ED 130 147	CE 009 00 9
AUTHOR TITLE INSTITUTION SPONS AGENCY REPORT NO PUB DATE NOTE	Belcher, Mary H.; And Others Evaluation of Project RACE. Weatherford Independent School District, Weatherford, Texas. Final Report. Educational Services, Inc., Waco, Tex. Weatherford Independent School District, Tex. VT-103-341 Jun 76 39p.
EDRS PRICE DESCRIPTORS IDENTIFIERS	MF-\$0.83 HC-\$2.06 Plus Postage. *Career Education; Educational Assessment; Elementary Secondary Education; Program Descriptions; *Program Evaluation; Teacher Attitudes; Test Results *Project RACE

ABSTRACT

The third party evaluation of the K-12 career education project RACE (Researched Activities for Career Education) focused on test results of students in four selected grades. A career education questionnaire was administered as a pre-test and again as a post-test to students in the third and sixth grades. Ninth and twelfth grade students were given the Career Interest and Information Survey, developed by Texas State Technical Institute, as well as the Career Maturity Inventory. Although test results were not as favorable as might be desired, the evaluators felt that the project had a significant impact on grades K-12. Results of teacher interviews showed that the teachers hold positive attitudes toward career education and accept its importance in the curriculum. The evaluators recommend that staff be maintained to continue the career education effort. (RG)



EVALUATION

OF

PROJECT RACE

WEATHERFORD INDEPENDENT SCHOOL DISTRICT

WEATHERFORD, TEXAS

Mary H. Belcher

Ingrid Olson

Carroll Neighbours

Elizabeth Simpson

Kaye Solomon

Educational Services, Inc.

Waco, Texas

June, 1976

Prepared for:

Weatherford Independent School District

Weatherford, Texas

VT 103 341

2

U.S. OEPARTMENT OF HEALTH, EQUCATION & WELFARE BOUCATION & WELFARE EDUCATION & WELFARE DOUCHING INSTITUTE OF INDED EXACTOR OF AN ANTIONAL DIVED EXACTOR ORGANIZATION OR OPINIONS ATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPREJ STATED DO NOT NECESSARILY REPREJ SENTOPEICIAL NATIONAL INSTITUTE OF SENTOPEICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

CONTENTS

	Chapter	Page
I.	Introduction	1-2
II.	Third Grade Students	3-8
III.	Sixth Grade Students	9-18
IV.	Ninth Grade Students	19-24
۷.	Twelfth Grade Students	25-31
VI.	Project Administration	32-33
v.	Conclusion and Recommendations	34-36

3

_.

1991 A.



CHAPTER I

Introduction

The Weatherford Independent School District (WISD) participated in the third year of the project, Researched Activities for Career Education (RACE) during the 1975-76 school year. During the first two years of the project, career education curriculum units were developed for grades kindergarten through seven. One of the major objectives for the final year of the project was the complete utilization of these new units into K-7 classrooms throughout the district. Plans called for continuation of ongoing career education at the eighth grade level based on units developed prior to funding for Project RACE. Senior high students (Grades 9-12) were served through a job placement and followup service, intensive counseling, participation in an employability mini-course, and exposure to and access to a well-rounded library of career resource materials.

ESI evaluators worked with project staff members in structuring the evaluation design and selecting student outcomes appropriate to the curriculum offering the program plans of Project RACE. Great difficulty was experienced in selecting appropriate test documents. Test documents remain the weakest link in the career education cycle.

In addition to complying with the national evaluation design, ESI evaluators elected, after conferences with appropriate officials of Project RACE and the school district, to conduct a series of interviews with elementary, middle and high school teachers, since one of the major process

-1-

4

Full Fact Provided by ERIC

object is for the second year of the project was implementation of the career education philosophy into the regular teaching strategies. In March, 1976, ESI personnel selected, at random, teachers in each of the four elementary schools, as well as teachers in Grades 6 and 7 at the middle school and English and math teachers in Grades 9 through 12. Evaluators met with teachers in private, assured each teacher that all identities would remain anonymous, and solicited their comments and reactions to career education as well as strategies of the Project RACE staff.

The formal evaluation design, structured in accordance with the national draft guidelines for evaluation of career education projects, is. presented on the following pages.



CHAPTER II

Third Grade Students

In order to conform with the suggested evaluation design, students in third grade were selected for special study in this evaluation. Third grade classes in Weatherford Independent School District operate in self-contained classrooms.

