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AUTHOR Roberts, Lawrence H.; Andrew, Larry Dean
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ABSTRACT

The extent to which specific program objectives were achieved is the focus of the third party evaluation report of the Russellville (Arkansas) two-year K-12 career education project. A brief description of the background, personnel variables (students and staff), and process variables (organization, activities, and objectives) are presented. Evaluation findings for 19 program objectives for both years of the project are detailed in narrative and tabular form. Evaluation instruments included standardized and staff-developed tests, attitude questionnaires, and project records. A chart summarizing the evaluation results shows, for each objective: the measuring instrument(s) used, the expected performance, the target population, results, and whether or not the objective was achieved. Summary statements, conclusions, recommendations, and an appendix containing the standardized measuring instruments used in the evaluation complete the report. Almost all of the objectives were achieved, and there has been a very positive response from students, teachers, and the community. Community involvement was one of the outstanding features of the project. During the 1974-75 year, 788 people from the community participated by serving as classroom speakers or resource persons, sponsoring field trips, or donating materials. (RG)

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RESEARCH AND DEVELOPMENT PROJECT
IN CAREER EDUCATION

Russellville, Arkansas

Evaluation Report
End of Project, 1973-75

~~Project No. OEG-0-73-2971~~
Project No. OEG-0-73-2971

September 15, 1975

Dr. Lawrence H. Roberts and
Mr. Larry Dean Andrew
Educational Planning and Evaluation Services
P. O. Box 689
Magnolia, Arkansas 71753

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APPENDIX

I. BACKGROUND INFORMATION

Russellville is located midway between, or about 75 miles from, each of the two largest urban areas of the state, Little Rock and Fort Smith. Due to rapid industrial and commercial expansion, the population has doubled in the past decade. Because of its location on the navigable Arkansas River and several major highways, including the Interstate System, Russellville has become a medical, transportation, commercial, education, industrial, agricultural, and financial center for the west central Arkansas River Valley area.

The economy of the Russellville area is balanced between tourism, agriculture, industry, and business. This area is the center of the poultry industry in the state. Several industries such as Firestone and Dow Chemical are located in Russellville. Russellville is also the home of Arkansas Polytechnic College, one of the state's major colleges. Because of its location on one of the largest man-made lakes in the state, and because of its location between the Ozark and Ouachita Mountains, Russellville has become a major recreation center.

The population of the city of Russellville is 14,000, although the Russellville School District serves a population of approximately 18,000. In spite of a rapid growth in per capita income during the past five years, the area still has a relatively low per capita income when compared to the rest of the nation. About 10 percent of the 1973-74 school enrollment of 3,900 were classified as economically disadvantaged, whereas about 25 percent of the 1974-75 enrollment of 4,119 was classified as economically disadvantaged.

Due to the rapid industrial development and the expansion of job opportunities in the community, a study was inaugurated in the spring of 1968 to analyze the changing economy of the community. Committees, composed of educators, lay citizens, and representatives from industry, labor, and business were organized. These groups evaluated the secondary school curriculum in view of the expanded job market.

The committee assignments also involved a survey of parents to determine their interest in expanding the curriculum to include vocational-technical courses. Eighty-one percent of the respondents felt a need for this program. As a result of the committee's findings, a full-time director was hired to coordinate the planning of a vocational-technical curriculum and to help plan physical facilities for the program.

During the planning stage, the concept of an area vocational-career center was developed. The State Board for Vocational Education approved the application of Russellville School District to provide a vocational-technical program to serve a geographic area comprised of Pope and Yell Counties and two school districts (Lamar and Clarksville) in Johnson County. The area facility was constructed adjacent to the Russellville High School complex.

Experiences with the Vocational-Career Center indicate an inadequacy in the counseling and guidance program at Russellville and also in the school districts sending students to the Center. It was also determined that neither the Russellville school nor other schools sending students to the area career center had programs designed to insure the placement of exiting students.

An application was submitted to the U. S. Office of Education, Adult, Vocational, and Technical Division for a research and development program in career education for FY 1973, to be supported under section 191(a) of Part C of the Vocational Education Amendments of 1968. A grant was awarded for the project to begin June 1, 1973, and continue until May 30, 1975. A no-cost extension extended the grant to June 30, 1975.

The purpose of this report is to present a brief description of the two-year project and the evaluation findings.

II. IDENTIFICATION AND DESCRIPTION OF PROGRAM VARIABLES

A. The personnel variables in the program were the students, teachers, administrators, counselors, career coordinators, and a career placement specialist.

1. Students. There were approximately 4,000 students in 1973-74 and 4,100 students in 1974-75 involved in the Russellville Research and Development Project in Career Education. Students at grade levels K through 12 participated in the program. Table 1 provides a description of the students.



Table 1: THE NUMBER AND PERCENT OF STUDENTS IN THE CAREER EDUCATION PROGRAM, BY SCHOOL, GRADE, AND SEX

| School and Grade | Male | | Female | | Total | |
|----------------------------|---------|---------|---------|---------|---------|---------|
| | 1973-74 | 1974-75 | 1973-74 | 1974-75 | 1973-74 | 1974-75 |
| <u>Crawford Elementary</u> | | | | | | |
| K | -- | 30 | -- | 33 | -- | 63 |
| 1 | 41 | 32 | 28 | 38 | 69 | 70 |
| 2 | 26 | 44 | 30 | 32 | 56 | 76 |
| 3 | 54 | 32 | 28 | 39 | 62 | 71 |
| 4 | 30 | 47 | 33 | 36 | 63 | 83 |
| 5 | 30 | 42 | 40 | 42 | 70 | 84 |
| <u>Dwight Elementary</u> | | | | | | |
| K | -- | 22 | -- | 18 | -- | 40 |
| 1 | 41 | 29 | 26 | 30 | 67 | 59 |
| 2 | 25 | 38 | 25 | 22 | 50 | 60 |
| 3 | 24 | 34 | 22 | 23 | 46 | 57 |
| 4 | 36 | 28 | 49 | 23 | 85 | 51 |
| 5 | 32 | 40 | 28 | 44 | 60 | 84 |
| <u>London Elementary</u> | | | | | | |
| K | -- | 9 | -- | 7 | -- | 16 |
| 1 | 9 | 12 | 10 | 7 | 19 | 19 |
| 2 | 7 | 12 | 7 | 11 | 14 | 23 |
| 3 | 10 | 7 | 8 | 10 | 18 | 17 |
| 4 | 7 | 12 | 13 | 11 | 20 | 23 |
| 5 | 14 | 10 | 8 | 13 | 22 | 32 |
| <u>Cakland Heights</u> | | | | | | |
| K | -- | 27 | -- | 35 | -- | 62 |
| 1 | 36 | 38 | 46 | 45 | 82 | 83 |
| 2 | 53 | 46 | 40 | 49 | 93 | 95 |
| 3 | 40 | 54 | 45 | 41 | 85 | 95 |
| 4 | 43 | 38 | 41 | 45 | 84 | 83 |
| 5 | 56 | 48 | 36 | 39 | 92 | 87 |

(Continued)

Table 1 Continued

| School and Grade | Male | | Female | | Total | |
|--|---------|---------|---------|---------|---------|---------|
| | 1973-74 | 1974-75 | 1973-74 | 1974-75 | 1973-74 | 1974-75 |
| <u>Sequoyah Elementary</u> | | | | | | |
| K | 38 | 19 | 38 | 21 | 76 | 40 |
| 1 | 46 | 32 | 57 | 30 | 83 | 62 |
| 2 | 41 | 31 | 22 | 30 | 51 | 61 |
| 3 | 50 | 37 | 56 | 38 | 104 | 70 |
| 4 | 64 | 38 | 47 | 37 | 81 | 75 |
| 5 | 67 | 56 | 48 | 45 | 115 | 101 |
| Special Education | 15 | 9 | 8 | 9 | 23 | 18 |
| <u>Russellville Middle School</u> | | | | | | |
| 6 | 192 | 192 | 179 | 154 | 371 | 346 |
| 7 | 222 | 179 | 174 | 167 | 396 | 346 |
| <u>Gardner Junior High School</u> | | | | | | |
| 8 | 189 | 200 | 156 | 163 | 345 | 363 |
| 9 | 164 | 198 | 159 | 173 | 323 | 371 |
| <u>Russellville Senior High School</u> | | | | | | |
| 10 | 164 | 164 | 151 | 154 | 315 | 318 |
| 11 | 153 | 150 | 135 | 137 | 288 | 287 |
| 12 | 143 | 120 | 144 | 117 | 287 | 237 |
| TOTAL | 2,110 | 2,151 | 1,905 | 1,970 | 4,015 | 4,121 |

2. Teachers. There were a total of 164 teachers in 1973-74 and 210 teachers in 1974-75 involved in the career education program. The following tables show the distribution of teachers by sex, training, and experience for each school year.

Table 2: CHARACTERISTICS OF TEACHERS INVOLVED IN THE
RUSSELLVILLE CAREER EDUCATION PROGRAM 1973-74

| School | Grades | Number of Teachers | Sex | | Degree | | Average Years Experience |
|----------------------------|--------|--------------------|-----|-----|----------|----------|--------------------------|
| | | | M | F | BS or BA | MS or MA | |
| Crawford Elementary | 1-5 | 13 | 0 | 13 | 8 | 5 | 20 |
| Dwight Elementary | 1-5 | 13 | 0 | 13 | 12 | 1 | 15 |
| London Elementary | 1-5 | 3 | 0 | 3 | 2 | 1 | 12 |
| Oakland Heights Elementary | 1-5 | 18 | 0 | 18 | 14 | 4 | 17 |
| Sequoia Elementary | K-5 | 21 | 0 | 21 | 16 | 5 | 11 |
| Russellville Middle School | 6-7 | 28 | 6 | 22 | 23 | 5 | 13 |
| Gardner Junior High School | 8-9 | 29 | 8 | 21 | 17 | 12 | 8 |
| Russellville Senior High | 10-12 | 39 | 20 | 19 | 20 | 19 | 11 |
| TOTAL | | 164 | 34 | 130 | 112 | 52 | 12.5 |

Table 3: CHARACTERISTICS OF TEACHERS INVOLVED IN THE
RUSSELLVILLE CAREER EDUCATION PROGRAM, 1974-75

| School | Grades | Number of Teachers | Sex | | Degree | | Average Years Experience |
|----------------------------------|--------|-----------------------|-----------|------------|------------|-----------|-----------------------------|
| | | | M | F | BS or | MS or | |
| | | | | | BA | MA | |
| Crawford Elementary | K-5 | 21 | 0 | 21 | 14 | 7 | 14 |
| Dwight Elementary | K-5 | 16 | 0 | 16 | 15 | 1 | 12 |
| London Elementary | K-5 | 6 | 0 | 6 | 5 | 1 | 11 |
| Oakland Heights Elementary | K-5 | 23 | 0 | 23 | 19 | 4 | 14 |
| Sequoyah Elementary | K-5 | 24 | 2 | 22 | 19 | 5 | 10 |
| Russellville Middle School | 6-7 | 32 | 9 | 23 | 26 | 6 | 11 |
| Gardner Junior High School | 8-9 | 35 | 14 | 21 | 23 | 12 | 8 |
| Russellville Senior High | 10-12 | 46 | 22 | 24 | 25 | 21 | 10 |
| Area Vocational Career Center | 10-12 | 7 | 7 | 0 | 7 | -- | 8 |
| TOTALS | | 210 | 54 | 156 | 153 | 57 | 10.8 |

3. Project Staff and Administrators. In addition to the project staff, there were eight building principals, the superintendent, and a deputy superintendent involved in the program.

