6	43	33	41
have been in the	1	8	0:	0, *	200	0	0	0	2	14	. 3	4
			•				-		* · ·	•		<i>: '</i>

Table 12 (continued).

•	_	· .		Ele	mentary				Jr.	High	High	School		•	
PONENT			RTON = 13			INGTON = 15	, Kyaz	VILLE 18	KAYS'	VILLE 21		AVIS = 14		OTAL = 81	1 .
		No.	•	8	No.	8	No.	•	No.		No.	. 8	No.	<b>8</b> ,	,
out most of the ivities (in and out formal classrooms ich my child has	:) .n					·	•				<del>,</del>	, ;	ž .		•
ticipated Mean*	•	2 2,15		15	5 2.13	33	7 2.56	39	4 2.10	19	1 1.93	. 7	19 2.19	23	
ll assessment of reer education m in my child's is			,	٠	1			,	•	•					u,
ellent d r 't know enough		2 3 0		15 23 0	0 · 7 0	0 47 0	3 6 0	17 33 0	1 8 3	5 38 14	0 4 2	0 29 14	6 28 5	7 35 6	
make a judgment Mean*	3	8 3,08		62	8 3.07	53	9 2,83	50	2.95	43	8 3.29	57	42 3.02	\$ 52	• •
ry children should be expected to ticipate in a eer education	• .				,					` <b>.</b>				* * ;	
gram ome aware of the king world about		0 ,	•	0.	0	0	2	11	1	5	. 3	21 ,	6	. 7	•
n the opportunity		0		0	0	• 0.1	0	Q	1;	5	a	0	1	1	
pecoming acquainted choices, expected to choose	•	13	.1	00	15	100	15	83	17	<b>8</b> 1	. 11	79	71	88	
ir profession before ring the sixth grade · Mean*	3	.00	,	0	3.00	0	0 2.76	0	1 2.90	5	0 2.57	<b>0</b> ,	1 2.85	, <b>1</b>	97
	•		•				n de de la companya d						` .	15	$\bigcup$
			•	.					$\mathcal{J}_{\infty}$	*	*				



Table 12, (continued)

	Elementary			Jr. High	7	
COMPONENT	BURTON N = 13 Mean	FARMINGTON N = 15 Mean	KAYSVILLE N = 118 Mean	KAYSVILLE N = 21 Mean	DAVIS, N = 14 Maan	TOTAL N = 81 Mear
RCE OF INFORMATION:	!	,			*	7
ent-Teacher conferences	1.42**	2.20**	2.39**	. 2.37**	2.00**	2,13**
meetings	1.17	1.53	1.61	74.59	1.40	1.49
k-to-school night	1.42	1.60	2.11	1.89	2.17	1.86
tten material from school	1.85	2,33	2.89	٧.10	1,77	2.23
sonal contact by school .				, · · · · · · · · · · · · · · · · · · ·	•	,
ersonnel	1.54	1.80	2.00	1.90	1.77	1.85
		٦				٠.,
ent reaction to the	•			• •		
ollowing items:	•			,	,	•
1 -					•	
eel I understand what is	2,23***	2.27***	2,39***	1.95***	2.14***	2.19***
eant by career education	2,23.777	2421	2139	2175.	,	
parents we could make an				•	•	
portant contribution to			**** * * * * * * * * * * * * * * * * * *			in elected by topological community
ne career education pro-	. 1.77	2.13	1.94	2.11	1.93	1.99
ram of the schools	. I.I.	4.13	(	7-0		:
ally, everyone should	4.46	3,67	3.88	3.67	3.93	3.89
caduate from college schools should involve	4 4 4 0	. 3407	7 . 3.46		•	
arents to a greater extent	•	,			ا ناځنۍ .	•
the planning of career			, i		<i>Ψ</i> '	
lucation programs	2.15	2.07	2.18	2.40	2,00	2.18
ce should be less emphasis	4143	-2.0/				•
n career cducation in the		F		•		٠.
chool than we have had	•		0			
nis year	4.23	3.50	3,65	3.74	`3.57	3.73
ould be pleased to be	7,43	,5.50	-,		•	•
nvited by the school to						4
ssist in the career educa-		•	•			1
ion program	2.25	2.60	2.35	2.75	2.07	2.44,
parents we have often		,				$I^*$
iscussed with our children				•	• • • •	1
ne type of career they		•	•	*	, in the second of the second	l .
hould plan	2.46	2.47	2.13	1.71	1.93	2.10
<b>F-</b>	7 7			•	i . I	$(x_1,\dots,x_{p-1},x_{p-1},\dots,x_{p-1})$
		•	• • •		· /	
	•			11 - 1 - 5	il	
		•		"	//	6
•	•		•		1	
	•	•			#-	
· ·	;				<i>₽</i>	
		. •			<b> </b>  -	99
•	•	19		√	<i>∦</i> :	00
<b>3</b>	•			I .	:1	•

Table 12 (continued)

COMPONENT	Elementary			Jr. High	High School	
	BURTON N = 13 Mean	FARMINGTON N = 15 Mean	KAYSVILLE N = 18 Mean	KAYSVILLE N = 21 Mean	DAVIS N = 14 Mean	TOTAL N = 81 Mean
expect the high school to	•					
oncentrate on preparing						
y children for college '	2.15	2.80	2.75	2.30	2.57	2.51
xpect my children to				•	•	•
ecide for themselves	· .			• • • • • • • • • • • • • • • • • • • •		
without much help from	•				•	•
arents) whether or not	2 05	3.27	3.70	3.71	3.21	3.56
hey will go to college school does a good job	3.85	<b>\ 3.27</b>	3.70	. 3.71	3.22	3.30
f helping students decide		k			\$	•
hat their life's goals			,	1	• }	
ill be	3.00	2.87	3.18	3.35	3.43	3.18
m aware of my child's				L		
nvolvement in career .	,		•		<b>~</b>	•
ducation in school	2.38	2,80	2.35	2,45	2.79	2.54
school has asked me to.	**				<b>.</b>	
articipate in school				•		
ctivities related to .	•		. 51			
areer education	3,67	3,60	4.19	3.84	4.07	.3.88
eer education should			•			
eccive a greator emphasis	•				i	* .
n the public schools than		2 62	2 50	2.35	2.50	2,51
t now receives	2.62	2.53	2.59	2.33	2,30	2,31
y those who receive a	GL.			. ~		
ollege education can be		4.67	4.78	4.57	4,71	4,62
onsidered successful in life honest work should be	4.34	7.0/	4.70		***	
	1.31	1.31	1.11	1.24	1.07	1.17
espected y		****				

\*Numeric values assigned to responses ranged from 1 = response to answer 1, 2 = 2, 3 = 3, 4 = 4.

\*\*Numeric values composed to 1 = little to 5 = much.

\*\*\*Numeric values assigned to responses 1 = strongly agree; 3 = uncertain; 5 = strongly disagree.



parents felt, for the most part, that information about career education was gleaned from materials taken home by their children, however much contact had taken place between parents and school personnel. Parent-Teacher Association meetings were the source of little information to parents, an indication of either failure of parents to participate in the PTA or lack of career education information provided at the meetings.

Parents were in general agreement that all work is honorable and should be respected. They also felt that parents have a responsibility in the school programs along with professional educators. While parents believed that high school should concentrate on preparing students for college, they also believed that other than college graduates could be considered, successful in life and that many opportunities exist for tradesmen.

DATA OF GENERAL ORIGIN

## Logistical Component

The career education project for Davis County involved three elementary, one junior high, and one senior high school. The teachers of the five schools including the administrators of the three elementary schools, were administered an instrument (Appendix F) relative to the logistical effectiveness of the career education program. Assessment was made on a five-point-scale ranging from strongly agree (5) to strongly disagree (1).

Analysis of the data in Table 13 revealed that junior high teachers had the most difficulty in two areas, sharing and coordinating materials. The problem of coordinating materials was considered the biggest problem by all teachers participating. Accessibility of the material was considered the least problem.

Junior high teachers scored highest over all on the logistical effectiveness with a total score of 2.61, followed by the high school with 2.68 and the three elementary schools having the most problems with a score of 2.75.

The junior high teachers had the most difficulty in two areas with scores of 4.0 and above, but also the lowest two areas with scores of 1.38. Sharing materials (4.15) and coordinating materials (4.0) were most difficult, while materials being accessible (1.38) was the least problem.

### Non Project Schools

There were thirty-five elementary, eight junior high and five senior high schools which participated in the district career education program but were non-project and non-evaluation schools. A questionnaire was submitted to principals of non-project schools to determine their involvement in career education related components (see Table 14 for data).