All third grade students were administered the Career Education Questionairre on a pre-test basis in September, 1975. In accordance with the evaluation design, post tests were administered to all students in April, 1976.

Before discussing the comparison of test results, it is significant to study the treatments received by third grade students during the 1975-76 school year. Also significant is the fact that these students entered the first grade during the first year of Project RACE and should have been exposed to career education concepts for three years.

All third grade teachers (ten teachers representing four elementary schools) participated in a special two hour in-service training meeting devoted to career education on August 19, 1975, prior to the opening of the school term. The meetings were conducted jointly by the elementary counselor and the awareness coordinator.

During this meeting, teachers were given an overall view of Project RACE and new teachers received special materials. They were given a review of various staff functions and shown new and/or revised materials. Time was allotted for discussions.



-3-

In addition to the group meeting, 123 one-to-one teacher - staff conferences were held by the awareness coordinator during the school year. Also, a special "Career Corners" workshop was conducted by staff members of the Education Service Center, Region XI. One third grade teacher attended this.

Third grade students participated in nine study tours. These study tours were taken by students at two elementary schools. The other two schools did not participate in study tours at the third grade level.

Twenty-two resource speakers addressed third grade students with each classroom utilizing at least one resource speaker. One energetic teacher used seven resource speakers.

Special resource materials requests were made of the elementary counselor a total of 64 times during the year while the awareness coordinator received 169 such requests. Obviously, the classroom teachers felt the special materials worthwhile and helpful. Also, the third grade teachers requested 89 special items, such as 16mm films, from the Education Service center.

The elementary counselor visited the ten third grade classroom a total of 19 times during the school year and conducted 47 group guidance sessions. She also conducted seven small group counseling sessions and counseled 71 students on an individual basis.

ESI sent trained interviewers to each of the four elementary schools in March to discuss with classroom teachers their utilization of Project RACE in their classrooms. The majority of teachers interviewed reported a great increase in their utilization of special career education curriculum units and all joined in praise for the work of the staff in aiding them in implementing career education.

ERIC Full Excl Provided By Eric 7

-4-

Two overall evaluation questions were posed for the 1975-76 school year. "Do third grade students demonstrate knowledge of major duties and and required abilities of different types of paid and unpaid work?" and "Do third grade students demonstrate knowledge of work conditions and life styles associated with different types or paid and unpaid work?" These same questions were utilized during the 1974-75 school year. Both years, the Career Education Quesionairue (CEQ) was used as a measurement device. Pre and post tests were not employed during the 1974-75 school year, but it is interesting to compare the 1975-76 post test results with test results from high exposure classroom of 1974-75.

Table 1

	Pre-Test	Post Test	
Mean Grade	72.20	75.70	
Average Grade	64.78	66.30	
Low Score	32.50	27.50	
High Score	92.50	95.00	

The degree of variance in pre and post test results could not be considered statistically significant although some improvement is noted. More significant is the fact that high exposure classroom during the 1974-75 school year reported a mean score of 64.1 as compared to the post test mean score of 75.70 for <u>all</u> third grade students in 1976.

Tables 2, 3, and 4 display additional detailed information concerning student responses.

-5-

8

ERIC

Comparison Pre and Post Test Results

to Career Education Questionairre

Third Grade Students

.

Pre-Test N=255 Post Test N=257

Raw Scores	#Students Receiving	Raw Scores	#Students Receiving
32.5	1	27.5	1
40.0	11	37.5	1
42.5	1	40.0	1
45.0	1	42.5	1
47.5	4	50.0	2
50.0	1	52.5	1
52.5	2	55.0	11
55.0	1	57.5	2
57.5	66	60.0	4
60.0	66	62.5	10
62.5	18	65.0	13
65.0	20	67.5	14
67.5	21	70.0	24
70.0	21	72.5	16
72.5	26	75.0	27
75.0	31	77.5	28
	36	80.0	36
80.0	. 21	82.5	33
82.5	16	85.0	16
85.0	8	87.5_	. 10
87.5	9	90.0	11
90.0	2	92.5	3
92.5	2 9	95.0	2
	-6-		



CEQ Pre-Test

Grade 3

Questions Answered Incorrectly

....

.