Information about the project staff and administrators is presented below.

Table 4: A DESCRIPTION OF THE PROJECT STAFF INVOLVED IN
THE RUSSELLVILLE CAREER EDUCATION PROGRAM, 1973-75

| Name | Position | Sex | | Degree | Years of Experience |
|-----------------|---------------------------------------|-----|---|--------|---------------------|
| | | M | F | | |
| Loretto Bonner | Project Director | | X | MA+36 | 26 |
| Jerry Sills* | Career Coordinator (Junior High) | X | | MA | 6 |
| Madie Westbrook | Career Coordinator (Middle School) | | X | BA | 9 |
| John Whiteside | Placement Specialist | X | | BA | 2 |
| Jim Pugh** | Career Coordinator (Junior High) | X | | BA | 1 |

*1973-74 only.

**1974-75 only.

4. Counselors. Four counselors were involved in the career education program. The characteristics of these counselors are presented in the table below.

Table 5: THE CHARACTERISTICS OF THE COUNSELORS INVOLVED
IN THE RUSSELLVILLE CAREER EDUCATION PROGRAM, 1973-75

| Name | Position | Sex | | Degree | Years of Experience |
|----------------|----------------------------|-----|---|--------|---------------------|
| | | M | F | | |
| Lewis Billings | Senior High Counselor | X | | MA+36 | 25 |
| Shirley Dodd | Senior High Counselor | | X | MA | 14 |
| Dee Austin | Junior High Counselor | | X | MA | 8 |
| Mary Pate | Middle School Counselor | | X | MA+36 | 31 |

5. Administrators. Fourteen administrators were involved in the education program. The characteristics of these administrators are presented in the table below.

Table 6: A DESCRIPTION OF THE ADMINISTRATORS INVOLVED IN THE RUSSELLVILLE CAREER, EDUCATION PROGRAM

| Name | Position | Sex | | Degree | Years of Experience |
|-------------------|--|-----|---|-----------|---------------------|
| | | M | F | | |
| Harvey L. Young | Superintendent of Schools | X | | MS+36 | 26 |
| Kent Butler | Assistant Superintendent | X | | MS | 23 |
| Kenneth Ledbetter | Deputy Superintendent | X | | MS+12 | 22 |
| Charles Horne | Principal (High School) | X | | M.Ed.+ 24 | 16 |
| Winford Hoover | Principal (Junior High) | X | | MS+12 | 22 |
| Ellis McIntosh | Asst. Principal (High School) | X | | MS+36 | 25 |
| Truman Pew | Asst. Principal (Junior High) | X | | MA | 9 |
| Bill Lewis | Vocational Center Director | X | | MA+12 | 11 |
| Johnny Thaxton | Principal (Middle School) | X | | Spec. | 14 |
| Janie Cox | Asst. Principal (Middle School) | | X | M.Ed.+ 36 | 27 |
| Harmon Bean | Principal (Dwight Elem.) | X | | MSE+12 | 23 |
| Herbert Booher | Principal (Crawford Elem.) | X | | MS+36 | 23 |
| Clifford Doll | Principal (Oakland Heights Elementary) | X | | MA | 3 |
| Richard Payne | Principal (Sequoyah Elem.) | X | | MA | 12 |

B. The process variables of the Russellville Career Education Program are described below.

1. Organization. The overall administration of the project was under the direction of the superintendent of schools of the Russellville School District. The project director, Mrs. Loretto Bonner, was responsible for the administration of the project and worked directly under the superintendent. She was assisted by two career coordinators, and a career placement specialist.

The program was organized into four components: (a) elementary component, (b) career orientation component, (c) guidance and counseling component, and (d) a placement component. However, during 1974-75 the guidance and counseling objectives were not included as a component but listed under the overall objectives.

2. Program Activities. The Career Education Program activities are described by components.

- a. Elementary Component (Grades K-5)

All elementary teachers were involved in a one-day orientation preschool workshop in August, 1973. The workshop was designed to orient teachers to the concept of career education and to help them increase career awareness in students, in terms of the broad range of options open to them in the world of work.

One staff member was assigned to work with teachers at the elementary and middle school levels. In-service sessions and personal contact with teachers stimulated their interest in providing career information to their students. Occupational awareness teaching materials and guides were provided for interested teachers, and resource speakers were scheduled for them at their request.

The approach emphasized was to stimulate interest in career education and then provide the materials and assistance needed, rather than the presentation of "canned" curriculum guides for teachers to use. At the elementary and middle school levels, the emphasis was on students increasing self-awareness and general career awareness.



b. Career Orientation Component (Grades 6-9)

The emphasis at the junior high school level was to help students grow in knowledge of self, occupational information and decision-making skills, to make appropriate choices for participation in the comprehensive high school program. In working with teachers, both individually and in training and orientation sessions, an effort was made to help them develop positive attitudes, and to help them learn how to relate all subject matter to the world of employment, to make the educational process more relevant to student needs.

The staff member assigned to this level had, as a part of his responsibilities, the function of planning and directing self-awareness activities, and the coordination of the development of a career orientation program.

The approach used was similar to that used in the middle school, that is, prepared lesson plans were not imposed upon teachers, but rather, they were encouraged, stimulated, and aided them in developing their own ways and means of helping students increase their self-awareness and knowledge jobs. Resource speakers were brought in and field trips were arranged at teachers' requests.

c. Guidance and Counseling Component

The major purpose of this component was the training of key personnel. A one-week workshop was conducted in August, 1973, for 62 teachers, counselors, and administrators. This workshop was followed by monthly sessions throughout the school year. Graduate or undergraduate college credit, or in-service credit, was offered. Dr. Jack Nichols, of the State Department of Education, was the instructor. Thirty-nine participants completed the course and received college credit for it.

The training centered around career development, exploration of value systems, and the development of interpersonal relationships.

d. The Placement Component

One staff member was assigned the responsibility of developing a system for (1) identifying job openings; (2) informing students about job openings; (3) matching students with jobs; and (4) follow-up and feedback. He worked closely with the director and other staff members, and guidance personnel in the schools, as well as vocational teachers and coordinators.

During the month of July, 1973, the placement specialist and project director were busy laying the groundwork for community involvement. Publicity through the newspaper, radio interviews, and spot announcements on the radio by project team members preceded visitations by the project director and placement specialist to industries and businesses in the Russellville area.

These visitations accomplished the following purposes:

- (a) helped acquaint the community with the project,
- (b) set up visitation to businesses and industries by workshop participants,
- (c) elicited community involvement by:

- (1) obtaining community volunteers in a wide range of careers to make learning tapes to be used by individual students or in groups
- (2) setting up the first phase of a resource library
- (3) identifying and gaining permission for shadowing and learning trips (small groups)
- (4) developing a phase of the placement service

The response from the community was positive from the beginning. Approximately 50 businesses were visited before school started. This activity was a regular part of the program throughout the year.

The placement specialist developed an information system for collecting needed data about jobs and students, and worked directly with counselors to keep students informed of services provided.

3. Facilities. The program activities in the career education program were conducted in the regular school buildings of the district. The project staff occupied a one-room office in a new section of Russellville High School. Field trips and community activities were conducted in the various business and industrial firms in the city of Russellville.
- C. The behavioral variables of concern in the career education program were in both the cognitive and affective domains. The cognitive variables included: (1) the increase of students' occupational awareness and job skills, (2) the increase of students' knowledge of career training opportunities, (3) the increase of teachers' knowledge of career concepts, career resources, and skills for teaching career information, and (4) the counselor's knowledge of what happened to students that left the Russellville School District.

The affective variables included the improvement of students' work habits and attitudes, and the students', teachers', and employers' positive responses toward parts or all of the program activities.

III. PROGRAM OBJECTIVES

The program objectives for 1973-74 are presented in pages 11-15 of the project director's report. The program objectives for 1974-75 are given in pages 15-19 of that report. Therefore, they will not be repeated here.

IV. EVALUATION FINDINGS

The evaluation findings for both years are presented in this section. As a result of the first year's evaluation, minor changes were made in some of the objectives for the 1974-75 school year.* Also during the second year, the Guidance and Counseling objectives were stated as overall objectives rather than as a separate component. Because of these changes, the findings will not be presented by components but by reporting the findings for both years for similar objectives. In those cases where objectives were entirely different, the findings will be presented separately, by year.

*Some of the changes were made in an effort to follow the "Guidelines for the Evaluation of Career Education Programs," provided by the U. S. Office of Education.

A. Program Objectives

Objective 1: The students in grades K-5 will increase their career awareness as indicated by their identifying occupations from pictures and by listing occupations known to them. It is expected that;

(1973-74)

- a. Students in grades K-3 will be able to identify 15 percent more occupations at the end of the year than they knew at the beginning of the year, and;
- b. Students in grades 4-5 will be able to list ten more occupations at the end of the year than they did at the beginning of the year.

Objective 1: The students in grades K-3 will demonstrate their career awareness as indicated by their identifying occupations from pictures and by listing occupations known to them. It is expected that students in grades K-3 will have a mean score equal to or greater than the mean post test score of similar sample from the spring, 1974.

(1974-75)

To measure the extent to which this objective (1973-74) was achieved, a random sample of students from each grade, from each target school, was selected. Pretests were administered in September, 1973, and post tests in May, 1974.

The random sample of students was selected by arbitrarily selecting a letter of the alphabet, going down an alphabetical roster of students' names, and then using an arbitrary number to select the names. For example, if the letter "E" was selected as a starting point and "12" the arbitrary number, the first name beginning with "E" was chosen and every twelfth name thereafter. In every case the arbitrary number selected was large enough to require going to the top of the roster repeatedly in order to select the required number of names.

The test used for K-3 was a simple picture identification test, administered individually. Students were asked to identify the workers shown on 24 picture cards from the Peabody Language Development Kit, Level I. (See a copy of the score sheet and instructions in the Appendix.)

Table 6 presents a summary of the results of the tests administered to the sample of students, grades K-3.