Table 13 Logistical Effectiveness

COMPONENTS	(N = 31)	Junior High (N = 13)	High School (N = 19)	Total (N = 63)
terials Accessible	2.26*	1.38	1.89	1.97
fficient Quantities of World of Work Materials	2.26	0.00**	0.00**	1.29
ared Materials Created Problems	3.39	4.15	3.42	3.56
terials Available When Needed	2.32	1.54	1.95	2.05
terials Treated Shabbily	3.32	3.69	3.32	3.40
erials Not Returned Promptly	3.19	2.92	′ <b>3.05</b> \	3.10
ways Sufficient Materials	2.32	1.38	2.32	2.13
reer Education Information Was	2.39	1.46	1.95	2.06
eer Education Person on Staff	. 2.52	1.46	1.84	<b>2.</b> 10
d More Career Materials	2.58	3.00	2.89	2.76
oblem Coordinating Materials	3.61	4.00	3.68	3.71
e Materials Should Have Been Available	2.87	3.69	3.16	3,13
•	2.75	2.61	2.68	\

<sup>\*</sup>Numerical values ranged from Strongly Agree = 1, Uncertain = 3, Strongly sagree = 5.

<sup>\*\*</sup>Only Elementary Schools Use World of Work Materials

Table 14

Summary of School Principals' Responses of Schools of Davis County (Utah) School District which Did Not Participate in Formal Career Education Activities to Questions Pertaining to Career Education Activities 1975-1976

	Schools							
COMPONENTS	Elementary	Junior High	High School					
mber of schools	35	8	5	•				
mber of schools responding to questionnaire	27	8 🗸	5					
mber of teachers _	452	, 223	335					
mber of elementary schools responding which have World of Work programs	. 25	• • .						
mber of teachers in elementary schools which have World of Work programs	417			, \				
mber of teachers teaching one or more World of Work units	125	•	•	•				
mber of teachers using parts of other orld of Work units with regular teaching	226		•					
mber of teachers using self-developed career education units	151	•		•				
mber of teachers using career education resource people	117			107				
mber of schools which have specific person in charge of career education	•	8	· . \					
Person in charge is teacher	**	5	en e	* · · · · · · · · · · · · · · · · · · ·				
counselor librarian		2	•					
A No.	<b>.</b>							



#### Table 14 (continued)

COMPONENTS Sumber of schools in which faculty meeting	Elementary	Junior	High	Wich	COLOC!
					DOMOOT.
inservice time devoted to career education		8	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		<del></del> -
some		5 3			
number of teachers of schools in which teachers used teaching moments or other methods to bring career education into regular classwork  Some teachers	226				•
Many teachers All teachers		4			ź 1
number of schools in which teachers have used. special career education units	(			T	
No teachers Some teachers	•	1			4
Many teachers (umber of schools in which teachers used		4			1
special resource people in class		•	•		
Some teachers Many teachers		2.	•		3
umber of school which have established career information centers		. 8		•	



### Table 14 (continued)

		Schools	
COMPONENTS	Elementary	Junior High	High School
Number of schools which have grades in which there is an organized program in the use of the career information center			•
Tenth Eleventh Twelfth			4 3 1
chools in which formal programs have been attempted to assist graduates to find work (excluding college entrance)			0
chools in which students exiting before graduation regularly receive counseling relative to work opportunities	The state of the s		á ,
number of high school students who have had O.J.T. experience in 1975-1976.	· •		983
		• • • • • • • • • • • • • • • • • • •	



the questionnaire indicating that 33 percent of elementary teachers at schools which have World of Work programs taught one or more World of Work units as an entity, while slightly more than 54 percent of the teachers at these schools integrated World of Work units with regular teaching. Over 54 percent, or 226 elementary teachers, used various teaching methods to bring career education concepts into regular classwork activities.

Junior and senior high school teachers participated in varying degrees in their use of career education concepts in regular classwork. Some time was devoted to career education at inservice meetings at all eight junior high schools, but only three principals indicated that much time was spent with inservice for career education at his school. Teachers' use of resource visitors, and teacher and student use of the Career Information Centers, was somewhat limited in the junior high schools.

No senior high schools had full-time Career
Information Center personnel, but all had one part-time
person in charge of Career Education. Most high school
principals reported that many of their teachers used
career education units and also used resource visitors
in their classrooms.

Only 33 percent of the elementary teachers used self-developed career education units.



# Summary of Findings

During the third year of operation considerable data were generated from questionnaires and observation. The following findings summarize the results of the analysis of collected data.

- 1. The greatest gains in Self-Awareness were observed in the Burton Elementary School where sizable gains (above or near the mean in all areas) were made. Other elementary schools showed gains in only three of the four sub-categories.
- 2. On the Career Maturity Inventory Kaysville
  Junior High School sixth grade students showed negative
  gains in all subscores while students at Farmington
  Elementary gained in all areas but one (Knowing Yourself)
  in which they showed little change.
- 3. In the secondary grades positive gains on the Career Maturity Inventory were recorded in all subscores for the seventh grade. Tenth grade gains were all negative, and only half of the subscores in the twelfth grade were positive.
- 4. Fourth grade students showed a student showed a students showed a students showed a students showed

- 5. Students at all levels showed gains in being able to relate occupations with their functions.
- 6. Students uncertain about career plans dropped from 50 percent in the elementary grades to 16 percent in the tenth grade.
- 7. Over half of the fourth grade students answered correctly to slightly over half of the items related to the Value of Work.
- 8. Nearly 70 percent of the items on an economics test were correctly answered by 60 percent or more of the fifth grade students.
- 9. With little exception, 80 percent of the teachers indicated their occasional (or more often) participation in career-related activities in the classroom.
- 10. Variance was noted in opinions of teachers regarding the purpose and function of Career Education
- ll. Over half of the parents polled didn't know enough about Career Education as it functions in the Davis School District to make a judgment as to its value.
- 12. Of the logistical components, teachers were most often negative about the coordination of materials.
  - 13. Career Education Activity, is being conducted in varying degrees in non-project schools.
  - 14. From teacher interviews it was found that teachers in project schools do not have a clear idea

as to what Career Education is. Some do not desire to learn because they have a preconceived notion that is not applicable to their area of expertise. The most common error was teachers equating Career Education with Vocational Education.

15. Interviews and observations also showed that in some cases teachers did not feel any obligation to become involved in Career Education.

# Conclusions a

From the findings of this evaluation the following conclusions were reached.

- I. The Career Education Project has had some impact on the participating students and teachers. This impact varies from school to school and even from classroom to classroom. Through observation and interview it was concluded that this variation was in large measure due to the attitude of the administrator and/or the teacher. Where the principal was enthusiastic about Career Education, the program had much more participation on the part of the teacher and a greater impact on the students.
- 2. Although Career Education has a greater application in some subject matter areas than others, Career Education principles were noted in application in all subject matter areas, and it is concluded that it can be adapted by all teachers.

# Recommendations Resulting from Three Year's Evaluation

# It is recommended that

- 1. If the District desires to have Career Education as an official part of the school program, that the School Beard formally adopt it and that it be made a part of the line organization program. In March 1976 the evaluator wrote a letter to the project director expressing such concerns, (see Appendix G).

  Data in this evaluation support such a recommendation.
- 2. Some one person be assigned the leadership role for Career Education in each school. This may be the principal if his time permits, or it may be someone other than the principal. If someone other than the principal should be known by all faculty that the principal supports the program but has delegated leadership to someone else. There is danger \otherwise as noted in recommendation 1 above that teachers may not accept it as an official part of the school program. Such a recommendation is proferred due to change in leadership assignments in the Davis High School during the third year of operation. During the first two years a teacher was given released time to organize and administer the Career Education Program in the high school. During the third year he was not. A noticeable difference occurred in the teacher activity and participation in Career Education.

3. A longitudinal evaluation design be developed which would follow the same students through school into post-high school education, into the job market and beyond. Only in this manner can the most valuable activities for the development of a Career Education program be clearly identified.

This is identified as the biggest weakness of the evaluation design used during the past three years. Each year the same grade level has been tested for the same things, and thus to longitudinal data are available. To compound matters, the instruments were changed and refined each year. It is believed that one of the contributions of this evaluation has been the identification, development, and refinement of instruments for evaluating Career Education Projects.

APPENDIX A

MAGNITUDE AND INTER-RELATIONSHIP
OF CAREERS QUESTIONNAIRE

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ERIC

# Magnitude/Interrelationship of Career

Pupil Rating Grade 5

1974 - 1975

DIRECTIONS: The following questions are about different kinds of jobs. There are twenty different groups and each group has five jobs. After each group there are six meanings (A., B., C., D., E., F.). Before each job there is a space which is underlined. Please put the letter of the best meaning for each job on the line. The example below will help you.

•			_	The state of the s
EXAMPLE:	1.	Man	Α.	Meows when it is hungry
	2.	— Woman	B.	Likes to play with dolls
	3.	_ _Boy	c.	Works for money to help buy things for the
•	4.	Girl	D.	family Cries when it is
•	5	_Baby	E.	hungry Likes to play ball
*• •	•		F.	Fixes meals and helps keep the house clean

Please write the letters clearly, and remember that there is one extra meaning in each group of jobs.

