#### DOCUMENT RESUME

ED 150 285

CE 013 843

INSTITUTION PUB DATE NOTE.

EDRS PRICE DESCRIPTORS

crawford, George; Miskel, Cecil Experience Based Career Education at Wichita East High School: A Third Party Evaluation. Wichita Public Schools, Kans. [77] 40p.

MF-\$0.83 HC-\$2.06 Plus Postage.

Academic Achievement; \*Career Education; Career Exploration; \*Educational Alternatives; Educational Objectives; Parent Attitudes; \*Program Attitudes; Program Effectiveness; Program Evaluation; \*School Community Coopeyation; Senior High Schools; Sex Discrimination; Skill Development; Student Attitudes; Student Characteristics; Student Improvement; \*Vocational Development; \*Work Experience Programs \*Experience Based Career Education; Kansas (Wichita)

IDENTIFIÉRS

ABSTRAC/T

The third-party evaluation presents assessment of the first cycle of operation of the Experience Based Career Education (EBCE) at Wichita East High School. Twenty-two process objectives and twelve outcome objectives were evaluated with either a nominal (yes/no) assessment of status, or a descriptive (statistical/narrative) assessment of status, as determined by interviews with program personnel, examination of project records, and/administration of appropriate instruments. A pre- posttest design was used to assess outcome objectives achievement associated with academic achievement, self-esteem, career orientation, and sex bias. A self-administering checklist/open-ended response form was used to collect summative impressions of the program from students, parents, and site resource people. Pre- posttest EBCE/control results are provided for the Differential Aptitude Test, the Career Development Inventory, the Coopersmith Self-Esteem Inventory, and on the sex-role socialization questionnaire. Results of the parent evaluation, student evaluation resource surveys, and interviews conducted with. resource persons at the work site are reported. It was concluded that process and outcome objectives were substantially accomplished. (Appendixes contain detailed descriptions of procedures and data for five outcome objectives.) (TA)

Reproductions supplied by EDRS are the best that can be made from the original document.

EXPERIENCE BASED CAREER EDUCATION AT WICHITA EAST

HIGH SCHOOL: A THIRD PARTY EVALUATION

George Crawford, Third Party Evaluator Cecil Miskel, Third Party Evaluator

> U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIDNAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRO-DUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGIN-ATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRE-SENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Submitted/to
Kenneth G. Best, Project Director
Richard Wood, Director of Operations
Office of Career Education
Wichita Public Schools U.S.D.#259
Wichita, Kansas

ERIC.

# TABLE OF CONTENTS

Purpose	Page
Purpose	• 1
Overview of Evaluation Procedures	. 1
Assessment of EBCE Program Objectives Process Objectives Outcome Objectives	6
Conclusions	. 12
APPENDIX A: Detailed Description of Procedures	13 '
APPENDIX B: Data for Outcome Objective 1	16
APPENDIX C: Data for Outcome Objective 2	20
APPENDIX D: Data for Outcome Objective 3	23
APPENDIX E Data for Outcome Objective 11	. 26/
APPENDIX F: Data for Outcome Objective 12	35 ·

# EXPERIENCE BASED CARÉER EDUCATION AT WICHITA EAST HIGH SCHOOL: A THIRD PARTY EVALUATION

#### Purpose

This document has been prepared by third party/evaluators for the purpose of presenting the assessment of the first cycle of operation of the Experience Based Career Education (EBCE) program at Wichita High School East. The program proposal contained 22 process objectives and 12 outcome objectives. The main body of this assessment document contains a listing of the process and outcome objectives, along with either a nominal (yes/no) assessment of the objectives' statuses, or a descriptive (statistical/narrative) assessment of status.

# Overview of Evaluation Procedures

The status of process objective achievement was determined via interview with program personnel and examination of project records.

Outcome objectives were assessed via the administration of instruments appropriate for assessing the various outcome objectives (See Appendices A-F). A pre-posttest design was used to assess outcome objectives achievement associated with academic achievement, self-esteem, career orientation and sex bias. A self-administering check list/open ended response form was used to collect summative impressions of the program from students, parents, and site resource people. In addition, 10 sites were visited by the evaluators to interview the resource people regarding their impressions of the program. A detailed summary of the evaluation procedures constitute Appendix A.