Table 6: A SUMMARY OF SCORES MADE BY A SAMPLE OF STUDENTS, GRADES K-3, ON THE PICTURE IDENTIFICATION TEST

| Grade | Pretest | | Post Test | | Percent Gain |
|--------|---------|-------|-----------|-------|--------------|
| | Number | Mean | Number | Mean | |
| K | 15 | 12.53 | 13 | 16.38 | 30.7 |
| 1 | 35 | 11.17 | 29 | 17.14 | 53.5 |
| 2 | 34 | 13.94 | 30 | 18.57 | 33.2 |
| 3 | 35 | 15.17 | 31 | 19.90 | 31.2 |
| TOTALS | 119 | 13.31 | 103 | 18.29 | 37.4 |

The data given in Table 6 show that each group attained the objective; the criterion stated in the objective required a 15-percent gain, which means that the post-test mean score must be at least 15 percent greater than the pretest score.

To measure part (b) of this objective (1973-74), a sample of students was selected by use of the same method described earlier, from grades four and five. They were asked to write a list of all the different jobs they could think of; pretests were given in September and post tests in May. (See Appendix A for a copy of the instructions given.) Table 7 presents a summary of the results.

Table 7: A COMPARISON OF PRETEST AND POST TEST LISTING OF OCCUPATIONS BY A SAMPLE OF STUDENTS, GRADES FOUR AND FIVE

| Grade | Pretest | | Post Test | | Mean Gain |
|--------|---------|------|-----------|-------|-----------|
| | Number | Mean | Number | Mean | |
| 4 | 35 | 6.31 | 29 | 16.72 | 10.21 |
| 5 | 35 | 9.26 | 30 | 20.30 | 11.04 |
| TOTALS | 70 | 7.89 | 59 | 18.54 | 10.65 |

Both fourth and fifth grade students attained the objective by listing an average of at least ten more occupations at the end of the school year than they listed at the beginning of the year.

To measure the extent to which this objective (1974-75) was achieved, a random sample of students from each grade, from each target school, was selected.

The random sample of students was selected by giving each student's name in each grade a number, and then using a table of random numbers to select those who were to participate in the 1974-75 sample.

The same test used in the spring of 1974 was also administered to the 1975 sample of students.

Table 8 presents a summary of the results of the tests administered to both sample of students, grades K-3.

Table 8: A SUMMARY OF SCORES MADE BY A SAMPLE OF STUDENTS, GRADES K-3, ON THE PICTURE IDENTIFICATION TEST

| Grade | Spring 1974 | | Spring 1975 | | Difference | |
|--------|-------------|-------|-------------|-------|------------|-------|
| | Number | Mean | Number | Mean | Number | Mean |
| K | 13 | 16.38 | 41 | 16.80 | 28 | .42 |
| 1 | 29 | 17.14 | 47 | 18.47 | 18 | 1.33 |
| 2 | 30 | 18.57 | 57 | 17.11 | 27 | -1.46 |
| 3 | 31 | 19.90 | 49 | 19.71 | 18 | -.19 |
| TOTALS | 103 | 18.29 | 194 | 18.03 | 91 | -.26 |

The data shown in Table 8 show that grades K and 1 achieved the objective as stated, whereas grades 2 and 3 did not. However, it should be noted that the sample used in the Spring of 1975 was almost two times larger than the 1974 sample. Therefore, due to this larger sample and the reliability of the test, the difference in means is not very large. In a practical sense, only grade 2 may not have achieved the objective.

It is important to note that large gains in career awareness were made during the first year of the program and appear to have been maintained during the second year.

Objective 2: After completing the Career Orientation Component, eighth grade students will demonstrate ability to establish career goals as indicated by their choice of a high school program of studies. It is expected that at least 80 percent of the students will select courses that will provide the exploration, preparation, and training needed to enter the career stated as their goal. (1973-74)

Objective 2: The students in the Career Education Program, grade 9, will demonstrate ability to establish career goals as indicated by their choice of a high school program of studies. It is expected that at least 75 percent of the students will designate a career interest area and will select courses that will provide the exploration, preparation, and training needed for success in their goal. (1974-75)

Due to a great deal of confusion regarding course offerings at the junior high level, scheduling of eighth grade students was postponed until the final two weeks of the 1973-74 school year.

As a result of this situation, it was decided that there was not enough time to properly evaluate this objective (1973-74).

In the 1974-75 school year, the counselor taught a three week orientation unit for ninth graders. The unit was designed to help students explore various career opportunities and to relate these opportunities to their interests, aptitudes, and abilities. A resulting product of the unit was that each student was to make an educational plan based on his/her career choice(s). Students were not required to designate a career choice, if they were uncertain about their interests, desires, and abilities.

To measure whether the objective was achieved, the project director, who is a certified counselor, reviewed the student's educational plan. She made a judgment on whether the student's plans were realistic based on her knowledge of the student's abilities, aptitudes and achievement.

Table 9 below presents a summary of the counselor's analysis of the educational plans of students participating in the unit of instruction.

Table 9: A SUMMARY OF THE NINTH GRADERS COURSE SELECTION FORMS

| Number of Students | Students Designating Career Choice | | Students Planning Realistic Courses | |
|--------------------|------------------------------------|---------|-------------------------------------|---------|
| | Number | Percent | Number | Percent |
| 323 | 199 | 61.6 | 163 | 81.9 |

The data from Table 9 show that only 61.6 percent of the students designated a career choice. Much emphasis has been placed on motivating students to explore aptitudes and abilities, and various career areas, before making a definite career choice. Many students, prior to the career exploration unit had either made up their minds (or their parents had made them up for them). The three-week exploration unit before the administration of this objective unit instrument tended to make them more aware of their options, thus suggesting the number of students who did not designate a career choice.

Students were told they did not have to designate a career choice. Just putting something down on paper after being motivated to explore would have been dishonest and the results irrelevant. As stated, this part of the objective was not achieved.

Approximately 82 percent of those students designating a career choice selected realistic electives to take in high school for the coming year. This was well over the 75 percent criteria needed to achieve this part of the objective. This suggests that students were capable of selecting courses that provided the training and preparation needed for success in their goal.

Objective 3: The counselors and teachers involved in the Career Education Program will demonstrate knowledge of the career education concept as indicated by their preparing an acceptable "plan of action" in the in-service education course, as judged by the course instructor.
(1973-74 only)



Letters were sent to administrators, counselors, and teachers in the seven school districts that send students to the Russellville Area Vocational-Technical School, inviting their participation in a career education workshop. Of the 85 invited, 62 accepted. The workshop met for one week during the summer and once each month throughout the school year. Graduate or undergraduate college credit, or in-service credit, was offered for those who desired credit. The class was taught by Dr. Jack Nichols of the State Department of Education, Division of Vocational, Technical, and Adult Education.

Fifty-seven participants completed a feedback questionnaire at the end of the one-week summer workshop.

Table 10 presents a summary of the responses to the feedback questionnaire.

Table 10: A SUMMARY OF PARTICIPANTS' RESPONSES TO A FEEDBACK QUESTIONNAIRE ADMINISTERED AT THE END OF THE SUMMER WORKSHOP

| Statement | From: | Percentage of Responses | | | | | To: |
|--|------------------|-------------------------|----|----|----|----|-----------------|
| | | 5 | 4 | 3 | 2 | 1 | |
| 1. The in-service training will be: | Very Helpful | 74 | 23 | 3 | -- | -- | Not Helpful |
| 2. The presentations and discussions were: | Very Practical | 54 | 39 | 7 | -- | -- | Too Theoretical |
| 3. The methods used in the in-service were: | Excellent | 56 | 35 | 8 | -- | -- | Poor |
| 4. The organization of the in-service was: | Excellent | 73 | 25 | 2 | -- | -- | Poor |
| 5. The objectives of the in-service were: | Clearly Evident | 61 | 35 | 4 | -- | -- | Vague |
| 6. The ideas and activities presented were: | Very Interesting | 63 | 30 | 7 | -- | -- | Dull |
| 7. The work of the consultant(s) was: | Excellent | 61 | 35 | 4 | -- | -- | Poor |
| 8. The scope (coverage) was: | Very Adequate | 40 | 54 | 6 | -- | -- | Inadequate |
| 9. Putting the ideas presented into practice would be: | Easy | 12 | 46 | 37 | 5 | -- | Difficult |
| 10. Overall, I consider this in-service: | Excellent | 70 | 23 | 7 | -- | -- | Poor |

The data given in Table 10 show that response to the workshop was overwhelmingly positive.

Thirty-nine participants chose to take the course for college credit and completed the course. Each participant submitted a "Plan of Action" to Dr. Nichols in October, 1973. A major criterion in determining the final grades was the acceptability of each participant's "Plan of Action" and the extent to which the plan was implemented. Following is a table which gives a summary of the final course grades.

Table 11: A RECORD OF THE GRADES GIVEN IN THE CREDIT COURSE

| Grades | Type of Credit | |
|--------|----------------|---------------|
| | Graduate | Undergraduate |
| A | 31 | 1 |
| B | 3 | 3 |
| C | 1 | 0 |

The data given above provides evidence that this objective was achieved.

Objective 4: (1973-74) The project staff, in conjunction with the Guidance Department, will demonstrate ability to place students in employment or further training. It is expected that 70 percent of the students who complete high school or who exit during the year will be placed in a job or in further training.

Objective 4: (1974-75) The project staff in conjunction with the Guidance Department will demonstrate ability to place students in employment or further training. It is expected that 70 percent of the students who complete high school or who exit during the year will be placed in a job or in further training.

The data for this objective (1973-74) was based upon the seniors' tentative plans. A discussion of this information follows.

A survey was made of all Russellville High School seniors in April, 1974, concerning their educational and career plans. Two hundred and six completed the survey form. The project staff continued their follow up until May 22, 1974, at which time data were reported to the evaluator.

Table 12 presents the summary of data as of May 22, 1974.

Table 12: A SUMMARY OF THE TENTATIVE PLANS OF THE SENIORS AT RUSSELLVILLE HIGH SCHOOL

| Plans | Number | Percent |
|------------------|------------|--------------|
| College | 119 | 41.5 |
| Further Training | 26 | 9.1 |
| Full-Time Work | 48 | 16.7 |
| Undecided | 13 | 4.5 |
| No Information | 81 | 28.2 |
| TOTALS | 287 | 100.0 |

The information in Table 12 indicates that approximately 41 percent of the 1973-74 seniors planned to go to college. Approximately 51 percent planned to go to college or get further training. No information was available on 28 percent.

The project director's quarterly report, dated May 31, 1974, reported that 47 percent of the seniors were working either part-time or full-time. It was assumed that many of these were working during the summer only, until college started in the fall.

In order to determine the extent to which this objective (1974-75) was achieved, a follow-up study of the 1973-74 seniors was conducted. Table 13 presents the summary of the data on the 1974-75 follow-up survey.

Table 13: A SUMMARY OF THE PRESENT STATUS OF THE SENIORS
FROM RUSSELLVILLE HIGH SCHOOL (1973-74)

| Present Plans | Number | Percent |
|------------------|------------|--------------|
| College | 118 | 41.1 |
| Further Training | 29 | 10.1 |
| Full-Time Work | 61 | 21.3 |
| Armed Service | 3 | 1.1 |
| No Information | 76 | 26.4 |
| TOTALS: | 287 | 100.0 |

The information in Table 13 indicate that 41 percent of the 1973-74 seniors are now in college. It also shows: (1) 10.1 percent of the former high school students are receiving further training and (2) 21.3 percent of the former students are presently employed full-time.