- 1. 1. \_\_\_\_Missionary
  2. \_\_\_\_Rabbi
  3. \_\_\_Nun
  4. \_\_\_\_Bishop
  5. Reverend
- A. A leader in the Mormon, Catholic, and some Protestant churches
- B. An unmarried lady who lives in a convent and works for her church
- C. A Jewish leader
- D. A title of respect for ministers in some churches
- E. A person worshipped as "god" ia Japan
- "god" in Japan
  F. A person sent out by his
  Church to preach

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	•			•
2.	1.	Undertaker	A	A person who puts new
				dovers on couches and
\	2.	Socail worker		ghairs
			B.	A person who takes care
. *	3.	Upholsterer		of the bodies of dead
1	. •			people
1	4.	Beautician		A person who investigates
	**		•	accidents and sometimes
	5.	Insurance agen	-	pays the bills
	J.	induce agen	D.	A person who helps people
	w		<b>D</b> .	with personal problems
•			E.	A person who fixes refrig-
	,	•	73	erators
•			F.	A person who washes and
		`	•	fixes women's hair
	_		_	/\
3.	<b>.</b> L •	Psychologist	A.	A person who works with
	_		_	doctors and nurses
	<b>2.</b> .	Veterinarian	В.	A person who tests the
. /	_			blood of people
. [	3.	Hospital	C.	-
15		orderly		animals \
	•	•	D.	
	4.	Nurse	٠.	to people and help them
,	·.		E.	A person who fixes teeth
	5.	Laboratory 🗸 🔻	F.	A lady or man who is
		technician		trained to help doctors
	, ,		1	take care of sick people
•		•	(	
4.	1.	Medical ·	A.	A person who tests people
	a *	Secretary	1	to see if they need
4		· -	,	glasses
	2.	Optometrist	B.	À person who uses a
				machine to take pictures
	3.	X-ray (		of the bones the body
•	-	technician	c.	A person who works with
	•			very small plants
•	4.	Chiropractor	D.	A person who helps doctors
	-,•		_ •	write down information
	5.	Bacteriologist	E.	A doctor who tries to
4.	· ·			keep the bones and muscles
		•		straight and in the right
		•	•	place
			F.	A person who manages a
		•		hospital

5.	.1	_Architect	Α.	A person who hangs wall- paper
	2.	_Plumber	В.	A person who puts wire in houses so the lights will
	<b>3.</b>	Carpenter	۸.	work
•	-	<b>-</b>	C.	A person who fixes water
	4.	_Electrician	n	pipes
	5.	Printer	D. E.	A person who builds houses A person who plans how
			)	buildings should be built
			F	A person who prepares
		, , , , , , ,	``	newspapers and wedding
• .,				announcements
6.	1.	Welder	A.	A person who puts things
	<u> </u>	-	٠.	in a factory
	2	_Chemist	B.	A person who keeps ma-
		A Paris de la Carte de la Cart		chines working the way
•	3. <u> </u>	_Sheet metal	_′	they should
		worker	c.	A person who makes things
		Maghina main-		out of chemicals
		Machine main- tenance man	D.	A person who makes things from tin and other things
,		Cenance man	E.	A person who melts iron
	5.	Assembly line		together with a torch
•		operator	·P.	A person who sweeps up
	· · ·	, , , , , , , , , , , , , , , , , , ,		after everyone
•	•		,	
7.	1	Brakeman	A.	A person who drives a truck
	2.	Truck driver	B.	A person who is the boss
	3	7	_	of a train station
	3.	Locomotive engineer	C.	A person who sells gas and fixes cars
		1 1	D.	A person who is in charge
	4.	Service sta-	. '	of the local grocery store
		tion attendant	E.	A person who drives a
١,				train
	5.	_Station agent	F.	A train worker who helps
•	• •		•	put together the cars on a train
8.	1.	Dairyman	A.	A person who helps farmers
				plan what to plant
•	2.	Rancher	В.	A person who knows about
	1.	-	•,	plants we use for food
	3.	Farm agent	C.	A person who raises silver foxes
	4	Poultryman	D. ,	A person who raises cattle
	5.	Agronomist	E.	A person who raises chickens and eggs
	·	WATONOUTS C		ens and edds



1			-	3
4		•	F.	A person who takes milk to stores
9.	1.	Soil conser-	A.	
!	,	vationist		problems about wild animals
	2.	Fish and game	B.	
		manager		precious stones and minerals
•	3.	Miner	c.	
			.= -	of a farm
	4.	Petroleum	D.	
	•	worker		
	_	Farm	E.	A person who raises rabbits
	, <b>5.</b> -	manager	F.	
٠.		manayer	<b>.</b>	and gasoline out of the
				ground
10.	1.	Pilot	Α.	A person who helps people
20.	<b>.</b>			on an airplane
	2.	Stewardess	В.	
•				airplane
. •	3.	Navigator	C.	
				a ship or an airplane will
	4.	Body and		go
		fender repair-	E.	
		man	•	in cars
	5.	Auto mechanic	F.	
. :		4		engines
11.	1.	School teacher	A.	A person who collects
		an <del>and an artist to the second and the second artist to the second and the second artist to the second artist to the second artist and the second artist to the second artist to</del>	er en	garbage and waste mater-
h	2.	Counselor		ials
	_		B.	
1	3.	Fireman	_	out fires
34,	c) # 🊁	Defuse	C.	A person who helps stu-
	4.	Refusecollector	. 1	dents with special prob- lems
e j		COTTECTOT	D.	The leader of a school
. 1	5.	- Principal	E.	A person who cleans class-
				rooms
., '			F.	A person who teaches
				school

				*
12.		Policeman		A person who writes down what happens in a court-
	<b>2.</b>	Court recorde		room
•	3.	Lawyer	В.	A person who arranges and checks out books
	4.	 Librarian	c.	A person who helps to keep law and order
•	_	<del></del>	D.	A person who helps when we
. •	5.	Soldier	Ε.	have a legal problem A person who sells small
*		,		radios
			F.	A person who fights for his country
13.	1. 🌞	Forest	A.	A person who makes shoes
		ranger	В.	A person who knows about
	2.	Range mana-	c.	the weather and universe A person who takes care
	•	ger		of government land other
	3.	Gardener	D.	than forests A person who helps take
	•	<del></del>	•	care of forests
•	4	Metèorologist	. E 🦛	A person who cares for yards and gardens
	5	Biologist	F.	A person who knows about plant and animal life
14.	1.	Travel agent	A.	
38	2.	Hotel or	\B.	money for things we buy A person who rents rooms
		motel manager		for a night or two
	3.	Waitress	9.	A person who helps you plan to take a trip
· · · · · · · · · · · · · · · · · · ·		and the second s	D,	A person who waits on
	. 4	Short-order cook	E	tables and serves food
,		COOK		A person who watches his diet
	5.	Cashler-	*	A gerson who prepares food in a hurry
15.		3	•	
15.	1	Author	A,	A person who writes books, stories, or poems
	2	Actress	В.	A male person who acts in
- ,	3.	Actor	c.	A person who leads music
	_			choruses and bands
	4	Jeweler	D.	A person who is an art dealer
		Conductor	E.	A person who makes or sells rings, watches, and
	• :	4 6	<u> </u>	precious stones .

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		÷ .		•
•			F.	A female person who acts in the movies or on the
	· .i		· v) · (v)	stage
16.	1	Photographer	<b>A.</b>	A person who talks on the radio
	2.	Radio	В.	A person who collects and
. •	_	announcer	<b>;</b> .	writes news
	3.	Reporter	C.	A person who makes books to sell to people
-	, ,		D.	A person who speaks in
	4	Printer	Ē.	public A person who paints
	5.	Lecturer	•	pictures
			F.	A person who takes pic-
•				tures with a camera
17.	i	Clerk	A.,	A person whose pay depends
<b></b>	<b>-</b> -		•••	on how much he salls
, "	2	Salesman	B.	A person who sells only
	_			jewelry
	3	Sales supervisor	C.	A person whose pay depends
	• *	PuberArgor	D.	on how many hours he works A person who is in charge
•	4.	Retail	-	of selling things
j.		distributor	E.	A person who sells things.
	· ·	<i>in</i> -1	- 100	only to stores
	5	Wholesale distributor	F.	The Twner or manager of a store
18.	1	Marine (sea)	A.	•
		biologist	_	for a living
	2.	Ship captain	В.	A person who is in charge of a ship
. 250 me - 1			C.	A person who swims under
• •	3	Scuba diver		the sea with oxygen tanks
	_	, a	D.	A person who is in charge
•	4	Commercial fisherman	E.	of the pier A crewman of a ship or a
		TTSHETMAN		boat
	5.	Seaman	P.	
	· -		}	plant and animal life in
		•		the ocean
19.	1	Office		A person who cleans an
		manager	~~ <b>~</b>	office
			В.	A person who takes papers
	23 _	Bank teller		and puts them away in
	3	Receptionist	· C	Cabinets A person who collects
		-washeren	7.	money and gives money to
	4.	File clerk	ğ.,	customers
	MATERIAL TO		2000 (1) 1245	

- Secretary
- D. A person who greets people in an office
- E. A person who is in charge of an office
- F. A person who writes and sends letters for her boss
- 20. 1. \_\_\_\_Model
  - 2. Seamstress
  - 3. Homemaker
  - 4. \_\_\_Nutritionist
  - 5. Interior decorator
- A. A person who makes a room or a home beautiful
- B. A person who eats only vegetables
- C. A person who sews
- D. A person who wears and shows clothes to people so they will buy them
- E. A person who is a good
- F. A person who knows which foods are best for us

# Magnitude/Interrelationship of Careers

# Students Rating Grade 11

1974 - 1975

DIRECTIONS: The following questions are about different kinds of careers. There are twenty different groups and each group has five careers. After each group there are six meanings. Please select the best meaning for each career and place the letter on the line next to the job. Please write the letters clearly, and remember that there is one extra meaning in each group of careers.