Five additional appendices detail the measurement and analysis procedures for Outcome Objectives 1, 2, 3, 11, and 12. They are:

Appendix B--Pre-posttest EBCE/control results on the Differential

Aptitude Test; Appendix C--Career Development Inventory, pre-posttest EBCE/control results; Appendix D--Coopersmith Self-Esteem Inventory, pre-posttest EBCE/control results; Appendix E--Parent survey, Student Survey, Resource Survey, and interviews conducted with the resource persons at the work sites; Appendix F--Pre-post, EBCE/Control results on the Sex Role Socialization Questionnaire.

In the instances where the assessment was accomplished through pre and nost testing, the EBCE and control groups contained subjects of the numbers and types described in Table 1. Complete data were collected from 40 of 44 EBCE students and 33 students in the Control group. Both groups appear to be roughly comparable in terms of sex ratios, racial composition, grade level, plans after high school, and educational levels of parents. Table 2 further supports the assertion that the groups resemble each other. Student occupational aspirations and eccupational positions of parents show similar patterns.

TABLE 1
FREQUENCY DISTRIBUTIONS FROM THE
CATEGORICAL VARIABLES

	EBCE Grou	ıp (N=40)	Control Gr	oup (N=33)
Variables	Frequency	Percent	Frequency	Percent
Sex			•	
Male .	. 22	55.0	15	45.5
Female	18	45.0	18	54.5
Race	(		•	
White \	33	82.5	24	72.7
Black	6	15.0	· 7	21.2
Spanish	1 .	2.5	2	6.1
`		<u>-</u>		
Grade Level	•			.
11	3	7.5	0	0.0
12	37	92.5	33	100.0
Plans After High School	٥			. / *
None	1	2.5	0 ,	6.0
Work-Full Time	· 9	22.5	10	30.3
Work-Part Time	1	2.5	0 ′	0.0
Apprenticeship	2	5.0	0	0.0
Military Service	$\mathbf{r}$	2.5	1	/3.0
Vocational-Technical School		20.0	2	6.1
Junior College-Academic	· 1	2.5	2	6.1
Junior College-Technical °	1	2.5	0	/ 0.0
College-University	16	40.0	18	54.5
Father's Education	,			
	_		` /	
Do not! know	1	2.5	1	c
Elementary School	.1	2.5	1 /	°3.0 .
Some High School	6 13	15.0	7 /	21.2
High School Graduate		32.5	9 /	27.3
Some Post-Secondary College Graduate	6	15.0	8 /	24.2
Some Graduate Work	9 0	. 22.5	. 5	15.2
Advanced Degree	4	0 10.0	0 /	0.0
	4	<del>-</del>	3/	9.1
·	6	_	= = =	

TABLE 1 Continued

'n	EBCE Grou	p (N=40)	Control Gr	oup (N=33)
Variables °	Frequency	Percent	Frequency	Percent
Mother's Education				•
Elementary School				
Some High School	2	5.0 °	, 5	15.2
High School Graduate	15	37.5	. 12	36.4
Some Post-Secondary	1.4	35.0	. 9	27.3
College Graduate .	8	20.0	· 4	12.1
Some Graduate Work	0	0.0	2	6.1
Advanced Degree	1	2.5	1	°3.0
	· · ·		-,	
Sibling Drop-outs				٥
0	32 .	80.0	29	87.9
1	6	15.0	3	9.1
2	. 2	5.0	16	3.0

TABLE 2

FREQUENCY DISTRIBUTIONS FOR CAREER
ASPIRATIONS AND CURRENT PARENT OCCUPATIONS

•		EBCE Grou	p (N=40)		Control G	roup (N=33)	
<u>Occu</u>	pations	Student	Father	Mother	Student	<u>Father</u>	Mother
1.	Clerical	2(5.0)1		14(35.0)	1(3.0)		8(24.2)
2.	Craftsperson	3(7.5)	7(17.5)	•	2(6.1)	2(6.1)	
3.	Farmer						
4.	Homemaker			12(30.0)		•	15(45.5)
5.	Laborer .	1(2.5)	6(15.0)	1(2.5)	2(6.1)	3(9.1)	•
6.	Manager	1(2.5)	5(12.5)	,	1(3.0)	2(6.1)	1(3.0)
7.	Military	, , , , , , , , , , , , , , , , , , ,	3(7.5)	,	2(6.1)	4(12.1)	
8.	Operative	1(2.5)	2(5.0)		1(3.0)	5 <b>(15.2)</b> ,	1(3.0)
9.	Professional	15(37.5)	8(20.0)	7(17.5)	19(57.6)	9(27.3)	4(12.1)
10.	Proprietor	1(2.5)	3(7.5)	•		1(3.0)	1(3.0)
11.	Protective	•	•				
,	Service	1(2.5)	1(2.5)	,		2(6.1)	٠.
12.	Sales	2(5.0)	1(2.5)	2(5.0)		2(6.1)	
13.	Service	1(2.5)	•			1(3.0)	2(6.1)
14.	Technical	3(7.5)	2(5.0)	<sup>'</sup> 3(7.5)	3(9.1)	2(6.1)	1(3.0)
15.	Do Not Know	9(22.5)	2(5.0)	1(2.5)	2(6.1)		

<sup>1</sup> The number in parenthesis is the percent of the total.