N≈255

Question	No. Wrong	Question	No. Wrong	Question	No.Wrong
	<u> </u>	15.	14	28.	76
2.	7	16.	120	29.	191
3	102	17.	118	30.	54
4.	86	18	26	31.	68
5	23	19.	105	32.	14
6.	66	20.	183	33.	20
7.	62	21.	35	34.	121
8.	44	22.	120	35.	58
<u> 9. </u>	47	23.		36.	38
10.	19^	24.	16	37	84
	126	25.	12	38.	60
12.	114	26.	123	39.	72
	61	27.	29	40.	187
14	85				

10

-7-



CEQ Post Test

Grade 3

Questions Answered Incorrectly

N=257

No. Wrong	Question	No. Wrong
4	21.	28
. 4	22.	115
81	23.	49
62	24.	11
_23	25.	11
62	26.	126
70	27	6
22	28.	57
22	29	179
15	_30	38
118	31	. 54
99	32.	3
43	33.	14
78	34	126
2	35.	. 62
117	36.	32
103	37	58
· 36	38.	57
. 73 _	39.	45
· ·		198
	4 81 62 23 62 70 22 22 22 15 118 99 43 78 2 117 103 36	4 $21.$ 4 $22.$ 81 $23.$ 62 $24.$ 23 $25.$ 62 $26.$ 70 $27.$ 22 $28.$ 22 $29.$ 15 $30.$ 118 $31.$ 99 $32.$ 43 $33.$ 78 $34.$ 2 $35.$ 117 $36.$ 103 $37.$ 36 $38.$ 73 $39.$



· · .

11

-8-

CHAPTER III

Sixth Grade Students

In accordance with the suggested evaluation design, sixth grade students were selected for special study. At Weatherford Independent School District, sixth grade students are situated at the middle school and are not in self-contained classrooms.

All Sixth grade students were given the Career Education Questionairre in September, 1975 as a pre-test and in April, 1976 as a post test.

Before discussing the comparison of test results, it is significant to study the treatments received by sixth grade students during the 1975-76 school year. Also significant is the fact that these students have allegedly been exposed to career education since the fourth grade, the point in time when Project RACE was funded to the school district.

The 25 sixth grade teachers received two group in-service sessions, the first occurring at the beginning of the school term. During this session, the coordinator was allotted 30 minutes to pass out revised materials and request that teachers participate in individual conferences. During the three weeks immediately after this meeting, she held 28 individual conferences with sixth and seventh grade teachers. Again in January, the coordinator spoke for approximately 20 minutes to all middle school faculty members, reviewing goals and describing new materials available through the library.

Incredible as it may seem, the coordinator met 410 times in in-dividual conferences with the 25 sixth grade teachers during the school year. During the 1974-75 school year, ESI has recommended that faculty

12



-9-

members at middle school receive special attention and guidance so that they would begin to utilize career education units more. This request was more than met.

In addition, the coordinator conducted five subject area meetings in April, 1976 for subject area teachers from all grade levels including sixth grade. The 22 career education concepts were emphasized and teachers were asked to informally indicate their perceptions of students' understanding of each concept. This stimulated group discussions of methods to be used to achieve the desired student outcomes. Several projects for the next school year were identified.

Sixth grade students participated in 18 study tours. All of these study tours involved students in Social Studies, English, Reading and Spelling classes.

Seventy eight resource speakers addressed sixth graders during the year. The range of subject areas was much greater than for study tours.

The coordinator received and responded to 283 requests for special materials. In addition, teachers made 115 requests for special materials such as 16mm films from the Education Service Center, Region XI.

Sixth grade students received extensive counselling. According to records maintained by the middle school counselor, 1,242 individual conferences were held and group sessions involving 973 students occurred.

In January, 360 sixth grade students toured Amon Carter Museum's Bicentennial exhibit, "Face of Liberty". The original tour request to Project RACE was submitted by one of the sixth grade English/Social Studies teachers. The teacher planned to coordinate the tour with the career education unit, "Fine Art Job Finds." The staff coordinator suggested making



-10-

the activity a combined effort involving all sixth grade English/Social Studies classes in the "block" group.

Prior to making the tour, the "block" teachers focused on covering the background on the artists from the revolutionary period and the leaders and events portrayed in the exhibit. Sixth grade art and science teachers coordinated with the "block" teachers to provide students with information on the careers of the artists and the scientific achievement of leaders from the period. Teachers compiled information from the exhibit catalogue into tour scripts since museum docents were not available for guided tours.

Post-tour activities focused on careers in the Fine Arts and Humanities cluster including the museum occupations. Curriculum covered two career education concepts -- careers are grouped by fields and positions are related within career fields.