1.	1.	Missionary	A.	A leader in the Mormon,
	2.	Rabbi		Catholic, and some Pro- 'testant churches
•	<b>~</b> •		В.	An unmarried lady who
	3.	Nun		lives in a convent and works for her church
	4.	Bishop	c.	A Jewish leader
	•		D.	A title of respect for
	5.	Reverend		ministers in some churches
	•		E.	A person worshipped as
			1	"god" in Japan >
		· · · · ·	F:	A person sent out by his
	'		•	church to preach
2.	1.	Undertaker	A.	Recovers couches and other furniture
• •	2.	Social worker	B.	Cares for bodies of dead people
	3.	Upholsterer	C.	Gives financial help in case of accident
	4.	Beautician	D.	Assists people with per- sonal problems
	5.	Insurance	E.	Repairs refrigerators
:		agent	F.	Helps to create a better
,				appearance for people
3.	1.	Psychologist	A. B.	3 · · · · · · · · · · · · · · · · · · ·
	2.	Veterinarian	c.	
	2.		D.	Trained to counsel and
	3.	Hospital	•	help people .
		orderly	E.	Fixes teeth
			F.	A man or woman who is
	4.	Nurse		trained to assist doctors in caring for the sick
,				

·	···		
5	. Laboratory	•	The second secon
	technician		
4. 1	. Medical	Α.	Tests people's eyesight
12	secretary	·B.	Takes pictures of the bones of the body
2	Optometrist	c.	An expert with micro- scopic plant life
.3		D.	Assists doctors to record
	technician	***	information
.4	. Chiropractor	E.	A doctor who straightens out bones and muscles
•	Chilopractor	F.	Administers hospitals
5	Bacteriologis		,
5. 1	. Architect	A.	Hangs wallpaper
		В.	Wires houses and fixes
2	Plumber	_	appliances
2	Carpantar	C.	• • • • • • • • • • • • • • • • • • •
ૃ, 3	Carpenter	EX	Designs buildings
. 4	. Electrician 🖑	$\mathbf{F}$	Makes newspapers and
	<del></del>	المراجعين المعتبدة	wedding announdements
5	Printer		
6. 1	Welder	A.	Puts things together in a factory
2	Chemist	В.	Makes machines work
3	. Sheet metal	c.	properly Mixes chemicals to make
•	worker	٠.	medicine and other things
		D.	Makes things from tin and
. 4			other things
	tenance man	E.	Melts iron together with a torch
" <b>5</b>		F.	Sweeps up after everyone
•	operator		
7. 1	. Brakeman	A.	Drives a truck
•		B.	Responsible for a train 3
2	Truch driver	_	station
3	. Locomotive	C.	Provides gas and service for cars
, 3	engineer	D.	Lays train tracks
		E.	Drives the engine of a
4	Service sta-		train
·	tion manager	F.	Helps assemble cars on a train
<b>5</b>	Station agent	÷	
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· 8.	1.	Dairyman	A.	Provides planning assis- tance to farmers
•	2.	Rancher	В.	Knowledgeable about
	4.		٥.	plants we use for food
	3.	<b>Agriculture</b>	Ċ.	Raises honey bees
,	•	farm agent	D.	
			E.	Provides chickens and
	4.	Poultryman .		<b>e</b> ggs
	•		F.	Provides milk
	5.	Agronomist		<b></b> ,
9.	1.	Soil con-	À.	concerned with wild
۶.	⊥.	servationist	A.	animals
•		BELAUCTOHIEC	в.	Removes coal and other
,	2.	Fish and game	٥.	minerals from the ground
-		manager	c.	Cares for a farm
	•		D.	Concerned with the use
	3. ·	Miner		of land
;		·	E.	Raises rabbits
	4.	Petroleum	F.	
		worker		ground
•		•		
	5. •	Farm manager	:	
		<b>-19</b> -4	_	
10.	1.	Pilot	A.	
	2.	Stewardess	в.	an airplane
	۷.	scewaitdess		Helps an airplane to land Decides where ships or
	3.	Navigator	<b>C</b> .	airplanes will go
*	J.	Havigacor	n.	Repairs airplanes
	.4.	Body and		Fixes dents in automobiles
		fender		Repairs automobile engines
		repairman	_ •	*
•	5.	Auto mechanic		• •
			_	And the state of t
ļ1.	1.	School	A.	
		teacher	_	waste materials
	•		В.	Assists by putting out
	2.	Counselor	_	fires
	<b>ત</b>	<b>W</b>	C.	Assists students with
	3.	Fireman	<b>D</b>	special problems
*	<b>A</b> .	Refuse	D. E.	The leader of a school
	7.	collector	F.	Teaches religious subjects Teaches school
	•	COTTECTOT	E .	reacties actions
	5.	Principal		
				*

12.	. 1. ' _	Policeman	Α.	Writes down what occurs
	_		-	in a courtroom
,	2	Court	B.	Arranges and checks out
		recorder	_	books
		· '	,C.	Helps to keep law and
	3	Lawyer		order
•			D.	Assists with legal
	.4	Librarian		problems
	_	0-1-1	E.	Repairs electrical
	5	Soldier	<b>79</b> .	appliances
			F.	Helps protect his country
13.	1.	Forest ranger	, ·	Chillen in Simbian
13.	∸•	rorest ranger	В.	Skillful in fishing .
	2.	Range manager		Knowledgeable about the atmosphere
	<b>4</b> · _	kange manager		
•	3.	Gardener :	C.,	
	٠	Gardener		government land
	4.	Wotoowolowist	D.	Helps protect forests
	4	Meteorologist	E.	
	5.	Dielesias	-100	yards
	·j. –	Biologist	F.	Knows about plant and animal life
	·			animai life
14.	1	Travel agent	Α .	Colleges manage for
T4.	<b></b>	ITAVET aggit	Α.	Collects money for purchases
	2.	Hotel-motel	В.	Provides a place to sleep
	<b>-</b>	notel-motel manager	₽•	overnight
		manayer	c.	Helps to make arrangements
	3.	Waitress	· ·	for trips
	· –		D.	Assists at tables and
	4.	Short order	υ.	serves food
• .		cook	Ē.	Watches his diet
		Cook	F.	Quickly prepares food to
	5.	Cashier .	- •	eat
	· / –			
15.	1.	Author	A.	A writer
		· ········	В.	Male performer
• •	2.	Actress	c.	Leads music choruses and
			•	bands
	3.	Actor	D.	Deals in art
			Ē.	Sells rings, watches, and
	4.	Jeweler		precious stones
			F.	Female performer ·
	<b>`</b> 5.	Conductor		

16.	1.	Photographer	A.	Broadcasts over the air
		Comment Comment Comment	B.	Collects and writes news
	2.	Radio	c.	Publishes written mater- ials
	3.	Reporter	D.	Public speaker
		Printer	E. F.	Paints pictures Takes pictures
	4.	Princer	<b>r</b> .	lakes biccules
	5.	Lecturer '	,	
17.	1.	Clerk	A.	Salary is usually a percentage of sales
•	2.	Salesman	в.	
·	_,		C.	
	3.	Sales super-	٠, ٠	usually paid by the hour
		visor	D.	In charge of selling
			E.	Sells only to retail
	4.	Retail		distributors
		distributors	F.	The owner or manager of a store
	5.	Wholesale		
	-	distributor		
18.	1.	Marine (sea)	A.	A specialist in catching
		biologist		fish
			B.	
	2.	Ship captain		and all people aboard
			C.	Swims under the sea with
•	3.	Scuba diver	ó	oxygen tanks
		<del>,</del>	D.	
	4.	Commercial	E.	Performs duty aboard a
•	•	fisherman	-	ship
		<b>.</b> .	F.	Expert on plant and
•	5.	Seaman		animal life in the ocean
19.	1.	Office	'A.	Cleans an office
		manager	В.	Sorts and places papers in cabinets
	•	Samb Asilan	•	
	2.	Bank teller	c.	Collects money from and gives money to customers
	3.	Receptionist	<b>D</b>	A greeter in an office
			Ē.	
	4.	File clerk	F.	
	•		- •	for her manager or
	5.	Secretary		employer

	. 20.	1.	Model		Beautifies a room or home	€
· · · · · · · · · · · · · · · · · · ·		2.	Seamstress	C.	Designs men's clothing Sews	
		_		D.	Wears and advertises	
•	بث	3.	Homemaker	E.	clothes A housewife	•
	***	4.	Nutritionist	F.	Knows which foods are best for one's health	
		5.,	Interior		best for one s hearth	2.20

#### APPENDIX B

EDUCATION AND TRAINING QUESTIONNAIRE

# Education and Training

# Students' Rating Grade 4

1974 - 1975

Under each question please put a circle around the letter of the answer you believe is correct.