Overall 73.6 percent of those seniors enrolled at Russellville High School during the 1973-74 school year are presently on a job or receiving further training, thus achieving this objective (1974-75).

Objective 5: (1973-74) The community will respond positively to the Career Education Program as indicated by the amount of involvement in career education activities. It is expected that twelve different community groups will be involved by (1) being career speakers, (2) acting as hosts to students on field trips, or (3) donating equipment or materials.

Objective 5: (1974-75) The community will respond positively to the Career Education Program as indicated by the amount of involvement in career education activities. It is expected that at least 300 community people representing professions, business, industries, and government agencies will be involved as career speakers or hosts to students or teachers on field trips.

The community involvement aspect of this project was one of its outstanding features. The project team members spent the month of July (1973) laying the groundwork for community involvement. Publicity through the newspaper, radio interviews, and spot announcements on the radio by project team members preceded visitations by the project director and placement specialist to industries and businesses in the Russellville area. Approximately 50 businesses and industries were visited before school started.

Throughout the year, records were kept on the number of volunteer resource speakers making presentations to classes at school, the number of field trips, the number of students shadowing, and the materials donated. Table 14 gives a summary of these records.

Table 14) A RECORD OF COMMUNITY INVOLVEMENT ACTIVITIES, 1973-74

| Activity | Number | Number of Groups |
|--------------------|--------|------------------|
| Career Speakers | 263 | 74 |
| Field Trips | 62 | 23 |
| Shadowing | 113 | -- |
| Donating Materials | 5 | 5 |
| TOTALS | 443 | 102 |

The evidence indicates that performance in this area far exceeded the requirements of the objective for 1973-74.

Throughout the 1974-75 school year, records were kept on the number of community people that were involved in the Career Education Program. Table 15 gives a summary of these records.

Table 15: A RECORD OF COMMUNITY INVOLVEMENT ACTIVITIES,
1974-75

| Activity | Number | Classes |
|------------------------------|------------|------------|
| Resource People | 302 | 367 |
| Learning Trips | 143 | 192 |
| Shadowing | 113 | --- |
| Summer Workshop Interviewees | 230 | --- |
| TOTALS | 788 | 559 |

The information from Table 15, as well as Table 14, indicates that community involvement in the Career Education Program has been very high during the two year project.

Objective 6: The participating teachers, counselors, and administrators will respond positively to the Career Education Program as indicated by their responses on a feedback questionnaire. It is expected that at least 70 percent of the total responses will be positive.

The extent to which this objective was achieved was measured by an attitude questionnaire administered to 47 teachers in the 1973-74 school year and 35 teachers in the 1974-75 school year who were involved in the program and the workshop. The group included teachers from the area schools, and all grades were represented. A copy of the 10-item questionnaire can be found in the Appendix.

Table 16 presents a summary of the questionnaire results.

Table 16: A SUMMARY OF TEACHER RESPONSES ON AN
ATTITUDE QUESTIONNAIRE

| Total Number of Responses | | Total Positive Responses | | Percent of Positive Responses | |
|------------------------------|---------|-----------------------------|---------|----------------------------------|---------|
| 1973-74 | 1974-75 | 1973-74 | 1974-75 | 1973-74 | 1974-75 |
| 464 | 345 | 441 | 336 | 95 | 97.4 |

The criterion stated in the objective was "at least 70 percent" positive. The criterion was exceeded, as can be seen from Table 16; the objective was achieved.

Objective 7: (1973-74) The students in the Career Education Program, grades 4-5, will increase their knowledge that all careers contribute to society as indicated by a written test. It is expected that students can write the value to society of 10 percent more occupations at the end of the year than at the beginning of the year.

Objective 7: (1974-75) The students in the Career Education Program, grades 4-5, will demonstrate knowledge of the major duties, required abilities and entry requirements, and the differences in work conditions and life styles associated with different types of work, as measured by the Career Education Questionnaire. It is expected that the mean score will be not less than 50 percent of the possible score.

This objective (1973-74) was evaluated by having a sample of students make a list of occupations they were familiar with, and then writing a brief description of how each occupation listed "helps other people." (See Appendix for instructions given.) The responses were scored by the project staff.

The same sample of students was used as in Objective 1 (1973-74), and the test was administered as a part of the same test. Table 17 below presents a summary of the results of the test.

Table 17: A COMPARISON OF THE NUMBER OF OCCUPATIONS DESCRIBED AS HELPING OTHERS, BY A SAMPLE OF STUDENTS IN GRADES FOUR AND FIVE, 1973-74

| Grade | No. | Pretest | No. | Post Test | Increase | Percent Increase |
|-------|-----|--------------------|-----|--------------------|----------|------------------|
| | | Mean (Occupations) | | Mean (Occupations) | | |
| 4 | 35 | 3.91 | 29 | 8.28 | 4.37 | 111.76 |
| 5 | 35 | 5.97 | 30 | 12.63 | 6.66 | 111.56 |
| TOTAL | 70 | 4.94 | 59 | 10.49 | 5.55 | 112.35 |

The data in Table 17 above indicate that the objective was achieved, as the criterion stated in the objective was far exceeded. The students, on the average, were able to explain twice as many occupations on the post test, compared to the pretest.

The 1974-75 objective was evaluated by having a sample of students respond to the Career Education Questionnaire, developed at the University of Minnesota. The questionnaire consisted of 35 matching and 21 multiple choice questions.

The data for this objective was not collected by grade level. Table 18 presents a summary of the total responses of the students.

Table 18: A SUMMARY OF THE STUDENTS' RESPONSES TO THE CAREER EDUCATION QUESTIONNAIRE IN GRADES FOUR AND FIVE (1974-75)

| Number of Students | Total Number of Possible Responses | Average Number of Correct Responses | Percent of Correct Responses |
|--------------------|------------------------------------|-------------------------------------|------------------------------|
| 104 | 56 | 30.3 | 54% |

The students correctly answered 54 percent of the responses. The criteria stated in the objective was "not less than 50 percent" of the possible score. The objective was achieved.

Objective 3: (1973-74) The students participating in the Career Education Program, grades K-5, will improve their work habits as indicated by ratings by teachers on a Work Habits Rating Scale. It is expected that there will be a statistically significant increase in the mean score on the Rating Scale.

Objective 8: (1974-75) The students participating in the Career Education Program, grades K-5, will improve their work habits as indicated by ratings by teachers on a Work Habits Rating Scale. It is expected that the mean raw score on the rating scale will be 10 percent higher than the mean score obtained on a similar group in the spring, 1974.

To measure the extent to which the 1973-74 objective was achieved, teachers rated the same sample of students used in Objective 1 (1973-74). Ratings were done in September and again in May. (See the Appendix for a copy of the rating scale used.)

Table 19 gives the results of the comparison of pre- and post ratings.

Table 19: A SUMMARY OF PRE AND POST RATINGS OF STUDENTS, GRADES K-5, BY TEACHERS ON THE WORK HABITS RATING SCALE

| Grade | Pretest | | Post Test | | Mean Gain | Ratio |
|--------|---------|-------|-----------|-------|-----------|-------|
| | No. | Mean | No. | Mean | | |
| K | 15 | 20.40 | 13 | 24.00 | 3.60 | 1.53 |
| 1 | 34 | 21.35 | 33 | 22.54 | 1.19 | 0.86 |
| 2 | 35 | 23.31 | 29 | 25.37 | 2.06 | 1.12 |
| 3 | 35 | 23.34 | 31 | 23.52 | 0.18 | 0.10 |
| 4 | 33 | 21.12 | 31 | 21.25 | 0.13 | 0.07 |
| 5 | 34 | 24.85 | 35 | 23.00 | -1.85 | ---- |
| TOTALS | 186 | 22.62 | 172 | 23.17 | 0.55 | 0.733 |



The "t" test was used to measure the significance of the difference in pretest means and post test means. The data in Table 19 show that there was no significant difference in the means, for any one grade or for the overall group. The objective was not achieved.

The project staff felt that the time of ratings may have been responsible for the lack of improvement in ratings. The ratings at the beginning of the year were made before teachers knew their students very well, and while students were still on their "best behavior." On the other hand, the end-of-year ratings were done after students had become restless and therefore not demonstrating their usual behavior.

To measure the extent to which this 1974-75 objective was achieved, teachers rated the same sample of students used in Objective 1 (1974-75). Ratings were done in May.

Table 20 gives the results of the comparison of the 1973-74 spring sample and the 1974-75 sample.

Table 20: A COMPARISON OF STUDENT RATINGS, GRADES K-5, BY TEACHERS ON THE WORK HABITS RATING SCALE

| Grade | Spring 1974 | | Spring 1975 | | Gain | Percent of Gain |
|--------|-------------|-------|-------------|-------|------|-----------------|
| | No. | Mean | No. | Mean | | |
| K | 13 | 24.00 | 39 | 25.58 | 1.58 | 6.58 |
| 1 | 33 | 22.54 | 48 | 26.70 | 4.16 | 18.46 |
| 2 | 29 | 25.37 | 57 | 24.96 | -.41 | -1.60 |
| 3 | 31 | 23.52 | 49 | 23.75 | .23 | .98 |
| 4 | 31 | 21.25 | 50 | 24.36 | 3.11 | 14.64 |
| 5 | 35 | 23.00 | 51 | 26.35 | 3.35 | 14.57 |
| TOTALS | 172 | 23.17 | 294 | 25.26 | 2.09 | 9.02 |

The data in Table 20 show that the total percent gain of the students in grades K-5 was 9.02 percent. Therefore, as stated, the objective was not achieved. However, the students in grades 1, 4, and 5 had gains much larger than the 10 percent criteria stated in the objective. Overall, the data collected for this objective for the two year period suggest a positive and favorable trend. However, little change has occurred at the second and third grade levels.

Objective 9: The students in the Career Education Program, grades 6-9, will demonstrate their knowledge of careers as indicated by their scores on an objective-type test. It is expected that the mean percentage score for students in grades 6-7 will be 60 or higher, and the mean percentage score for students in grades 8-9 will be 70 or higher.

A random sample of students was selected each year from grades 6-9 using the two procedures described in objective 1 respectively.

The instrument used to measure this objective was a test developed by the project staff. It consisted of twenty items in which students matched the title of occupations with primary duties involved in the occupations. (See the Appendix for copies of the tests.) The tests were administered to the sample of students near the end of each school year.

Table 21 below shows the results of the tests.