ESI interviewers held informal conferences with randomly selected sixth grade students in March, 1976. All teachers interviewed expressed enthusiasm for Project RACE and felt a commitment to career education. However, many teachers still felt that career education was a "separate subject" and that other learning activities should cease while "career ed units" were taught. This attitude was called to the attention of the Project RACE staff and subject area meetings with all middle school teachers were held to discuss infusion of career education into standard curriculum offerings.

A marked change in attitude toward career education was detected among middle school teachers interviewed. The change in attitude is a direct reflection of the amount of staff time committed to in-service and personal conferences with teachers.

-11-



Three evaluation questions were posed to measure student outcomes for the 1975-76 school year which were:

- 1. Do sixth grade students demonstrate knowledge of major duties and required abilities of different types of paid and unpaid work?
- 2. Do sixth grade students demonstrate knowledge of work conditions and life styles associated with different types of paid and unpaid work?
- 3. Do sixth grade students demonstrate knowledge of entry requirements of major types of paid and unpaid work?

The Career Education Questionairre (CEQ) was administered to all sixth grade students in September, 1975 on a pre-test basis and again in April, 1976 as a post test measurement.

During the 1974-75 school year, sixth graders also were given the CEQ, but not on a pre-post basis. Results of that test response will be compared to post test results for the 1975-76 school year.

	Table 5		
	Pre-Test	Post Test	1974-75
Mean Grade	62.12	66.33	50.3
Average Grade	56.40	59.19	44.20
Low Score	22.30	22.30	n/a
High Score	87.05	90.75	n/a

-12-

..



••

The degree of variance in pre and post test results is not considered statistically significant although some improvement is noted. More significant is the variance between the 1974-75 mean grade and the post test results for 1975-76.

Tables 6, 7, and 8 display additional information concerning student responses.



Comparison Pre and Post Test Results

to Career Education Qûestionairre

Sixth Grade Students

Pre-Test N=313		·	Post Test N=332	
Raw Score	#Students Receiving	Raw Score	#Students Receiving	
22.30	1	22.30	1	
27.85	2	27.85	1	
29.70	3	29.70	2	
31.55	2	31.55	1	
33.40	1	35.25	3	
35.25	2	37.10	1	
37.10	77	38.95	5	
38.95	4	40.80	4	
40.80	5	42.65	3	
42.65	2	44.50	88	
44.50	44	46.35	3	
46.35	5	48.20	5	
48.20	7	50.05	<u>L:</u>	
50.05	9	53.75	8	
51.90	8	55.60	16	
53.75	77	57.45	17	
55.60	11	59.30	15	
57.45	20	61.15	5	
59.30	12	63.00	20	
61.15	22	64.85	17	
63.00	19	66.70	16	



-14-

Raw Score	# Students Receiving	Raw Score	# Students Receiving
64.85	15	68.55	18
66.70	20	70.40	19
68.55	19	72.25	23
70.40	19	74.10	18
72.25	24	75.95	22
74.10	15	77.80	18
75.95	7	79.65	23
77.80	17	81.50	. 16
79.65	10	83.35	10
81.50	4	85.20	1
83.35	77	87.05	5
85.20	2	88.90	2
87.05	1	90.75	1

•

۰.

.

0

÷ .



.

Table 7 CEQ Pre-Test Sixth Grade Students Questions Answered Incorrectly

N-313

.

Question	No. Tota	l Question	No. Total
1.	4	16.	47
2.	1	17.	45
3.	5	18.	53
4.	263	19.	28
5.	159	20.	120
6.	105	21.	88
7.	172	22.	100
8.	75	23.	205
9.	133	24.	36
10.	117	25.	89
11.	149	26.	103
12.	111	27.	47
13.	49	28.	2
14.	179	29.	229
15.	107	30.	201
31.	132	43.	171
32.	67	44.	152
33.	121	45.	146
34.	159	46.	168
35.	248	47.	104
36.	191	48.	171
37.	114	49.	186
38.	179	50.	121
39.	140	51.	101
40.	122	52.	67
41.	128	53.	107
42.	50	54.	216



Table 8 CEQ Post Test Sixth Grade Students Questions Answered Incorrectly

N=332

Question No.

Students Wrong

1.	. 6
2.	2
3.	3
4.	277
5.	153
6.	97
<u> </u>	173
8.	72
9.	101
10.	96
<u></u> <u>11.</u>	113
12.	
13.	
14.	195
15.	90
16.	41
17.	30
18.	
19.	26
20.	94
21.	<u> </u>
22.	76
23.	167
24.	38
25.	101
26.	122
27.	49
	2
29.	259
30.	201
31.	141
32.	53
33.	71
34.	132
35.	292
36.	182
37.	112
38.	158
39.	138
40.	87
41.	152
42.	54
43.	174
44.	126
45.	152
46.	174 126 152 146



Table 8 Continued

Question No.