- 1. People who have the following jobs do things for people. We have to have some, training or experience to do any of them. For which job do you think we would need the least amount of training?
  - a. Hairdresser
  - b. Babysitter
  - c. Barber
  - d. Tailor
  - e. TV repairman
- 2. People who have the following jobs care about our health. In all but one of these jobs a person has to go to high school or college or have much training. Which one doesn't?
  - a. Counselor
  - b. Druggist
  - c. Hospital ward assistant
  - d. Laboratory technician
  - e. Dental assistant
- 3. People in the following jobs build things. In ohe job you have to go to college. Which job is it?
  - a. Plumber
  - b. Bricklayer
  - c. Plasterer
  - d. Architect
  - e. Carpenter
- 4. In some jobs people make things to sell. People have to have much training to do them. In one of the following jobs you have to go to college. Which job is it?



- a. Machine operator
- b. Chemist
- c. Sheet metal worker
- d. Welder
- e. Tool operator
- 5. The following jobs are about moving people and things. Training is necessary to do any of these jobs. In which of these jobs do you think a person has to go to college?
  - a. Truck driver
  - b. Body and fender repairman
  - c. Auto mechanic
  - d. Service station manager
  - e. Aerospace engineer
- 6. These jobs are about using land. Which job could you have if you only graduated from high school?
  - a. Farmer
  - b. Soil conservationist
  - c. Mining engineer
  - d. Petroleum engineer
  - e. Pish and game manager
- 7. People who have these jobs help-people. In which job don't you have to go to school?
  - a. Lawyer
  - b. Teacher
  - c. Engineer
  - d. School counselor
  - e. Garbage collector
- 8. The following jobs are about environment. For which of these jobs don't you have to graduate from high school?
  - a. Meteorologist
  - b. Fish and game manager
  - c. Range manager
  - d. Gardener
  - e. Forest ranger
- 9. The following jobs help us use our spare time. For which job would we have to go to college?

- a. Waitress
- b. Cook
- c. Restaurant hostess
- d. Golf pro
- e. Community Recreation Director
- 10. Sometimes a person doesn't have to go to very much school, and he just needs lots of training. In most of the following jobs a person needs more training than he needs more school. In which job does a person need more school?
  - a. Actor
  - b. Singer)
  - c. Poet
  - d. Lawyer
  - e. Sculpturer
- 11. In some jobs people tell other people about things.
  In most of the following jobs a person needs good
  training and not more school. In which job does
  a person need more school?
  - a. Photographer
  - b. College professor
  - c. Sportscaster
  - d. Newswrite
  - e. Reporter
- 12. Some jobs help companies decide it they want to make things. A person doesn't have to graduate from high school for one of the following jobs. Which job is it?
  - a. Salesman
  - b. Statistician
  - c. Economist
  - d. Marketing researcher
  - e. Systems analyst
- 13. Some jobs are about the different uses of the ocean. A person must go to college in all of the following jobs but one. For which job does one not have to go to college?
  - a. Marine biologist
  - b. Physicist
  - c. Fisherman

- d. Aquatic biologist (scientist)
- e. Geophysicist (scientist)
- 14. Some jobs are about office work. For many of these jobs a person has to graduate from high school. For which job does a person not have to go to high school?
  - a. Data key puncher
  - b. Bank teller
  - c. Bookkeeper
  - d: Custodian
  - e. Secretary
- 15. In some jobs people make things for our comes. For which job do you think you would have to to school the longest?
  - a. Homemaker
  - b. Model
  - c. Seamstress
  - d. Drapery maker
  - e. Nutritionist
- 16. Most of us change our minds about what we want to do when we grow up. For the job you want at this time how much school or training do you need?
  - a. 10th grade
  - b. High school graduate
  - c. Technical school graduate
  - d. College graduate
  - e. Professional school after graduation from college
  - f. I don't know yet
- 17. What job do you think you want when you grow up?

## Education and Training

## Students' Rating Grade 8

1974 - 1975

Under each question please draw a circle around the letter of the answer which you believe to be correct.

- 1. People who have the following jobs do things for people. We have to have some training or experience to do any of them. For which job would we need the least training?
  - a. Beautician
  - b. Babysitter
  - c. Barber
  - d. Tailor
  - e. TV repairman
- 2. People who have the following jobs care about our health. One of these jobs does not require as much training or education as the other jobs. Which job is it?
  - a. Counselor
  - b. Druggist
  - c. Hospital ward attendant
  - d. Laboratory technican
  - e. Dental assistant
- 3. The following jobs are concerned with building things. In one job you have to go to college. Which one is it?
  - a. Plumber
  - b. Bricklayer
  - c. Plasterer
  - d. Architect
  - e. Carpenter
- 4. People in some jobs manufacture products. People have to have much training to do them. In one of the following jobs one must also go to college. Which job is it?



- a. Machine operator
- b. Chemist
  - c. Sheet metal worker
  - d. Welder
  - e. Tool operator
- 5. In which of the following jobs concerned with transportation do you think college is necessary?
  - a. Truck driver
  - b. Body and fender repairman
  - c. Auto mechanic
  - d. Service station manager
  - e. Aerospace engineer
- 6. Some jobs are concerned with the use of land. Which job requires no more than a high school education?
  - a. Farmer
  - b. Soil conservationist
  - c. Mining engineer
  - d. Petroleum engineer
  - e. Fish and game manager
- 7. Some jobs are to help people. Which job requires no school?
  - a. Lawyer
  - b. Teacher
  - c. Engineer
  - d. School counselor
  - e. Garbage collector
- 8. Jobs which are concerned with our environment are important. Which of the following jobs does not require graduation from high school?
  - a. Meteorologist
  - b. Range manager
  - c. Fish and game manager
  - d. Gardener
  - e. Forest ranger
- 9. Some people have jobs to help us use our spare time. Which of the following jobs would require us to go to college?



- a. Waitress
- b. Cook
- c. Restaurant hostess
- a. Golf pro
- e. Community recreation director
- 10. Some jobs require good training rather than more school. In which of the following jobs should one have more school than training?
  - a. Actor
  - b. Singer
  - c. Poet
  - d. Lawyer
  - e. Sculpturer
- 11. Some jobs are concerned with giving information to other people. Which of the following jobs requires more school than training?
  - a. Photographer
  - b. College professor
  - c. Sportscaster
  - d. Newswriter
  - e. Reporter
- 12. Some jobs are to help companies decide if they should produce certain products. Graduation from high school is not necessary for one of the following jobs. Which job is it?
  - a. Salesman
  - b. Statistician
  - c. Economist
  - d. Marketing researcher
  - e. Systems analyst
- 13. Some jobs are related to the ocean. For which of the following jobs is one not required to go to college?
  - a. Marine biologist
  - b. Physicist
  - c. Commercial fisherman
  - d. Acquatic biologist
  - e. Geophysicist

- 14. Business offices employ many people with different skills. At least a high school education is necessary for many of these jobs. For which job would a person not have to graduate from high school?
  - a. Data key puncher
  - b. Bank teller
  - c. Bookkeeper
  - d. Custodian
  - e. Secretary
- 15. Some jobs are concerned with making products for our homes. Which of the following jobs would one be required to attend school the longest?
  - a. Momemaker
  - b. Model
  - c. Seamstress
  - d. Drapery maker
  - e. Nutritionist
- 16. Students frequently change their minds about what job they want when they grow up. For the job you now want how much education or training do you think you will need?
  - a. 10th grade
  - b. High school graduate
  - c. Technical school graduate
  - d. College graduate
  - e. Professional school after graduation from college
  - f. Don't know as I haven't made up my mind yet
- 17. What job do you want after you have finished your education or training?

Education and Training

Students' Rating Grade 10

1974 /- 1975

Under each question please draw a circle around the letter of the answer you believe is correct.

- 1. Persons who have careers in the area of personal services do things for people. A certain amount of training or experience is necessary in each of these areas. Which of the following jobs requires least training?
  - a. Beautician
  - b. Babysitter
  - c. Barber
  - d. Tailor

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- e. TV repairman
- 2. Some careers deal with health. All of the following jobs require a person to graduate from high school and go to college except for one job. Which is it?
  - a. Counselor
  - b. Druggist
  - c. Hospital orderly
  - d. Laboratory technician
  - e. Dental assistant
- 3. The construction career area is primarily one that requires training rather than formal school. One of the following careers, however, requires a college education. Which one is it?
  - a. Plumber
  - b. Bricklayer
  - c. Plasterer
  - d. Architect
  - e. Carpenter
- 4. Careers in manufacturing are concerned with creating products. Much training is required in each of them. One requires a college education. Which is it?