Table 21: A SUMMARY OF THE RESULTS ON A TEST OF KNOWLEDGE ABOUT OCCUPATIONS BY A SAMPLE OF STUDENTS, GRADES 6-9

| Grade | Number in Sample | | Possible Score | Mean | | Mean Percentage Score | |
|-----------|------------------|------|----------------|-------|-------|-----------------------|-------|
| | 1974 | 1975 | | 1974 | 1975 | 1974 | 1975 |
| 6 | 29 | 33 | 20 | 19.14 | 18.23 | 95.70 | 91.15 |
| 7 | 29 | 26 | 20 | 19.38 | 18.81 | 96.90 | 94.05 |
| Subtotals | 58 | 59 | 20 | 19.26 | 18.52 | 96.30 | 92.60 |
| 8 | 26 | 56 | 20 | 16.62 | 18.38 | 83.10 | 91.90 |
| 9 | 25 | 37 | 20 | 19.68 | 19.30 | 98.40 | 96.50 |
| Subtotals | 51 | 113 | 20 | 18.12 | 18.84 | 90.60 | 94.20 |

The criterion for grades six and seven was a mean percentage score of 60 or higher; for grades eight and nine, the criterion was 70 percent. The data in Table 21 indicate that all four grades achieved this objective, both years.

Objective 10: The students in the Career Education Program, grade 8, will demonstrate their knowledge of training requirements or careers taught in the Russellville Vocational Career Center as indicated by their scores on a knowledge test. It is expected that the mean score will be 70 percent or higher.

In 1973-74 a sample of 24 eighth grade students took a 10-item, objective type test on the Russellville High School Career Center and its offerings. In 1974-75 a sample of 55 students took the same test. The sample of students was selected in the same manner described under Objective 1. A copy of the test used to measure this objective can be found in the Appendix.

Table 22 below shows the summary of test results.

Table 22: A SUMMARY OF THE RESULTS OF A TEST ON THE AREA VOCATIONAL CAREER CENTER MADE BY A SAMPLE OF EIGHTH GRADE STUDENTS

| Number in Sample | Possible Score | Mean Score | Mean Percentage Score |
|------------------|----------------|------------|-----------------------|
| 1973-74 24 | 10 | 7.04 | 70.4 |
| 1974-75 55 | 10 | 8.13 | 81.3 |

The data shown in Table 22 indicate that this objective was achieved, both years, since the criterion stated in the objective was "70 percent or higher" of the possible score.

Objective 11: Students in the Career Education Program, grades 8-9, will demonstrate knowledge of their own occupational interests and aptitudes as indicated by a comparison of their self-estimates and their measured interests and aptitudes. It is expected that there will be 70 percent congruence between the students' self-estimates and their interests measured by the Kuder Preference Record and aptitudes measured by the Differential Aptitude Tests.

Objective 11: The ninth grade students in the Career Education Program will be able to:

- (1) associate their own abilities and limitations with possible success in their future careers,
- (2) relate their personal interests and values to different types of work, as measured by Parts I and III of the Career Maturity Inventory. It is expected that the mean percentile rank will be 40 or higher.

To measure the extent to which the 1973-74 objective was achieved, a comparison was made between students' estimates of their interests and aptitudes and their measured interests and aptitudes. The Kuder Preference Record was used to measure interests; the Differential Aptitude Tests were used to measure aptitudes.

A sample of eighth grade students and a sample of ninth grade students were selected in the manner described under Objective 1.

The students selected for the samples were taken from their classes for the testing sessions. Before the tests were administered, the students were given general information about interests, with definitions of the ten Kuder categories. The Kuder Preference Record was not mentioned at this time. The students were then asked to estimate their own interests, based upon the definitions given and in comparison with other people of their sex and age. For each interest category on the Kuder inventory, they were asked to indicate their own level of interest as "above average," "average," or "below average."

The Kuder Preference Record was then administered to the sample of students. The results of the inventory were considered "average" if the percentile rank was between 25 and 75. If the percentile rank was above 75, it was considered "above average;" if it was below 25, it was considered "below average."

By comparing the students' self-estimates with the results of the inventory, the extent of congruence was then determined.

A procedure similar to that described above was used to compare students' self-estimates of aptitude and results from the Differential Aptitude Tests. The same sample of eighth and ninth grade students was used in comparing interests and aptitudes, but the measurements were done at different times.

Tables 23 and 24 below present the results of the comparisons of students' self-estimates and measured interests.

Table 23: A COMPARISON OF THE SELF-ESTIMATES AND MEASURED INTERESTS (KUDER PREFERENCE RECORD) OF TWENTY-TWO EIGHTH GRADE STUDENTS IN THE RUSSELLVILLE CAREER EDUCATION PROGRAM

| Kuder Category | Number | Number and Percent Congruent | |
|----------------|--------|------------------------------|---------|
| | | Number | Percent |
| Outdoor | 22 | 9 | 40.9 |
| Mechanical | 22 | 10 | 45.5 |
| Computational | 22 | 10 | 45.5 |
| Scientific | 22 | 14 | 63.6 |
| Persuasive | 22 | 9 | 40.9 |
| Artistic | 22 | 12 | 54.5 |
| Literary | 22 | 8 | 36.4 |
| Musical | 22 | 12 | 54.5 |
| Social Service | 22 | 12 | 54.5 |
| Clerical | 22 | 7 | 31.8 |
| TOTAL | 220 | 103 | 46.8 |

The data given in Table 23 show that the eighth grade students were more accurate in assessing their scientific interests than in any other area. Overall, there were more discrepancies than congruence in their self-estimates and measured interests.

Table 24: A COMPARISON OF THE SELF-ESTIMATES AND MEASURED INTERESTS (KUDER PREFERENCE RECORD) OF TWENTY-EIGHT NINTH GRADE STUDENTS IN THE RUSSELLVILLE CAREER EDUCATION PROGRAM

| Kuder Category | Number | Number and Percent Congruent | |
|----------------|--------|------------------------------|---------|
| | | Number | Percent |
| Outdoor | 28 | 13 | 46.4 |
| Mechanical | 28 | 17 | 60.7 |
| Computational | 28 | 12 | 42.9 |
| Scientific | 28 | 15 | 53.6 |
| Persuasive | 28 | 15 | 53.6 |
| Artistic | 28 | 17 | 60.7 |
| Literary | 28 | 20 | 71.4 |
| Musical | 28 | 15 | 53.6 |
| Social Service | 28 | 13 | 46.4 |
| Clerical | 28 | 9 | 32.1 |
| TOTALS: | 280 | 146 | 52.1 |

The data in Table 24 indicate that the ninth graders were more accurate in their self-estimates than were the eighth graders. The group was more accurate in assessing the literary interests than in any other area.

Tables 25 and 26 present the comparisons of students' self-estimates and measured aptitudes.

Table 25: A COMPARISON OF THE SELF-ESTIMATES AND MEASURED APTITUDES (DIFFERENTIAL APTITUDE TESTS) OF TWENTY EIGHTH GRADE STUDENTS IN THE RUSSELLVILLE CAREER EDUCATION PROGRAM.

| DAT CATEGORY | Number | Number and Percent Congruent | |
|----------------------|--------|------------------------------|---------|
| | | Number | Percent |
| Scholastic | 20 | 11 | 55 |
| Abstract Reasoning | 20 | 8 | 40 |
| Mechanical Reasoning | 20 | 8 | 40 |
| Space Relations | 20 | 9 | 45 |
| Clerical | 20 | 7 | 35 |
| TOTALS | 100 | 43 | 43 |

The data in Table 25 show that the eighth grade students were more accurate in their self-estimates of their scholastic aptitude than in other areas. The congruence, overall, was 43 percent. That is, of 100 estimates by 20 students, 43 were congruent with test results.

Table 26: A COMPARISON OF THE SELF-ESTIMATES AND MEASURED APTITUDES (DIFFERENTIAL APTITUDE TESTS) OF TWENTY-EIGHT NINTH GRADE STUDENTS IN THE RUSSELLVILLE CAREER EDUCATION PROGRAM

| DAT Category | Number | Number and Percent Congruent | |
|----------------------|--------|------------------------------|---------|
| | | Number | Percent |
| Scholastic | 28 | 20 | 71.4 |
| Abstract Reasoning | 28 | 12 | 42.9 |
| Mechanical Reasoning | 28 | 15 | 53.6 |
| Space Relations | 28 | 18 | 64.3 |
| Clerical | 28 | 13 | 46.4 |
| TOTALS | 140 | 78 | 55.7 |

Table 26 shows that, overall, the ninth grade students were accurate in more than one-half of the 140 estimates made by 28 students, when self-estimates were compared to D.A.T. Test results.

The information summarized in Tables 23 thru 26 indicate that the objective, as stated, was not achieved. However, the objective was probably not realistic in the 70 percent criterion. Perhaps eighth and ninth grade students should not be expected to know their own interests and aptitudes to that extent.

It might be of interest to note whether students' self-estimates were higher or lower than measured interests and aptitudes, in those cases where they were not congruent. Table 27 gives the number and percent of self-estimates that were congruent, higher, and lower than measured results.

Table 27: A SUMMARY OF STUDENTS' SELF-ESTIMATES THAT WERE CONGRUENT, HIGHER, AND LOWER THAN MEASURED INTERESTS AND MEASURED APTITUDES

| Grade | Area | Congruent | | Not Congruent | | | |
|-------|----------|-----------|---------|-----------------------|---------|-----------------------|---------|
| | | No. | Percent | Self-Estimates Higher | | Self-Estimates Higher | |
| | | | | No. | Percent | No. | Percent |
| 8 | Interest | 103 | 46.8 | 83 | 37.7 | 34 | 15.5 |
| 8 | Aptitude | 43 | 43.0 | 34 | 34.0 | 23 | 23.0 |
| 9 | Interest | 146 | 52.1 | 104 | 37.2 | 30 | 10.7 |
| 9 | Aptitude | 78 | 55.7 | 29 | 20.7 | 33 | 23.6 |

The data show that in cases where self-estimates were not congruent with measured results, the students' estimates were higher than the measured results from the Kuder and D.A.T. in more cases than they were lower than measured results. However, the ninth graders' estimates on aptitude are exceptions to this. Although the group had more estimates which were accurate, of those who were not accurate, more students under-estimated their aptitudes.

To measure the extent to which objective 11 (1974-75) was achieved, a sample of eighth grade students were given the Career Maturity Inventory in April, 1975.

Table 28 below presents the results of this Inventory.

Table 28: A SUMMARY OF THE NINTH GRADE STUDENTS RESPONSES TO THE CAREER MATURITY INVENTORY

| Number of Students | Career Maturity Inventory Mean Percentile Rank | |
|--------------------|--|----------|
| | Part I | Part III |
| 312 | 59.1 | 57.0 |

The data in Table 28 indicate that Objective 11 (1974-75) was achieved, since the criterion stated in the objective was a mean percentile rank of "40 or higher."

Objective 12: The counselors and teachers involved in the Career Education Program will demonstrate their knowledge of career opportunities available to students in the Russellville area as indicated by their scores on a knowledge test. It is expected that the mean score will be 70 percent or higher.

The counselors and teachers who were enrolled in the summer workshop and in-service credit course throughout the year were given a 10-item, objective-type test to measure the extent this objective was achieved. Forty-six of the participants took the test, which was made up of five matching items and five true-false items. (See a copy of the test in the Appendix.) The test was given in the spring, 1974.

Table 29 presents the results of the test.