Students Wrong

.

,	47	80
· · · · · · · · · · · · · · · · · · ·	48.	170
	49.	177 .
	50	117
	51.	105
	52.	61
	53	98
•	54	190



-18-

CHAPTER IV

Ninth Grade Students

It is interesting to study the ninth grade students involved in Project RACE. Although no specific curriculum offerings are made to these students during their first year in high school, the ninth grade students studied for this evaluation report did participate as eighth graders in intensive career education courses. Students in the ninth grade during the 1975-76 school year participated in the career education course during the 1974-75 school year. Therefore, it is reasonable to expect that they would display a higher than average knowledge about various aspects of career education. These students also are the target of intensive counseling sessions by the district counseling staff and they have access to the career resource center located in the high school building. This resource center is equipped with much material related to career and occupational choices. These same students also have access to much specialized material available through the Project RACE staff.

During the 1975-76 school year, the ninth grade population of the district was listed as 316. Of this total ninth grade population, 288 students participated in counseling sessions concerning career choices. As part of the measurement of student outcomes, all ninth grade students were given the Career Interest and Information Survey document developed by Texas State Technical Institute under a Part C Grant from Texas Education Agency. High school counselors used the individualized results of this test to counsel students concerning career choices and study plans for their high school

-19-



 $\mathbf{22}$

careers. This information, which was in addition to the mandates of the evaluation design, was an unexpected bonus for counselors.

Five student outcomes were identified as applicable to the treatments being administered to ninth grade students, having taken into account the career education exposure they received as eighth graders. The Career Maturity Inventory was selected to measure several of the specified outcomes. This document was administered to 50 ninth grade students selected randomly from the 316 class members. In addition to the CMI, it was decided that the TSTI Career Interest and Information Survey would be used to provide more definition for two of the specified student outcomes. Although this document is not listed among suggested documents in draft guidelines for evaluation of career education projects, it is felt that administration of the document gives a clear picture of student perceptions of careers. The document is useful not only to draw broad conclusions about student groups, but also as a counseling tool.

Question: "Do ninth grade students demonstrate

knowledge of major duties and required abilities of different types of paid and unpaid work?"

Part II of the CMI, which relates to knowing about jobs, is the most applicable for this outcome. In studying the table on the following page, it will be noted that the national mean for this portion of the test is 11.3, while ninth graders at Weatherford scored 14.1. This increase of 2.9 over the national mean is significant, and it indicates that ninth graders in Weatherford can demonstrate knowledge of major duties and required abilities of different types of paid and unpaid work.

-20-



 $\mathbf{23}$

(Grade = 9.7)									
N-50									
	Attitude	Part I (Knowing Your Self)	Part II (Knowing About Jobs)	Part III (Choosing <u>A Job)</u>	Part IV (Looking Ahead)	Part V (What Should They Do?)			
National Mean	32.8	11.1	11.3	10.0	. 8.4	7.1			
Weatherford Mean	34.5	12.4	14.1	11.4	13.4	9.7			
(Variance)	+1.7	+1.3	+2.8	+1.3	+4.7	+2.3			

Mean Scores on Career Maturity Inventory, 9th Grade

Question: "Do students in Grade 9 demonstrate knowledge of the important factors that affect work success and satisfaction?"

Again, the CMI was the only measurement to determine progress toward this desired outcome. Although no specific part of the test relates to this desired outcome, assumptions may be drawn by comparing overall test outcomes by Weatherford students to overall national means. It will be noted on Table 9 that, in the attitude scale and the five parts of the competency test, Weatherford ninth graders consistently scored significantly higher than the national mean, indicating that the students are demonstrating knowledge of the important factors that affect work success and satisfaction.

-21-

ERIC^{*}

Question: "Do ninth grade students demonstrate the ability to associate their own abilities and limitations with possible success in present or future paid or unpaid work?"