Assessment of the EBCE Program Objectives -  $\sim$ 

				, , ,,
	with the second	ccomp-	Not Accomp-	, 1
Pro		ished	<u>lished</u>	Note .
1.	To hire staff (instruction- al and director) by Septem- ber 30, 1976.	<b>X</b>		,
2.	To formalize technical asistance subcontract with AEL by September 30, 1976.	<b>X</b> ,		
<b>3.</b> .	To formalize subcontract with third-party evaluator(s) by September 30, 1976.	x		· · · · · · · · · · · · · · · · · · ·
4.	To sponsor all project staff to Charleston, WV, for train- ing by AEL's staff to be com- pleted by October 15, 1976.			
5.	To acquire AEL/EBCE materials by October 15, 1976.	X		,
6.	To conduct sex-bias and sex- role stereotyping awareness workshop for staff by October 31, 1976.	` <b>x</b>	•	Conducted 2/17-19, 4/13-16, & 6/12/77
7.	To have operational by Nov- ember 15, 1976, an EBCE learning center capable of housing three learning coor-	,		,
	dinators, 60 students and the placement coordinator analysts, Director of Opera- tions, and secretarial/cler- ical personnel.	x	·	
8.	To conduct by November 30, 1976, a workshop on techniques for the elimination of sex-bias, and sex-role stereotyping and methods for sex-fair guidance in the operation of the program.	x		
	To complete by December 16, 1976, the development of those components of the EBCE instructional delivery system necessary to implement the program locally.	X		

χ.

Χ .

# Process Objective

10. To develop by January 1, 1977, at least 45 community experience sites in which EBCE students can be placed for both academic credit and career exploration.

11. To identify in at least 10% of the local experience sites individuals in non-traditional job roles where EBCE students will be placed, i.e. male telephone operators, female plumber.

12. To have operational by January 9, 1977, the adapted AEL system for placing EBCE students in community experience sites.

13. To have recruited students for second semester implementation by January 9, 1976.

14. To conduct EBCE student orientation during the week of January 17-21, 1977.

15. To finalize the individualized learning plans, developed by the student and his/her learning coordinator, by the end of the orientation (January 17-21, 1977).

16. To have 90% of the EBCE students placed on an experience site pursuing their individualized programs by the end of EBCE orientation (January 17-21, 1976).

17. To prepare quarterly reports and quarterly budget reviews on October 1, 1976; January 1, 1977; April 1, 1977; July 1, 1977.

60 sites were developed.

E.G. Women in management roles, female police officers, males in baking research.

190% were placed.

Assume July will be completed on-time,

Proc	ess Objective	Accomp- lished	Not Accomp- lished	Note
18.	To implement, by January 21, 1977, the evaluation procedures necessary for the documentation of the effectiveness of the program.	x	•	See Appendix A Procedures.
19.	Recruitment for the 1977-78 school year of students and students' parent sign-up documentation will be completed by May 15, 1977.		·	Still in progress.
20.	The third party evaluation report will be prepared and ready for submittal by June 30, 1977.	<b>X</b>		•
21.	The annual report and budget review will be completed by June 30, 1977.	x		
22.	The project continuation application and budget request for FY 1978 will be prepared and submitted by June 30, 1977.	x		

#### Outcome Objective

#### **OUTCOME:**

- EBCE students will demonstrate equivalent or greater gains in basic skills than comparison group students.
- EBCE students will demonstrate equivalent or greater, gains in career maturity than comparison group students.
- 3. EBCE students will demonstrate equivalent or greater gains in attitudinal development than comparison group students.

#### Result

Six of the eight pre-post DAT subscale comparisons did not differ significantly. The subscale scores for space relations and language usage differed significantly in favor of the control group. (See Appendix B). The objective was substantially accomplished.

The EBCE students had a significantly larger gain in the planning orientation subscale score of the career development inventory than the controls. There were no significant pre-post differences for the two remaining subscales. (See Appendix C). Objective accomplished.