Table 29: RESULTS OF A KNOWLEDGE TEST ON CAREER OPPORTUNITIES GIVEN TO PARTICIPANTS IN THE IN-SERVICE TRAINING COURSE

| Number | Possible Raw Score | Mean Scores | |
|--------|--------------------|-------------|------------|
| | | Raw | Percentage |
| 46 | 10 | 7.6 | 76 |

The data given in Table 29 above indicate that this objective was achieved, since the mean score exceeded the criterion stated in the objective.

Objective 13: The counselors and teachers in the Career Education Program will demonstrate their knowledge of career training opportunities available in the Russellville area as indicated by their scores on a knowledge test. It is expected that the mean scores will be 70 percent or higher.

To measure the extent to which this objective was achieved, the staff developed a short, objective-type knowledge test which was administered to the participants in the in-service course in the spring, 1974. (See copy of the test in the Appendix.)

Table 30 gives the results of the test given to measure this objective.

Table 30: RESULTS OF A KNOWLEDGE TEST ON TRAINING OPPORTUNITIES GIVEN TO PARTICIPANTS IN THE IN-SERVICE COURSE

| Number | Possible Raw Score | Mean Scores | |
|--------|--------------------|-------------|------------|
| | | Raw | Percentage |
| 48 | 10 | 8.3 | 83 |

The data show that this objective was achieved; the average score exceeded the criterion by 13 percentage points.

Objective 14: (1974-75) The counselors, librarians, teachers, and administrators involved in the Career Education Workshop will demonstrate knowledge of the skill requirements, training, benefits, and the attitudes and values related to 200 jobs in the Russellville area. Evidence of the achievement of this objective will be a Manual of Job Profiles which will include specific skills required and life style values related to each job.

Thirty-one counselors, librarians, teachers, and administrators participated in the summer 1974 Career Education workshop. The workshop participants received college credit from the University of Arkansas. Much of the time was devoted to a survey of the businesses and industries in the Russellville area to acquire information to be included in the Manual of Job Profiles, a 275-page booklet of job profiles.

This objective was achieved.

Objective 15: The counselors and teachers in the Career Education Program, including the area schools, will respond positively to the materials and assistance provided by the career coordinators as indicated by their responses on a feedback questionnaire. It is expected that 70 percent of the responses will be positive.

The instrument used to measure this objective was a feedback questionnaire in the form of a rating scale. The participants in the in-service course rated the various services provided by members of the career education project staff. Ratings were on a five-point scale from "very helpful" to "not helpful." (See a copy of the Feedback Questionnaire in the Appendix.)

Table 31 presents a summary of the responses to the questionnaire.

Table 31: A SUMMARY OF TEACHERS' RESPONSES TO A FEEDBACK QUESTIONNAIRE FOR RATING THE HELPFULNESS OF SERVICES PROVIDED BY THE CAREER EDUCATION PROGRAM

| POSITIVE RATINGS | | NEUTRAL | | NEGATIVE RATINGS | | | | | |
|------------------|---------|---------|---------|------------------|---------|----|-----|----|-----|
| 5 | 4 | 3 | 2 | 1 | | | | | |
| No. | Percent | No. | Percent | No. | Percent | | | | |
| 181 | 43.9 | 110 | 26.7 | 71 | 17.2 | 13 | 3.2 | 97 | 9.0 |

The data shown in Table 31 indicate that 70.6 percent of the responses were in the positive categories of "5" and "4". The objective, therefore, was achieved. However, the overall response was more positive than indicated by this figure. The last item on the rating scale, which asked for an overall rating of the services provided, received 89 percent positive rating.

Objective 16: The placement specialist will demonstrate ability to relate to employers and identify job openings as indicated by the number of job openings identified. It is expected that 50 job openings will be identified during the first year of the program.

The second quarterly report, dated November 30, 1973, contained copies of letters sent to businessmen and personnel managers in industry. Also included were copies of the following forms used in the placement service:

1. Prospective Employers Card
2. Placement Application
3. Interview Referral
4. Record of Students Employed
5. Student Information Card

Through contacts by mail, by telephone, and personal visits, the placement specialist identified 52 jobs during the 1973-74 school year. Thus, this objective was achieved for 1973-74. However, this objective was not achieved during the 1974-75 school year as the placement specialist was only able to identify seven jobs.

Objective 17: The placement specialist will demonstrate ability to disseminate information about job openings to exiting students as indicated by the number of students requesting job information. It is expected that at least 100 students will fill out a "placement application" card during the first year.

The placement specialist informed students of services offered by the project through personal contact with students, through working with counselors, through announcements and articles in the local newspaper and school paper, and through radio and television. The placement records show that during the 1973-74 school year 108 students filled out applications for either full-time or part-time jobs. Thus, this objective was achieved for 1973-74. Only 11 students filled out applications during the 1974-75 school year, therefore not achieving this objective in the second year.

Objective 18: (1973-75) The placement specialist will demonstrate the ability to match students with jobs by placing at least 25 percent of the students who seek jobs by filling out a "placement application" card.

Of the 108 applications mentioned in objective 17 for 1973-74, preceding, the placement specialist was able to place 30 of the students in jobs during the school year. The objective was achieved; 28 percent were placed.

Of the 11 applications mentioned in Objective 17 for 1974-75, the placement specialist was able to place 5 of the students in jobs during the school year. The objective was also achieved the second year; 45 percent were placed.

Objective 19: (1973-75) The employers and the students placed in jobs will respond positively to the placement service as indicated by results of a feedback questionnaire. It is expected that 70 percent of the responses will be positive.

In order to measure the extent to which this objective was achieved, the placement specialist conducted a survey during the summer of 1974.

Table 32 presents a summary of responses to the survey.

Table 32: A SUMMARY OF THE PLACEMENT SURVEY

| | Number of Surveys Sent | Number of Surveys Returned | Possible Responses | Total Positive Responses Possible | Percent of Positive Responses |
|-----------|------------------------|----------------------------|--------------------|-----------------------------------|-------------------------------|
| Employers | 18 | 7 | 4 | 28 | 100.00 |
| Students | 22 | 6 | 4 | 24 | 100.00 |

The data given in Table 32 above indicate that for those employers and students who responded, this objective was achieved, since the 100 percent positive response exceeded the stated "70 percent" criterion in the objective. No information was given on those employers and students who failed to respond.

B. "Spin-Off"

In the planning stages of this project, the Project Director was given a role of leadership in developing an approach to career education which would best serve the needs of students in this area. The Project Director felt very strongly that the use of a highly structured system using prepared teaching units and commercial materials would not be innovative, and might or might not succeed. Since this was a research and development project, it was decided to use a conceptual approach, with teachers, counselors, and administrators involved in the planning and development of the program, from the beginning.

As the need arose, therefore, through the conceptual approach, career education activities expanded. A number of activities were initiated which were not originally planned, and were not included in the objectives or evaluation plan. Some of these activities have added substantially to the effectiveness of the project. Below is a brief description of some of the more important activities which may be considered "spin-off" effects.

1. Career Exploration Laboratory

The project director, at the request of the English teachers at Russellville High School, introduced methods of career exploration. To provide a place for this, a career exploration lab was set up in one of the conference rooms in the library. Individual exploration carrels were equipped with 7-inch screen filmstrip--cassette projectors with listening phones. Magazine and pamphlet racks and bookshelves housed the latest career education materials. Listening tapes made by local career people were a part of the lab. All equipment was purchased by the local school district.

Project staff members selected from volunteers one student for each class period and trained him in the use of the equipment. These lab assistants not only taught other students but kept a list of career materials requested but not in the lab, and the number of students using the lab each period. These lists were brought to the project office weekly so that materials could be obtained and evaluation of lab use determined.

Throughout the remainder of the 1973-74 school year, February through May, a total of 804 students visited the lab. This provides evidence that young people, given the opportunity and proper motivation, will explore themselves and career areas on their own.

2. Shadowing

Shadowing at the senior high school level was introduced to the students in October, 1973. Administrators and teachers endorsed this type of career exploration, and requests by students began immediately. Each student who requested the opportunity to spend a day with a person in a particular career was interviewed by the placement specialist, and a Permission to Shadow form was filled out. After the resource person confirmed the date for shadowing, the student was informed and was given the permission form for each teacher to sign. This form was then returned to the placement specialist who checked to see that it was complete. If so, he then gave it to the high school principal.

During the balance of the 1973-74 school year, a total of 113 students were provided the opportunity for shadowing experiences. By coincidence, the same number (113) of students enjoyed shadowing experiences during 1974-75.

3. In-Service Education for Other Schools

The area schools sending students to the vocational-technical school were actively involved in the project. Although the proposal called for technical assistance only for these schools, the project staff gave in-service sessions and provided career exploration experiences, including shadowing, throughout the year. There are six rural schools in the area, which covers an area within a 35-mile radius of Russellville.

In addition, the project staff was involved in a number of conferences and in-service training activities in other parts of the state, and beyond. For example, a booth on career education was prepared for the August Meeting of the Parent-Teacher Conference in Little Rock in April. An exhibit was invited for Expo '74, a two-day curriculum fair sponsored by the Arkansas State Department of Education, which was held in Little Rock with exhibitors from an eight-state area.

As a result of this exhibit, the project staff was invited to conduct an in-service program at Kansas State University at Pittsburg, Kansas.

V. SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

A. Summary of Findings

The results of the evaluation are summarized in Table 33 below. Information is presented for each objective, by year, and includes the measuring instrument, expected performance level, target population, results, and whether the objective was achieved.