Two measurements were made to determine the degree to which this outcome is being achieved. Part I of the CMI, which relates to knowing yourself, shows that Weatherford students had a mean score of 12.4 while the national mean score is only 11.1. The positive variance of 1.3 between the mean raw scores is significant, and it shows that this desired outcome is being achieved. The TSTI Career Interest and Information Survey was also analyzed in an effort to draw further assumptions related to this outcome. On the Career Interest and Information Survey, students were asked to select their first, second, and third choices of careers. They were then asked to indicate their level of information concerning the career choices. The information levels ranged from "1" to "5", with "1" representing very limited information and "5" representing information based on courses taken in the actual career field. The median of the choice indicated considerable knowledge, but not firsthand experience. Table 10 shows student assessments of their level of information for their first, second, and third career choices. It should be noted that, on the first career choice, the majority of students ranked their level of information at "2" or "3". These assessments indicate "2," moderate but general information, or "3," considerable information, but not first-hand experience. When it is considered that these are ninth grade students, it is an adequate demonstration of the students' own honesty in assessing their abilities and limitations in selecting a career.



 $\frac{25}{-22}$

Question: "Do students in Grade 9 demonstrate ability to relate personal interests and values to types of paid and unpaid work in their associated life styles?"

Table 10

Information Levels indicated

TSTI Career Interest and Information Survey

N=312					
	Very Limited	Moderate But General	Considerable But Not First Hand	Based On First Hand Experience	Based On Courses Taken in This Field
	1	2	3	4	5
First Career Choice	15.6	30.5	24.5	16.2	13.2
Second Career Choi <u>c</u> e	24.4	29.8	18.8	15.5	11.6
Third Career Choice	34.2	27.6	20.1	9.3	8.7

Again, the CMI and the TSTI Career Interest and Information Survey were used to determine the success of being achieved in this specific student outcome. The entire CMI must be taken into account, since no specific part relates directly to this outcome. Results show that ninth graders in Weatherford scored consistently higher than the national mean. On Table 10, which displays results of the information levels indicated by students concerning career choices, there is strong indication that students are able to relate

-23-



ţ

 $\mathbf{26}$

their present level of information with a career choice.

Question: "Do ninth grade students demonstrate knowledge of steps taken and factors to be considered in career planning?"

Part III ("Choosing a Job"), Part IV ("Looking Ahead"), and Part V ("What Should They Do?") were used as measurement of this outcome. These parts of the CMI show that ninth grade students are demonstrating knowledge of the steps to be taken and factors to be considered in career planning.

Overall, the results of the two test instruments administered to ninth grade students indicate an above-average ability to assess themselves in light of requirements of various careers. The students also indicate an unusually high level of knowledge concerning specifications of different types of paid and unpaid work. It is reasonable to assume that the excellent response of the students is based on exposure they received to career education as eighth graders.



-24-

27

CHAPTER V

Twelfth Grade Students

Students in the twelfth grade of the Weatherford Independent School District, as well as those classified as graduating students, were studied in compliance with the draft guidelines for evaluation of career education projects.

A number of career education opportunities are available to twelfth graders. All graduating students receive counseling. All students had access to career resource material. This material was available both in the career resource center, located in the high school building, and, by request, from Project RACE staff and members of the regular high school counseling staff. Graduating seniors were eligible to participate in an employability mini-course. In this course, they learned how to fill out a job application form, how to conduct themselves during an interview, and how to prepare a resume for presentation to prospective employers.

In addition to these programs, a placement service is operated as a function of Project RACE. All high school students are eligible to file an application for work with the placement director, who attempts to identify part-time work suitable for each student's level of experience and area of expertise.

Graduating students attending vocational-technical courses also have an opportunity to participate in cooperative work programs throughout the community in their line of specialization.

Some of these treatments are standard procedures for the district. Others have been initiated by Project RACE. It would be diffficult to separate the ongoing activities from those initiated by the career education



-25-

project. Therefore, all activities related to the graduating students are considered as a part of the treatment received.

Ten outcome areas were identified as bearing direct relationships to the programs offered to graduating students in the academic high school, graduating students in the vo-tech high school, and former students. It was decided that outcomes would be measured by the administration of the Career Maturity Inventory to 80 graduating students selected at random, including 25 vo-tech and 15 work oriented. Reinforcement for anticipated outcomes would be obtained through administration of the TSTI Career Interest and Information Survey to all graduating students. Results of these two tests are displayed in Tables 11 and 12.