- a. Machine operator
- b. Chemist
- c. Sheet metal worker
- d. Welder
- e. Tool operator
- 5. Which of the following jobs in the transportation career area do you think requires a college education?
  - a. Truck driver
  - b. Body and fender repairman
  - c. Auto mechanic
  - d. Service station manager
  - e. Aerospace engineer
- 6. Some careers pertain to the use of land. These jobs vary in the amount of education required. Which career requires no more than a high school education?
  - a. Farmer
  - b. Soil conservationist
  - c. Mining engineer
  - d. Petroleum engineer
  - e. Fish and game manager
- 7. Public service is a career area in which service for individuals is the goal. Careers in this area may require very little or very much schooling. Which of the following careers requires no school?
  - a. Lawyer
  - b. Teacher
  - c. Engineer
  - d. School counselor
  - e. Garbage collector
- 8. Some careers are concerned with protecting our environment. Which of the following careers does not require graduation from high school?
  - a. Meteorologist
  - b. Range manager
  - c. Fish and game manager
  - d. Gardener
  - e. Forest/ranger



- 9. Some people have careers in which they help other people spend their leisure time. Which of the following jobs would require a college education?
  - a. Waitress
  - b. Cook
  - c. Restaurant hostess
  - d. Golf pro
  - e. Community recreation director
- 10. Some careers require good training rather than more schooling. Which of the following careers would require more school than training?
  - a. Actor
  - b. Singer
  - c. Poet

- d. Lawyer
- e. Sculpturer
- 11. Some careers are concerned with transmitting information. Which of the following jobs requires more school than training?
  - a. Photographer
  - b. College professor
  - c. Sportscaster
  - d. Newswriter
  - e. Newspaper reporter
- 12. Information provided by some careers assist companies in deciding what products and how much of each they should produce. A high school or college education is helpful or necessary in many of these jobs, but not necessary in which one of the following?
  - a. Salesman
  - b. Statistician
  - c. Economist.
  - d. Marketing researcher
  - e. Systems analyst
- 13. Some careers are related to the exploration and use of the oceans. Which of the following careers does not require a college education?
  - a. Marine biologist
  - b. Physicist
  - c. Commercial fisherman

- d. Acquatic biologist
- e. Geophysicist
- 14. Business offices employ many people with different skills. Graduation from high school is required for almost all business office careers. For which of the following jobs is high school graduation not required?
  - a. Data keypuncher
  - b. Bank teller
  - c. Bookkeeper
  - d. Custodian
  - e. Secretary
- 15. Some careers are concerned with making products for our homes. Which of the following careers would require the most education?
  - a. Homemaker
  - b. Model
  - c. Seamstress
  - d. Drapery maker
  - e. Nutritionist
- l6. Students frequently change their minds about what career field they want to enter. For the career you now think you want how much education or training do you expect to have?
  - a. 10th grade
  - b. High school graduate
  - c. Technical school graduate
  - d. College graduate
  - e. Professional school after graduation from college
  - f. I haven't decided yet
- 17. What job do you want after you have completed your schooling?

APPENDIX C

VALUE OF WORK OUESTIONNAIRE

### DAVIS COUNTY SCHOOL DISTRICT

Value of Work
Grade 4

1974 - 1975

DIRECTIONS: Please read each of the following sentences carefully. Place a check ( ) in the column under the word which you think applies to you.

		Agree	Disagree	
1.	After you choose a job you can't change your mind later on			7
2.	You have to know what kind of a person you are			42.
	in order to choose a job.			
3.	I will find a job which my parents suggest for me			
4.	I suppose that everyone will have to work, but I don't want to			
5.	I can do any job I want to do when I grow up, as long as I try hard	. 10		
6.	I am too young to choose a job now. There will be enough time to decide after I finish school			
7.	A job is important. It determines how much money I will make	i	20	
8.	Work is good because it lets you buy the things		4	

	•	Agree	Disagree
9.	The best job for me is one where I can earn the most money		
10.	I think about when the to be, but I have to decided yet		
11.	What I am good at is more important than what I like when I choose a job		
12.	My parents know better than anyone else what my job should be	•	
13,	I will be happy if I can help other people in my work		
14.	I don't like to work	•	
15.	I don't know what to do for a job as everyone tells me something different		
16.	I don't know how to find the job I want to do		
17.	I don't want to decide on a job because there are so many problems in the world		
18.	I wish I could do some jobs that I know I could never do		
19.	I don't know what courses to take in school when I have a choice		
20.	I think I can do as well in one job as another		

		Agree	Disagree
	21. I think that by the time I am 15 years old I will know what job I want to have	1	
<b>3</b>	22. It is hard to decide what job I want as there are so many things to think about	s. ·	
	23. The job a person chooses doesn't matter as long as he gets lots of money	-	
,	24. I don't think very much about the job I want when I grow up		
	25. I think that each person should listen to what		
ŧ	his parents say about choosing a job		
,	26. Working is just like going to school	·	
:	27. I'm having trouble in preparing myself for the work I want to do		
	28. I don't know very much about what a person does to keep a job and not lose it		
) ノ゛.	29. When I choose a job I want to be able to do what I want		
	30. I think that a person should try several jobs and then choose the one he likes best		
3	31. There is only one job for each person		



		Agree	Disagree
32.	The most important thing about a job is if you can do it, and not if you don't like it	¥c.	**. 1
33.	I don't know how some people can know what job they want to do		
4.	As long as I can remember I've known what job I want to do when I grow up :		
5.	I want to do something in my work like helping people, earning lots of money, or making a great discovery		4
6.	I think a person gets a job by chance		
7.	I think it is who you know that helps you get a job, not what you know		a.
3.	When it comes to choosing a job, I'll decide for myself without help from anyone		
•	I think a person should choose a job which gives him a chance to help other people		7
) .,	When I should be study- ing I often think about my future job		
•	I don't know what working will be like	•	
•	I think that you should choose a job and then plan how to do it		

.•		Agree	Disagree	
43.	I can't think of any jobs that I would like			
	I think you should choose a job to make you famous			•
45.	I think if you don't know what job to do, you should ask your parents, and teachers, and friends for suggestions	·		
46.	I want to choose a job which lets me do what I believe in			
47.	The best thing about work is the happiness that comes from doing it			
. 48.	I keep changing my mind about what job I want.		١	•
49.	As for choosing a job, I believe that I will decide before too long .		•	٠.
50.	I'm not going to worry about a job since I won't have any say about it anyway	•		

APPENDIX D

ECONOMIC CONCEPTS QUIZ

151

#### DAVIS COUNTY CAREER DEVELOPMENT EDUCATION PROJECT

### ECONOMIC CONCEPTS QUIZ

Name	e	<del></del>	Date	
. —	ECTIONS:	Choose the one bes	t answer to each	question
1.	Homemak	ers:		
	1	_do not use specia.	l tools in doing	their
` <b>&gt;</b>	2	_help young people work.	learn to share a	nd do
:	3	do not have much	o do.	
	4	do work that is u	· ·	÷ .
1 2	<sup>N</sup> Your pa	ents and others wor	ck:	٠.
	1.	to buy food shelt	er, and clothing	
	2	to have money for ents and interests	developing specia	al tal-
	3.	_both of the above		
1		neither of the abo	We answers is co	rrect
_				
3.	Princip	ls, teachers, custo	dians, and other	school
	workers	are paid from:		•
	` <del></del>	donations from pri	vate citizens.	
ė.	<b>42.</b>	are not paid but d	onate their time	for
	3.	educational purpos	es.	
	· —	_taxes paid by your	parents, tarmers	3,
	4.	businessmen, and on none of the above	thers.	· . _•
	•• —	Thouse of the above	answers is correc	;t.
4.	Tax mone	y can be spent for:		
	1.	county, state, or		
•	2.	public schools; li	braries, and park	s.
	3.	all of the above.	,	
5'	4.	private schools or	libraries.	
5.	People w	ho work for city, s	tate, or federal	govern-
	ments ma	y have obtained tho	se jobs:	
	1	_by winning election		
	2.	by applying for the	em.	. 3
		both of the above.	•	
	4	neither of the abo	ve.	
6.	Money ne	eded to operate a co	ommunity state	<b>.</b>
- <del>-</del> .	federal	government may come	from the sollost	ion of .
	taxes su	ch as:	Trom the Correct	TOU OT
	1.	_sales or income tax	Kea	•
		property or gasoling		
		* - 25 3 3	cureg.	

	3both of the above. 4neither of the above.
7.	<ol> <li>be used and managed wisely.</li> <li>not be used.</li> </ol>
	3be given to state and federal governments. 4not be a concern of individual citizens.
8.	A wise use of our forest resources would be:  1. having controlled tree harvesting.
	2. having unlimited camping.
	3. having around-the-year hunting.
	4having uncontrolled grazing by sheep and cattle.
9.	Raw materials such as iron ore, oil, and trees:  l have little value.
	2. are needed.
	3. are not needed.
	4are an unnecessary expense.
10.	Which of the following is not a good use of water?  1 To carry harmful or poisonous chemicals used in industrial plants to large lakes
	or bodies of water.
	<ol> <li>To provide animals and crops with water.</li> <li>To produce electrical power.</li> </ol>
	4To provide people with water for drinking, cooking, and cleaning.
11.	Which one of the following best describes a good watershed?
	1An area of land, with a lot of water mov-
	ing across it.
	2. An area of land where a reservoir can
	easily be built.
	3. An area of land with a good stand of grass
•	flowers, shrubs, and trees.
	4An area of land that has been cleared of grasses, flowers, shrubs, and trees.
12.	Usually, when shoes are made in large quantities,
	the cost per pair of shoes is:
	1less.
	2. more.
	3the same.
	4. not determined.