Table 33: SUMMARY OF THE EVALUATION RESULTS FOR THE PROGRAM OBJECTIVES

| Objective | Measuring Instrument | Expected Performance | Target Population | Results | Objective Achieved | |
|---------------------|-----------------------------|---|--|-------------|--------------------|----|
| | | | | | Yes | No |
| 1a (1973-74) | Picture Identification Test | 15 percent gain | K-3 | 37.4% gain | X | |
| 1a (1974-75) | Picture Identification Test | Equal to previous year's post test mean: 18.29 | K-3 | Mean: 18.03 | | X |
| 1b (1973-74) | List of occupations | Gain of 10 (raw score) | Grades 4-5 | 10.65 gain | X | |
| 2 (1973-74) | Course Selection Form | Appropriate selection by 80 percent of students | Grade 8 | (No data) | | X |
| 2 (1974-75) | Course Selection Form | Appropriate selection by 75% of students | Grade 9 | 81.9% | X | |
| 3 (1973-74 only) | Credit Course Grades | Development of acceptable "plan of action" | Administrators, counselors, and teachers | 100% | X | |

(Continued)

Table 33 Continued

| Objective | Measuring Instrument | Expected Performance | Target Population | Results | Objective Achieved | |
|----------------|--------------------------------|--|---------------------------|--|--------------------|----|
| | | | | | Yes | No |
| 4 (1973-75) | Follow-up study | 70% placed in jobs or further training | Exiting students | 73.6 | X | |
| 5 (1973-74) | Project Records | Involvement of 12 community groups | Community groups | 102 groups | X | |
| 5 (1974-75) | Project Records | Involvement of 300 community representatives | Community representatives | 788 people | X | |
| 6 (1973-75) | Feedback Questionnaire | 70 percent of responses positive | School personnel | 1973-74: 95% 1974-75: 97% | X | |
| 7 (1973-74) | Criterion-referenced test | 10% increase | Grades 4-5 | 112% increase | X | |
| 7 (1974-75) | Career Education Questionnaire | 50% of possible score | Grades 4-5 | 54% | X | |
| 8 (1973-74) | Work Habits Rating Scale | Significant increase | K-5 | t ratio 0.73 | | X |
| 8 (1974-75) | Work Habits Rating Scale | Mean 10% greater than Spring, 1974 mean | K-5 | 9.02 greater | | X |
| 9 (1973-75) | Objective Type Test | Grades 6-7: 60% Grades 8-9: 70% | Grades 6-9 | 1973-74: Grades 6-7: 96% Grades 8-9: 90% 1974-75: Grades 6-7: 93% Grades 8-9: 94% | X X X X | |

(Continued)

Table 33 Continued

| Objective | Measuring Instrument | Expected Performance | Target Population | Results | Objective Achieved | |
|-----------------|---|---|--------------------------|---|--------------------|------------------|
| | | | | | Yes | No |
| 10 (1973-75) | Objective Type Test | 70 percent | Grade 8 | 1973-74 70.4% 1974-75 81.3% | X X | |
| 11 (1973-74) | Kuder and DAT | 70% congruence in self-estimates and measured interests and aptitudes | Grades 8-9 | Grade 8: Interest: 47% Aptitude: 43% Grade 9 Interest: 52% Aptitude: 56% | | X X X X |
| 11 (1974-75) | Career Maturity Inventory, Parts 1 and 3 | Mean of 40th percentile | Grade 9 | CMI Part 1: 59% Part 3: 57% | X X | |
| 12 (1973-74) | Knowledge Test | 70 percent | Counselors & teachers | 76% | X | |
| 13 (1973-74) | Knowledge Test | 70 percent | Counselors & teachers | 83% | X | |
| 14 (1974-75) | Production of a <u>Manual of Job Profiles</u> | | By workshop participants | Manual was completed | X | |
| 15 (1973-74) | Feedback Questionnaire | 70% positive responses | Counselors & teachers | 70.6% | X | |
| 16 (1973-75) | Project Records | 50 job openings identified | (Not applicable) | 1973-74: 52 job openings 1974-75 7 job openings | X | X |

(Continued)

Table 33 Continued

| Objective | Measuring Instrument | Expected Performance | Target Population | Results | Objective Achieved | |
|-----------------|----------------------|---|--------------------------------------|---|--------------------|----|
| | | | | | Yes | NG |
| 17 (1973-75) | Project Records | Job applications by 100 students | High school students | 1973-74 108 students 1974-75 11 students | X | X |
| 18 (1973-75) | Project Records | Placement of 25% of students making applications for jobs | High school students | 1973-74 28% placed 1974-75 45% placed | X | X |
| 19 (1973-75) | Project Records | 70% positive response | Working students and their employers | Of the questionnaires returned, 100% of responses were positive | X | |

B. The following are summary statements, in narrative form, of the evaluation findings:

1. In 1973-74, a random sample of students in grades K-3 identified approximately 37 percent more occupations on a picture identification test at the end of the school year than they were able to identify on the pretest. The mean score of sample of students in grades K-3 in the spring of 1975 was approximately the same as the mean score of the 1973-74 sample in the spring of 1974.
2. In 1973-74, a sample of students in grades four and five listed an average of ten more occupations at the end of the year than they were able to list at the beginning of the year. The same sample of students, grades four and five, demonstrated more knowledge, at the end of the year than at the beginning, of how occupations contribute to society. They were able to explain twice as many occupations, on the average, on the post test than on the pretest.



In 1974-75, a sample of students in grades four and five demonstrated similar knowledge by obtaining a mean of 54 percent correct responses on the Career Education Questionnaire.

3. There was no significant difference in the mean pretest and mean post test ratings of a sample of students (1973-74), grades K-5, by teachers on a work habits rating scale. The mean score for a sample of students in grades K-5 in 1974-75 was 9 percent greater than the mean of the sample in the spring of the previous year.
4. A sample of students in the program, grades 6-9, in both 1973-74 and 1974-75, had a mean score above 90 percent on a twenty-item knowledge test concerning occupations and their duties.
5. The mean score of a sample of 1973-74 eighth grade students on a knowledge test on the training offered by the Russellville High School Career Center was 70 percent. The eighth graders in 1974-75 had a mean score of 81 percent.
6. When measured interests, with the Kuder Preference Record, were compared to self-estimates of their level of interests, it was found that a sample of students, grades 8-9, correctly estimated their level of interests in approximately half of the cases. The eighth graders, as a group, had 46.8 percent accuracy, while the ninth grade students had 52.1 percent accuracy.
7. When the aptitudes measured by the Differential Aptitude Tests were compared to self-estimates of their aptitudes, it was found that 43 percent of the estimates of a sample of eighth grade students were accurate. For a sample of ninth grade students, 55 percent of the self-estimates were correct.
8. In 1974-75, a sample of ninth grade students had a mean percentile of 59 on Part 1 of the Career Maturity Inventory ("Knowing Yourself"), and a mean percentile of 57 on Part 3 ("Choosing a Job").
9. Eighty-two percent of the ninth grade students in Russellville Junior High School in 1974-75 made course selections for high school that are appropriate for their career plans.

10. In a follow-up study of 1973-74 exiting students, it was found that 73.6 percent were in full-time jobs or further training (including college).
11. Forty-seven teachers who were involved in the 1973-74 program responded positively to the program, as indicated by their responses on an attitude questionnaire completed in the spring, 1974. Ninety-five percent of the total number of responses on a ten-item questionnaire were positive. On the same questionnaire, 35 teachers involved in the 1974-75 program had 97 percent positive responses.
12. Thirty-nine of the workshop participants attended monthly sessions throughout the 1973-74 school year for graduate or undergraduate college credit. Each of these participants developed an acceptable "Plan of Action" for teaching career education concepts in the classroom.
13. Thirty-one participants in the summer (1974) workshop surveyed the community and developed a 275-page Manual of Job Profiles.
14. Participants in the 1973-74 in-service course had a mean percentage score of 76 on a knowledge test on career opportunities in the Russellville area. On a knowledge test on training opportunities in the Russellville area, the same group had a mean percentage score of 83.
15. Seventy percent of the total number of responses of participants in the 1973-74 in-service course, on a rating of services provided by the Career Education Program, were in the positive categories.
16. A total of 443 individuals from the community participated in the career education program during 1973-74 by visiting classrooms as resource speakers, sponsoring field trips, providing opportunities for shadowing experiences for students, and donating materials for the program. During the 1974-75 school year, a total of 788 people from the community participated.
17. The placement specialist identified 52 jobs during the 1973-74 school year. Only seven job openings were identified in 1974-75.
18. During the 1973-74 school year, 108 students filled out applications for full-time or part-time jobs. Only 11 students filled out applications during 1974-75.

19. Thirty students (28 percent of those filling out applications) were placed in jobs during the 1973-74 school year. During the 1974-75 school year, only five of the eleven making application (45 percent) were placed in jobs.
20. In a survey of students placed in jobs and their employers, made in the summer of 1974, the responses of those returning the questionnaires were all positive. However, only seven of the 18 employers and only six of the 22 students returned their questionnaires.

C. Conclusions

1. The program has been well received; there has been an overwhelmingly positive response to the program from students, teachers, and the entire community.
2. The program was successful in increasing the career awareness of elementary school students, as evidenced by the achievement of objectives in this area.
3. The school personnel involved in the Career Education Program liked the training they received and were successful in planning ways to teach career education concepts in the classroom. They also demonstrated knowledge of career opportunities and career training opportunities.
4. The project staff has been unusually successful in involving the community in the Career Education Program.
5. From the results of teachers' ratings of elementary students' work-study habits, it appears that the project has not been successful in improving students' attitudes toward work. However, it may be that the measuring instrument, and when the ratings were done, may be responsible for the poor results on this objective.
6. Middle school students achieved the project objectives concerning knowledge of occupations and knowledge of training opportunities available in the Russellville High School Area Career Center, as measured by staff-developed tests.

7. When students' measured interests and aptitudes were compared to their own estimates of their levels of interests and aptitudes, it appeared that eighth and ninth grade students in 1973-74 were limited in their knowledge of their own interests and aptitudes. However, ninth grade students were somewhat more accurate in their self-estimates than the eighth grade students.
8. From the findings, it appears that job placement activities were more successful during the 1973-74 school year than during the 1974-75 school year. This was probably due to lack of coordination between the career education activities and the activities of the guidance department.

D. Recommendations

1. The program should be continued, as almost all of the objectives were achieved. Additional time is needed to institutionalize the practices. It is recommended that the career education program be incorporated into the guidance and vocational programs.
2. It is recommended that the "spin-off" practices be continued to increase the effectiveness of the program and to assist other schools in initiating career education programs.
3. It is suggested that the project staff analyze and improve the activities designed to develop desirable attitudes toward work, and review the measuring instruments to be used in assessing students' attitudes.
4. It is recommended that group guidance activities be used in conjunction with individual counseling at the junior high school level to increase students' self-knowledge of interests and aptitudes.
5. The excellent community involvement program is to be commended, and should be continued.

APPENDIX A

Measuring Instruments

STANDARDIZED MEASURING INSTRUMENTS

1. Kuder Preference Inventory
(Career Orientation Objective Number 3)
2. Differential Aptitude Tests
(Career Orientation Objective Number 3)
3. Career Maturity Inventory, 1973,
McGraw-Hill, Inc., Monterey, California,
93940
4. Career Education Questionnaire
(CEQ), University of Minnesota

Picture Identification Test for Grades K-3

MATERIALS NEEDED: Answer forms, set of 25 specific picture from the Peabody Language Development Kit, Level #1, 1965 American Guidance Service, Inc. Publisher's Building Circle Pines, Minnesota 55014

ADMINISTRATION OF THE TEST:

Say: "I am going to show you some pictures of workers. I want you to tell me the name of each worker. For example, what is this worker's name?" (Show the sample card of the cowboy.)

"Yes this is a cowboy."

Follow the same procedure with each of the remaining 24 pictures, writing down any unusual or questionable answers.

Remember: To be scored positively, the response must be identified as a job, not as an occupational activity.

Examples:

"Barber" + "He's cutting hair" or "Haircutter" -

"Druggist" + "Medicine man" -

The following exceptions may be allowed:

Saleslady or salesclerk
Trashman or garbage man
Streetsweeper or streetcleaner

All other responses must be the ones printed on the answer sheet.

Total score is the total correct responses.