Table 11

Mean Scores on Career Maturity Inventory, 12th Grade

	· · · · · · · · · · · · · · · · · · ·	Part I (Knowing	Part II (Knowing	Part III (Choosing	Part IV (Looking	Part V (What Should	
	Attitude	Yourself	About Jobs		Ahead)	They Do?)	
National							
Mean	37.2	14.1	14.4	12.9	11.9	9.5	
Weatherford Mean							
(Regular)	38.6	14.9	17.7	14.4	15.0	12.2	
Weatherford Mean (Vo-Tech							
&Work)	36.7	13.4	16.6	13.0	13.6	11.0	

⁽Grade = 12.7)

-26-



Information Levels Indicated

	Very Limited	Moderate But General	Considerable But Not First Hand	Based On First Hand Experience	Based On Courses Taken In This Field
	1	2	3	4	5
First Career Choice	7.3	24.3	26.3	18.3	23.6
Second Career Choice	17.3	25.6	19.0	19.0	19.0
Third Career Choice	26.6	26.7	22.0	15.3	9.3

TSTI Career Interest and Information Survey

(N=150)

Question: "Do graduating students demonstrate knowledge of major duties and required abilities of different types of paid and unpaid work?"

It was decided that Part II of the CMI provided significant information related to this outcome area. It will be noted on Table 11 that Weatherford students had mean scores of 16.6 and 17.7 with the national mean score of 14.4. The variance amounts to a significant difference, indicating that graduating students are able to demonstrate knowledge of major duties and required abilities of different types of paid and unpaid work.

> Question: "Do students in Grade 12 demonstrate knowledge of the important factors that affect work success and satisfaction?"

> > 30

-27-



Part III of the CMI, which involves choosing a job, appears to provide more information relevant to this outcome. Weatherford students scored above the national mean average on this part of the CMI.

> Question: "Do twelfth grade students demonstrate the ability to associate their own abilities and limitations with possible success in present or future paid and unpaid work?"

Two measurement devices were found useful in assessing this outcome. Part I of the CMI is isolated for comparison purposes. It will be noted on the table that this is the only portion of the six-part test in Weatherford V-tech students fell below the national mean average. The second measurement was the TSTI Career Interest and Information Survey. On this test document, students were asked to indicate their level of information concerning their three top career choices. It will be noted on Table 12 that 23.6% of the graduating students tested indicated that knowledge about their first career choice was based on courses taken in the field.

> Question: "Do students in Grade 12 demonstrate ability to relate personal interests and values to types of paid and unpaid work and their associated life styles?"

Part IV of the CMI was selected as the most appropriate measurement for this outcome. Results show that Weatherford students scored above the national mean on this section of the test instrument. Contradictory to this is the response of students to the TSTI Career Interest and Information

-28-



Survey. The reader's attention is again called to the table that indicates students' assessment of their levels of information concerning their first, second, and third career choices. These contradictory results lead evaluators to the conclusion that students in Grade 12 do not consistently demonstrate the ability to relate personal interests and values to types of paid and unpaid work and their associated life styles.

> Question: "Do twelfth grade students demonstrate the ability to identify, locate, and utilize sources of information to solve career decision making problems?"

Part V of the CMI concerns problem solving. On this portion of the test instrument, Weatherford students scored significantly above the national mean. This indicates good ability in problem solving.

> Question: "Do twelfth grade students demonstrate knowledge of steps to be taken and factors to be considered in career planning?"

Part IV of the CMI is most reflective of student ability to plan careers. Weatherford students scored well above the national mean, which indicates that students do demonstrate the ability in planning for careers.

> Question: "Do twelfth grade students and vocationaltechnical school students demonstrate the ability to adapt to varying work conditions?"

> > -29-



The problem solving portion of the CMI, Part V, is the most indicative of the ability to solve problems. On this section of the test, Weatherford students scored well above the national mean, indicating their ability to solve problems and adapt to varied working conditions.

> Question: "Do twelfth graders at high school and the vocational-technical high school demonstrate the ability to plan work effectively?"

Overall student responses to the Career Maturity Inventory indicate that Weatherford students rank above other students in the nation, by mean scores. Of particular interest in this segment of student outcomes were the working students and the vo-tech students in cooperative education.

> Question: "Do graduating students and former students, drop-outs, and graduates demonstrate skills required in applying for and accepting work?"

It was impossible to obtain measurements for this outcome on drop-outs and graduates. Only graduating students were studied. During the 1974-75 school year, 147 graduating students participated in the employability mini-course. Of that number, all completed the course successfully, demonstrating that they had acquired the skills necessary in applying for and accepting work.

33



-30-

Question: "Do graduating students and former students demonstrate success in being placed in a paid occupation, in further education, or in unpaid work that is consistent with their current career education?"