13.	If the supply of a commodity such as cotton or lumber is greater than the demand for that com-
	modity, the price will probably: 1. increase.
	2. decrease.
	3. stay as it is.
	4. none of the above answers is correct.
14.	Workers provide:
	1 goods for the consumer.
	2services for the consumer.
	3neither of the above.
	4both of the above.
15.	Which of the following workers are more concerned
	with providing a product rather than a service?
,	1. Baker or farmer.
Fig.	2. Postman or telephone operator.
	<ol> <li>Postman or telephone operator.</li> <li>Mayor or city recorder.</li> </ol>
,	4. Law officer or librarian.
	Baw Clitcel OI libialian.
16.	, , , , , , , , -
	with providing a service rather than a product?
	1. A fruit farmer or a dairy farmer
	2. A doctor or nurse.
	<ul><li>A furniture maker or car repairman.</li><li>All of the above.</li></ul>
•	4. All of the above.
17	Workers depend upon each other for:
Τ/.	1. goods.
	1goods. 2. services.
	3. services.
	4. Noth of the above.
	4Moth of the above.
18.	In the United States' economis or free enterprise
, —	system people may:
	1own and operate their own business.
	2operate the business but let the govern-
	ment own it.
	3own the business but let the government
	operate it.
•	4 do none of the above
	ao none or ane above.
19.	In our country there are:
	1many career or job choices.
	2very few job choices.
	3. no job choices.
	4less job choices than there were 20 years

	\.		• ,	
20	Which one of the f	ollowing tobs	would be the mo	st.
	physically dangerp	1167	WOULE DO GIO MO	
				A Section 1
•	1. Meteorolo	gisc.	· .	and the second second
•	2. Dentist.		•	*
	3. Surveyor.			
,	4. Fireman.	٠.		
		<b>₩.</b>	s de la companya de	-1 <sup>1</sup>
21.	Workers can work w	ith:	•	
	1. people.			
:		animals or th	ad mana	
•			iriida.	
•		information.		
	4. all of the	e above.		
•		- v a	•	
. 22.	Jobs:	•	- <b>5</b>	
	1. never char	nge.		
	2. sometimes			,
			Haarmaan am ba	
•			lisappear, or be	•
	created.			e tra
	4always ch	ange:		!
		, ,		•
23.	Which of the follow	wing is not a	good attitude	
	toward work?	84		
N. X	The state of the s	does the best	work he can	
			needs to be do	Sign C
	A WOERGE	does only what	needs compe do	114.
A CONTRACTOR OF THE CONTRACTOR	A Worker	gets to work o	Line.	•
al colon			id helpful toward	1
	other worl	kers.		-
The state of the s				·
24.	Which of the follow	ring, hospital	workers do not	
The state of the s	work for money?			•
	1. Technician			
10 mg (2)		ative and busi	nage workers	•
			mass worvers.	• .
	3. Volunteers			
	4. Propession	nal personnel.		
100				
254	A nurse may work:			
	1. in a Hospi	a <b>tal</b> ingà na thàirean Chi	alamija se rajahija darah lamin ili gasa	distribution of
	for an inc	lividual in a	home and	ĩ
	3 in a school			\$
	11 any or	the places li	'ared grove.	and the second
		tru		
<b>25.</b>	The veterinarian:			•
	i. \gives medi	cine to peopl	.e.,	-
1. " N 49 Land	2. needs prof	iessional scho	oling and trains	ing.
		ne above.		
<b>*</b>	4 melther of	the above.		
• •	Torrest Of	~ me and .		
· 📜 🕱				
27.	Mateorologists, shar		mation with other	<b>?</b> [
	mezgorologists in c	ur country	A Property of the second	*
	1. never.			
	2. continuall	ly.		Att
* * * * * * * * * * * * * * * * * * *	1			
4		155		

/	
/	3. seldom.
	4once a day.
28.	Which statement about private property is correct?
/	1. People have the right to own property.
	erty.
	3. People should use the private property of
	others without permission for their own
	benefit or good.
	4None of the above answers is correct.
29.	If a worker uses his tools and possessions care-
	fully, they will:
	1. not look or work better.
	2be easily lost or misplaced.
	3not last longer or need fewer repairs.
	4last longer and need fewer repairs.
30.	If I take care of such things as my clothes, sports
	equipment, books, bedroom, radio and/or other
	possessions:
	1they will last longer.
	'2they will look and work better for a longer
ŧ	period of time.
	3employers will have a greater desire to
	hire me.
	4all of the above answers are correct.
	all of the above answers are correct.
31.	Preparing for the world of work or a career should
	begin:
	1 when you get a job.
	2when you go to a trade school.
,	3 when you begin high school.
	4. early in life.
	early in life.
22	Charini deb eleille on be abl
J	Special job skills can be obtained:
	<pre>1through on-the-job training. ' 2in high school. *</pre>
	in colleges.
	4all of the above.
33.	Once a person gets a job, the spending of more time
	and money to improve his skills or to learn new ones
	is:
	1. sometimes worthwhile.
•	2. never worthwhile.
	3usually worthwhile.
	4. unnecessary.

•	34.	When a person steals from a store, the future price of the item he steals will:  1
1	35.	When all people in a particular business do the best work they can:  1costs can be kept lower.  2feelings among people are usually better.
	• ~	<ul> <li>3the quality of the thing they are making improves.</li> <li>4all of the above.</li> </ul>
. • •	36.	Saving and earning money to do such things as taking piano lessons, buying tennis rackets, or traveling are:
	:	<ol> <li>good things to do.</li> <li>wasteful of time and money.</li> <li>all right.</li> <li>none of the above.</li> </ol>
	37.	Jobs have dignity and importance because:  1they make some people better than others.  2they provide people with a way of paying
		for the things they need.  3both of the above answers are right.  4the answer is not given above.
, , , , , , , , , , , , , , , , , , ,	38.	The kind of job a person has often determines:  1how much he earns.  2where he works and lives.  3both of the above.  4neither of the above.
	39.	Getting to work on time and working until quitting time:
,		1increases costs. 2helps the employer and the worker. 3does both of the above. 4does neither of the above.
	40.	The expense of learning skills or gaining knowledge for jobs is:  1. usually worthwhile.
	٠	2costs money the amount varies. 3both of the above. 4neither of the above.
		<b>y</b>



# APPENDIX E OUESTIONNAIRES

8

# Career Education Involvement Questionnaire

Subject(s) taught\_\_\_\_\_

		•			
	the	The following extent of teac	questionnaire i cher involvement	s designed d in Career Ed	to measure ducation.
	1.	I am using te ing student a subject matte	aching moments as wareness of job a refield.	s a means of areas relate	f increas- ed to my
•		Frequently	Occasionally	Seldom	Never
	2.	I am using te ing student a subject matte	aching moments as wareness of job a r field.	s a means oi areas unrela	f increas- ated to my
, and		Frequently	Occasionally	Seldom	Never
•	3.	I am taking a student's com	dvantage of oppor petencies in deci	tunities to sion making	increase skills.
	•	•		•••	•
•		Frequently	Occasionally	Seldom	Never
	4.	I am attempti of economic c	ng to increase st oncepts.	udent under	standing
•					
. :		Frequently	Occasionally	Seldom	Never
	5.	my students the	age of opportunit he training neces wide variety of o	sary to ach	ieve com-
	V and	and the second			
3		<u> </u>		•	
		Frequently	Occasionally	Seldom	Never
Ü	6.	I have used a Education in r	formal unit that my teaching this	is related year.	to Career
•		Yes	No	How ma	ny?
	•				
,			120		•
·	~	. · · · · · · · · · · · · · · · · · · ·	1 7 1 1		

	Yes	No	_	,
8.	malated to t	the subject matte he skill training career field.		
	Yes	No	<del>_</del> .	·
9.	I have invit	ed resource peopleuss some phase of	e to come to their care	o my class- er.
	Frequently	Occasionally	Seldom	Never
.0.	I have used opportunitie	audio-visual media s.	a to emphas:	ize career
	. <u></u>			•
	Frequently	Occasionally	Seldom	Never ,
LEN	Frequently  ENTARY TEACHE	•	Seldom	Nevel ,
	MENTARY TEACHE	•		
1.	MENTARY TEACHE How many Wor year?	RS ONLY  ld of Work units b  d part of the WOW	have you tau	ight this
1.	How many Wor year?	RS ONLY  ld of Work units b  d part of the WOW	have you tau	ight this
2.	How many Wor year? Have you use with other u	RS ONLY  Id of Work units h  d part of the WOW  nits?	have you tau	ight this
1. 2.	How many Wor year?  Have you use with other u	RS ONLY  Id of Work units h  d part of the WOW  nits?	have you tan	nght this onnection
1. 2.	How many Wor year?  Have you use with other u  Yes  ONDARY TEACHER	RS ONLY  Id of Work units length of the WOW nits?  No	have you tan	nght this onnection
ECC.	How many Wor year?  Have you use with other u  Yes	RS ONLY  Id of Work units is d part of the WOW nits?  No S ONLY career hands-on e	nave you tan	nght this onnection