PICTURE IDENTIFICATION TEST
Grades K-3

Name _____ Date _____

School _____ Total

Grade _____ Score _____

OCCUPATION SCORE COMMENT

Barber _____

Salesclerk _____

Dentist _____

Fireman _____

Doctor _____

Garbageman _____

Lifeguard _____

Druggist _____

Pharmacist _____

Mailman _____

Postman _____

Nurse _____

Policeman _____

Soldier _____

Milkman _____

Street Cleaner _____

Baker _____

Chef Cook _____

Mother _____

Teacher _____

Truck Driver _____

Carpenter _____

Clown _____

Painter _____

Boxer _____

Gardener _____

Service Station

Attendant _____

Listing Occupations

Directions: I want to see how many different occupations you know. On a sheet of paper write all the different jobs you can think of. Be sure to name jobs, not places of employment. For example, write "cashier"--not "works in a grocery store."

Time Limit: This is a power test, not a speed test. Give the students all the time they need, up to one class period.

Scoring: For each different job, give the student one point. Scoring of pretests should be the same way as scoring of post tests.

How The Occupation Contributes To Society

Directions: This instrument is to be used at the same time as, and in conjunction with, the instrument listed above. When all students have completed their listing of occupations, say the following, "I would like for each of you to write a brief description of what each occupation you have listed does that helps other people. Write your description beside each occupation you have already listed. If you do not know how to answer one, feel free to leave it blank."

The time limit and scoring procedures are the same as above.

KNOWLEDGE TEST ON CAREERS
(Grades 6 and 7)

I. Match the following:

- _____ 1. Is responsible for a collection of books.
- _____ 2. Instructs students in one or more subject(s).
- _____ 3. Is qualified to fly an airplane.
- _____ 4. Designs buildings and supervises their construction.
- _____ 5. Provides help in placing phone calls.
- *****

- a. attorney
b. telephone operator
c. biologist
d. pilot
e. librarian
f. teacher
g. architect

- _____ 1. Keeps teeth repaired.
- _____ 2. Is responsible for food preparation and menu planning.
- _____ 3. Cashes checks and takes money.
- _____ 4. Examines blood to determine whether or not there are diseased cells.
- _____ 5. Supervises the planting of crops that will provide food for birds and wild animals.
- *****

- a. bank teller
b. dentist
c. salesman
d. cook
e. wildlife manager
f. medical technologist
g. policeman

- _____ 1. Collects ballads, poems and stories that have never been written down.
- _____ 2. Supervises the planting and cutting of trees.
- _____ 3. Cuts and styles hair.
- _____ 4. Hauls goods from one place to another.
- _____ 5. Is responsible for keeping a building clean and comfortable.
- *****

- a. truck driver
b. fireman
c. beauty operator
d. folklorist
e. minister
f. forester
g. custodian

- _____ 1. Takes care of a home and a family.
- _____ 2. Arranges and sells flowers and plants.
- _____ 3. Prepares medicines according to a doctor's instruction.
- _____ 4. Owns or works on a farm.
- _____ 5. Has studied nutrition and plans meals for hospital patients.

- a. dietitian
b. housewife
c. coach
d. farmer
e. florist
f. carpenter
g. pharmacist

KNOWLEDGE TEST ON CAREERS 8th AND 9th GRADES

I. Match the following:

- | | |
|---|-------------------------|
| ___ 1. fills drug prescriptions | a. veterinarian |
| ___ 2. a doctor who works with animals | b. dietician |
| ___ 3. enforces the law and arrests violators | c. computer programmer |
| ___ 4. translates problems into computer language | d. medical technologist |
| ___ 5. performs laboratory tests in hospital or doctor's office | e. policeman |
| | f. pharmacist |
| | g. engineer |
-

II. Match the following:

- | | |
|--|----------------|
| ___ 1. designs buildings and supervises their construction | a. electrician |
| ___ 2. instructs students in one or more subjects | b. secretary |
| ___ 3. installs and maintains all electrical equipment in a building | c. welder |
| ___ 4. operates all machines found in a typical machine shop | d. architect |
| ___ 5. manages an office | e. carpenter |
| | f. teacher |
| | g. machinist |
-

III. Match the following:

- | | |
|---|---------------------|
| ___ 1. hauls goods from one place to another | a. psychologist |
| ___ 2. practices law | b. attorney |
| ___ 3. cuts and styles hair | c. truck driver |
| ___ 4. plants and harvests agricultural crops | d. wildlife manager |
| ___ 5. supervises the planting and cutting of trees in the nation's forests | e. beauty operator |
| | f. forester |
| | g. farmer |
-

IV. Match the following

- | | |
|--|-----------------------|
| ___ 1. prepares food in a restaurant | a. marine biologist |
| ___ 2. rings up sales and makes change | b. physical therapist |
| ___ 3. studies different types of water life | c. custodian |
| ___ 4. cleans rooms and halls of buildings | d. cook |
| ___ 5. works as a religious leader | e. salesclerk |
| | f. minister |
| | g. florist |
-

MODEL CAREER EDUCATION PROJECT

TEACHER QUESTIONNAIRE

DATE _____

Instructions: Please do not write your name on this paper. There are no right or wrong answers. Circle "yes" or "no" after each statement, according to your own feelings.

- | | | |
|---|-----|----|
| 1. I am familiar with the Career Education Project. | yes | no |
| 2. I would like the career education program to become a regular part of the school. | yes | no |
| 3. I believe the career education project will enable students to make more realistic career decisions. | yes | no |
| 4. Career education activities seem to enhance student performance in the classroom. | yes | no |
| 5. Participation in career education activities seems to make school more enjoyable to most students. | yes | no |
| 6. Most students seem to be interested in career education activities. | yes | no |
| 7. As a result of career education activities students seem to have an increased interest in planning their future. | yes | no |
| 8. As a result of career education activities students seem to have a more realistic image of themselves. | yes | no |
| 9. As a result of career education activities students seem to be more aware of training requirements of various career fields. | yes | no |
| 10. I think our schools need more programs like career education. | yes | no |

WORK HABITS RATING SCALE

Student _____ Date _____

Teacher _____ School _____

INSTRUCTIONS: Consider each item and rate the student according to his or her usual behavior.

| Item | 3 | 2 | 1 | 0 |
|---|--------|--------------|-----------|-------|
| | Always | Most of Time | Sometimes | Never |
| 1. Starts on time without prompting..... | | | | |
| 2. Uses time wisely..... | | | | |
| 3. Completes assignments..... | | | | |
| 4. Sees next step..... | | | | |
| 5. Gets along with peers..... | | | | |
| 6. Enjoys work..... | | | | |
| 7. Presents a neat appearance..... | | | | |
| 8. Follows directions..... | | | | |
| 9. Work is satisfactory..... | | | | |
| 10. Is safety-conscious..... | | | | |
| 11. Takes care of equipment..... | | | | |
| 12. Works without direct supervision..... | | | | |

Administration: Teachers of all students (K-5) chosen in the sample are requested to fill out these forms.

Scoring: All marks in column 1 are worth 3 points each, column 2 are worth 2 points each, column 3 are worth 1 point each, column 4 are worth 0 points each. Points in each column are tabulated separately, and a total score is achieved by adding up the columns. Highest possible score is 36.

KNOWLEDGE TEST ON AREA VOCATIONAL CAREER CENTER

I. Match the following. Some answers may be used more than once, and some answers will not be used at all.

- | | |
|--|----------------------|
| _____ 1. This course deals with the proper use of lathes, drills and presses. | a. printing |
| _____ 2. This course uses all types of industrial welding equipment. | b. metal fabrication |
| _____ 3. A basic knowledge of electricity would be helpful in this course. | c. horticulture |
| _____ 4. Engine tune-up, overhaul, and transmission and brake repair and service are units taught in this course. | d. electronics |
| _____ 5. This course of study offers the following areas of instruction: greenhouse management, production and arrangement of flowering plants, woody plants and their culture, turf management, and landscaping principals. | e. auto mechanics |
| _____ 6. This course gives the student the knowledge to draw all types of plans (blueprints etc.) | f. drafting |
| _____ 7. Since this course deals with the proper use of fertilizers, insecticides, and other chemicals, a background in biology and chemistry would be helpful. | g. carpentry |
| | h. machine shop |
| | i. plumbing |

Answer T for True or F for False

- _____ 8. All courses taught in the career center are two years in length.
- _____ 9. Students will spend 3 hours each day in the career center and 3 hours each day in regular classrooms.
- _____ 10. Success in any of the career center areas depends more on the interest and desire of the student than on his grade point average.

KNOWLEDGE TEST ON CAREER OPPORTUNITIES

I. Match the following:

- | | |
|--|-------------------------------|
| ___ 1. This company hires the most employees during the summer months. | a. clerical |
| ___ 2. This industry has the brightest outlook for summer employment. | b. public service |
| ___ 3. This industry has the poorest outlook for summer employment. | c. professional and technical |
| ___ 4. According to national trends, this job category will have the fastest growth rate in the 70's. | d. Firestone |
| ___ 5. According to national trends, this job category will have the second fastest growth rate in the 70's. | e. Atkins Pickle Company |
| | f. tourism |
| | g. construction |

II. Answer T for true or F for false:

- ___ 6. According to national trends, jobs for clerical workers will be increasing in the 70's.
- ___ 7. According to national trends, jobs for salesworkers will be increasing in the 70's.
- ___ 8. According to national trends, jobs for craftspeople will be decreasing in the 70's.
- ___ 9. According to national trends, jobs for skilled trades people will be decreasing in the 70's.
- ___ 10. According to national trends, jobs for managers and administrators will be increasing in the 70's.

FEEDBACK QUESTIONNAIRE

School _____

Directions: During the past year, a number of services were offered to help you develop career education activities. These activities may have been provided by a counselor, career coordinator, community worker, or the project director. Please read each statement and circle the number which represents how much help this service was for you.

| Service Performed | Rate From | | | | |
|--|--------------|---|----|---|-------------|
| | very helpful | | to | | not helpful |
| 1. Arranging for study trips..... | 5 | 4 | 3 | 2 | 1 |
| 2. Arranging for resource speakers to come to my classroom..... | 5 | 4 | 3 | 2 | 1 |
| 3. Orienting me to the concepts of career education..... | 5 | 4 | 3 | 2 | 1 |
| 4. Providing me with career materials..... | 5 | 4 | 3 | 2 | 1 |
| 5. Providing me with up-to-date career information..... | 5 | 4 | 3 | 2 | 1 |
| 6. Providing me with adequate in-service activities..... | 5 | 4 | 3 | 2 | 1 |
| 7. Providing transportation for study trips when necessary..... | 5 | 4 | 3 | 2 | 1 |
| 8. Counseling with individual students on careers..... | 5 | 4 | 3 | 2 | 1 |
| 9. Providing me with assistance in planning career education activities..... | 5 | 4 | 3 | 2 | 1 |
| 10. Overall, I consider the services provided me to be..... | 5 | 4 | 3 | 2 | 1 |

11. Please list activities performed that were of little help to you.

12. Please list activities that you needed to develop a career education program in your class but were not provided.