A longitidinal study of all graduates and former students of the district has been started by the placement director of Project RACE. Only two years of information has been accumulated. Of the 1974 graduates of the district, less than 1% were unemployed at the time they were contacted by the placement director. The remainder were attending college, attending college and working, working full time, serving in the minitary, were out of the labor force, or were located by the placement director. Of the 137 students who graduated in 1975, 102 reported they felt their school training prepared them for the jobs they currently hold. This longitudinal study undertaken by the placement director is currently maintained in a most professional manner.

It is felt that the majority of outcomes desired for twelfth grade students are being achieved, and that the work currently in progress in lower grade levels will result in the achievement of all desired outcomes.

-31-

Full Text Provided by ERIC

CHAPTER VI

Project Administration

Since its inception, Project RACE has been administered by a full time project director. Although the need for a full-time administrator in a project of this size is doubtful, the affairs of the project have been wellmanaged. ESI has always felt some concern when small projects assign a fulltime administrator who has no direct program responsibility.

Although not a part of the evaluation design, ESI is mandated under the contract terms of this project to examine the distribution of funds among the various grade level components.

From information furnished by the project, the following facts emerge concerning fiscal distributions.

- Administration costs accounted for 36% of the total funding. These costs include salaries for the project director, two secretaries, office supplies, equipment, evaluation, printing, etc.
- 2. Cost of the high school component accounted for 20% of the total funding during the three years. Costs included the salary of the exemploratory and employability skills teacher and some inventory items.
- 3. Elementary school component received 36% of the total funding. These costs included the third year salary of the coordinator, the full three

ERIC

-32-35 year salary of the elementary counselor, the cost of curriculum development, study tours, and special inventory items.

Other program costs, such as salary for the placement and followup officer were provided by state folding or the local district.

It is obvious that a great deal of work has been accomplished by staff members. The work loads handled by the two secretaries, the elementary coordinator, the elementary counselor, the placement and follow-up officer, and the exploratory teacher have been quite heavy. Obviously, some of these staff people have found it necessary to devlote large quantities of their own time to Project RACE.

The project director has served effectively and faithfully carried out his assignment to administer the project. Again, though, ESI questions whether a full-time administrator is required on a small project.



 $\mathbf{36}$

CHAPTER VII

Conclusions and Recommendations

Test results from all components of Project RACE are not as dramatic as might be desired. However, the evaluators have looked beyond the test results, through the utilization of teacher interviews and observations, to try to determine the impact of this three year program on the small, rural school district.

From these non-standard measurements, ESI feels that the impact of Project RACE has been significant in Grades K-12.

Teacher interviews conducted in March, 1976, showed that elementary, middle school, and high school teachers hold positive attitudes toward career education and accept its importance in their classroom offerings.

The extent to which this enthusiasm will continue after Project RACE ceases cannot be predicted. This helps to spotlight one of the problems in many Federally funded programs. Three years is not long enough to introduce a new program, smooth out the rough spots, and have concepts become a part of the day-to-day work of the classroom teacher.

The first year of Project RACE was devoted in large part to planning and solving logistic problems. The organization of teams to write the K-7 units was begun and the staff devoted a great deal of time to "selling" the concept of career education. Also, time was devoted to acquiring the necessary office space and equipment with which to work.

-34-

- 37

The second year of the project saw the new curriculum units introduced to K-7 teachers with efforts made to encourage all teachers to utilize the units. Middle school and high school components began to develop specific work patterns.

The final year of the program saw the majority of elementary and middle school teachers beginning to utilize the career education units, while high school teachers were working more closely with staff members to find or develop specialized materials.

It is unfortunate that a fourth project year is impossible. If such a year were possible, it is likely that career education would become an integral part of curriculum offerings through the grade levels of Weatherford Independent School District.

Without the assistance and enthusiasm of staff members to classroom teachers, there is the distinct possibility that the intense interest in and support for career education will dwindle.

For that reason, ESI strongly recommends to the administration of the school district that appropriate steps to be taken to maintain at least a semblance of the present staff for the immediate future. Particularly, the elementary coordinator and exploratory teacher functions should be maintained. The work of placement and follow-up should be continued, possibly as a function of the high school counselling effort. Certainly, all staf: positions should be maintained, but these are critical if the efforts of the past three years are not to be wasted.

As this report concludes ESI's professional association with

-35-

ERIC

Project RACE and Weatherford Independent School District, we would like to express our appreciation to those whose efforts made our work much easier and pleasant during the past three years; Jack Finley, Gerald Smith, Raymond Curtis, J. C. Liddell, Larry Woods, Mary Murrell, Ann Witherspoon, Sylvia Anderson, JoLayne Harbour, Joe Tyson, and Wayne Davies.



-36-