## TEACHER'S CAREER EDUCATION RATING SHEET

The nurnose of	this muchicular	.—-	τ —			
is to determine atti- ledge relative to ca Please check the resider most appropriate	rees education. ponse you consi-	Strongly Agree	Agree	Uncertain	sagree	Strongly Disagree
Name of School	·	St	Ag	Un	Disa	St; Dia
THE PUBLIC SCHOOLS (	K-12) SHOULD				·	
<ol> <li>prepare all student in possible school training ment</li> </ol>	st high	,				
2. prepare students	s for careers .				_	
3. prepare graduat lege entrance	tes for col-		4			
4. provide students ance and counsel career developme	ling for	1				
5. use parents, emp community for so learning	oloyers, and ources					
6. assist graduates post-secondary sentrance		,				
7. be responsible f the progress of after they leave	all students					
TEACHERS SHOULD						
8. appreciate the vork .	alues of many					
9. relate classroom to use in the wo				Í		
10. assist students the ability to go						

**161** 

		*		2		
and the second of the second o		Strongly Agree	Agree	'Uncertain	Disagree	Strongly Disagree
11.	be responsible for assisting students to develop attitudes necessary for career advancement					
12.	assist students in making decisions about careers					
13.	be responsible for teaching career awareness to statents .					,
STUD	ENTS SHOULD		•		·	
14.	study their interests and abilities to determine their fitness for specific careers .				,	
15.	learn how to cope with the economic world	3	•	·	,	
16.	learn techniques for using their leisure time wisely					
17.	have the opportunity to learn vocational skills	*	•			
18.	have the opportunity for "hands- on-experience" as a part of the school curriculum	·	•			115
19.	demonstrate appropriate attitudes concerning the dignity and importance of work	·				
20.	develop pride in accomplian- ment, loyalty, and dependa- bility					
CHAR	ACTERISTICS OF CAREER EDUCATION					W.
21.	Motivation for teaching can be stimulated through career education					***

· · · · · · · · · · · · · · · · · · ·		, , , , , , , , , , , , , , , , , , ,		in		یو بحد
	•	Strongly Agree	Agree	<b>Uncertain</b>	Disagree	Strongly Disagree
••	•	Str	Agr	Cinc	Die	Str Dis
<b>.</b> .			•		•	
22.	Career education will enable students to see why they should acquire essential academic skills				·	
<b>23.</b> ′	Career education can enable each individual to develop a self-identity as a worker in a work-centered society .	l				
24.	Career education goes beyond the school, and the entire community may be a resource for career development	. •				
25.	It is important for an indi- vidual to know and understand himself	•				
26.	Many jobs are not being filled because the unemployed person does not have the required skills to meet the job requirements		•		,	
27.	One of the goals of education is to prepare individuals for employment	r.	,			
28.	Many counselors, teachers, and principals are academic-college oriented and tend to over-encourage students to presare for college	1 t m.		•	•	
29.	Career education is a new term for vocational education					
30/	Public education should have the responsibility of planning new programs which would give students the opportunity of exploring the world of work	·			•	
-				47	7	

		1999					_
<i>ý</i> = -	<b>8</b>	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree	
•	and assisting them in making satisfying decisions						
31.	Career education encompasses both academic education and vocational-technical education	, established	<i>y</i>	ad g		•	
32.	Career education is concerned only with preparing a person to enter into a chosen vocation other than that for which a baccalaureate degree is required						
33.	Many people are working at jobs from which they gain little or no personal satisfaction						•
34.	A college degree is the best and surest route to occupational success					~ ,	:
35.	Career education should be a continuing process from first grade through senior high school and beyond						

APPENDIX F



. .:

### DAVIS COUNTY SCHOOL DISTRICT

Parent Evaluation of Career Education Program

Will you please complete this questionnaire which pertains to your child's attendance at school. A new concept in education has been promoted in recent years and your participation and assistance is greatly needed in helping us evaluate this program. After completion would you please return this questionnaire this week in the enclosed envelope.

Choose the one statement in each of the following

ing	your feelings and check ( ) the appropriate space.
1.	During the present school year I have visited in the school during the regular school day a total of
:	a. 2 hours or less.  b. 3-5 hours.  c. 6-10 hours.  d. *more than 10 hours.
2.	Career education is
	a. a term I know little or nothing about.  b. a good program and should be retained as it is in the schools of the district.  c. a program to which increased emphasis should be given.  d. a program to which too much time and energy is being devoted.
3.	Regarding my child's activities in Career Education, I know
v	a. very little.  b. only of some units that have been taught.  c. only about some outside resource people who have been in the school.  d. about most of the activities (both in and out of the formal classroom) in which my child has participated.
4.	My overall assessment of the Career Education program in my child's school is
•	a. excellent. b. good. c. poor. d. don't know enough about it to make a judgment.



					•		
	*	•					
-	<i>.</i>		)	( The )			
5.	Elementary school child	lren shou	ıld 🛊				
	a. not be expecte Education pro	ed to par	tici	ipate	in a	Caree	r
	b. be forced to p	participa	te i	in a (	aree	r Edu-	•
	cation program	1.					
H	c. have the opportunity with different	tvpes o	f wo	ecomin ork.	ig ac	quaint	.ea
•	d. be expected to fore leaving t	choose	thei	r pro	fess	ion be	· -
	· ·		,				
abou 1-5, from	Opposite each of the fo it Career Education, plea , as indicated, the amoun n:	se check	( L	). on	as	cate o	f
			Т		<u> </u>		
		l Little	2	3	4	5 Much	
6.	Parent-teacher						
	conferences	,					,
7.	P.T.A. meetings			ψ.		•	
8.	Back-to-school night				,		

10. Personal contact by school personnel .

9. Written material from school . .

Please make a check ( / ) in the box under the statement which best describes your reaction to each of the following items.

Strongly Agree	Agree	Uncertain	Disagree	Strongly* Disagree	
				`	

11. I feel I understand what is meant by Career Education .



	· · · · · · · · · · · · · · · · · · ·	-				<u> </u>
	*. **	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
12.	As parents we could make an important contribution to the Career Education program of the schools					•
13.	Ideally, everyone should graduate from college		,			
. 14.	The schools should involve parents to a greater extent in the planning of Career Education programs				**	
15.	There should be less emphasis on Career Education in the school than we have had this year	-				
16.	I would be pleased to be invited by the school to assist in the Career Education program	Å				
17.,	As parents we have often discussed with our children the type of career they should plan					
18.	I expect the high school to concentrate on preparing my children for college	·	٠		***	
19.	I expect my children to decide for themselves (without much help from parents) whether or not they will go to college				;	
˙20.	The school does a good job of helping students decide what their life's goals will be					
21.	I am aware of my child's in- volvement in Career Education in school			, (		

	<u>*</u>		<del>-</del>		
	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
ties		ر • •			
ve olic					
-				;	

The school has asked me to participate in school activities related to Career Education . .

23. Career Education should receive a greater emphasis in the public schools than It now receives .

24. Only those who receive a college education can be considered successful in life . . .

\*

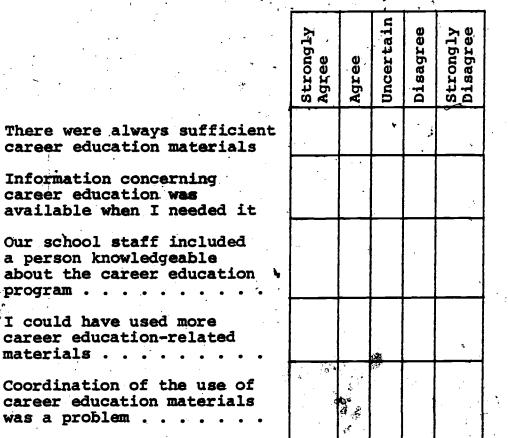
### DAVIS COUNTY SCHOOL DISTRICT

Logistical Effectiveness of Career Education Program

prov	Please indicate your status by ride information requested in specific Elementary School  Middle School High School	paces	ieck bel	( <b>/</b> ow:	<b>'</b>	and
ques abil	Would you please respond in the copriate space to the following stions pertaining to the availated crials.					
		Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1.	Career education-related materials were readily accessible					
2.	World of Work materials were provided in sufficient quantities. (Elementary only)				·	e _
8	Career education materials which had to be shared with other teachers/users created problems.					
4.	Career education materials were available when needed.					
5.	Some school personnel did not take proper physical care of career education materials	-		·	•	

Some teachers did not return career education materials

promptly after using them



7.

8.

11.

12.

More career education

materials should have been available to teachers . . .