The EBCE students demonstrated a significantly-larger gain in the "general" subscale of the SEI than did the controls. There were no significant

- Students will use instruments such as Work Activities Checklist, Work Situation Checklist, Values Instrument, and Chart for Relating School Subjects and Occupations to assess career, educational, and personal needs and interests and will use the data to develop academic and career experiences.
- 5. Students will use instruments such as the Basic Skills Inventories and the GATB (short form) to assess career, educational, and personal aptitudes and will use the data to develop academic and career experiences.
- Students will observe various career requirements, restrictions, and opportunities through experience site placements and document these characteristics ities in the Student Career Guide. They will then use the data in developing viable career plans.
- Students will determine the necessity of basic reading and mathematics skills for various careers at experience sites and then utilize scores from the Fasic Skills Inventories to select learning objectives necessary to master those skills essential for rewarding career opportunites.

#### Result

differences on the remaining 3 subscales or the over-all scores. Appendix D). Objective accomplished.

Interviews with project personnel and perusal of project records indicate that this objective was accomplished. Some negative student feedback was noted for these activites. (See Appendix E). Objective accomplished.

The Basic Skills Inventory was used in its entirity. The math portion of the GATB was used. Parent response to provision of the kind of experience were positive. (See Appendix E). Objective accomplished.

The physical evidence supporting the assertion that this objective has been accomplished is available. | Feedback from students suggests, however, that they fail to fully appreciate the value of the activities and products associby completing related activ- ated with this objective. / (See Appendix E). The value of this type of activity should be assessed over the longer term.

> Interviews with staff and project records indicate that their objective was accomplished. Some of the DAT subscale scores measuring the skills in question do not verify the accomplishment of the objective. The process was followed, but the outcome was not achieved as measured by the DAT (See Appendix B).

# Outcome Objective

- 8. Students will develop Activity Sheets which utilize basic skills and/or academic learning in conjunction with available activities at experience sites. This integration of basic skills/academic learning and experience site activities will result in the application of refinement of basic skills/academic learning development.
- 9. Students will utilize various instruments for assessing personal needs, interests, and aptitudes, will participate in career exploration through experience site placements, and will complete the Final Review activity in the Student Career Guide as a function of generating preliminary career plans which are informed and realistic.
- 10. Students will participate in career placements at experience sites and will engage in academic activities which relate to experience sites in the decision-making process antecedent to the selection of a career field.
- 11. Parents, students, employers, labor union, and other involved community members will demonstrate a positive attitude toward, and continual support of, the EBCE program.

13

#### Result

The record of achievement on their objective is mixed. Some feedback in appendix E complements the relationship between work and study while other feedback criticizes it. The dominant tendency in the feedback is for a stronger relationship between work and study. This objective requires additional attention for its satisfactory accomplishments.

Feedback from students, parents and resource persons confirm that this objective was achieved. This area of activity marks one of the major accomplishments of the project.

Objective accomplished.

Interviews with personnel at 10 sites, plus written feedback from 22 additional site resource persons, 12 parents, and 40 students confirm the accomplishment of this objective. Some parent feedback was particularly noteworthy in terms of gratitude expressed for keeping a potential dropout in school, changing a negative attitude to a positive one, and so forth. Several of the respondents in face-to-face interviews indicated that they would be enthusiastic about. having their own child participate in EBCE. The program enjoys substantial support among its constituents. (See Appendix E).

## Outcome Objective

12. Students participating in the EBCE program will participate, during orientation, in sex bias, sexrole stereotyping small-group workshops and will demonstrate a greater awareness and acceptance of, and participation in non-traditional job-roles.

#### Result

Using the Sex Role Socialization questionnaire, the EBCE students showed gains no different from the control groups on sex stereotypes (See Appendix F). The EBCE students did participate in the workshops and did participate or observe non-traditional job-roles. Objective partially accomplished.



# Conclusions.

All but one of the process objectives were accomplished at or above the target criteria. Most of the outcome objectives were met and the remainder approached the values set before the program started. Therefore, the process and outcome objectives were substantially accomplished.

APPENDIX A

DETAILED DESCRIPTION OF PROCEDURES

#### Procedures

Outcome objectives 1, 2, 3, and 12 were evaluated with a pretest-posttest, treatment-control group design. Malcolm B. Young and Russell Schub (1975) describe this type of design as being able to provide an accurate assessment of the impact of the program, if the pretest differences between participant and comparison groups are due to chance.

Outcome objective ll was evaluated with a survey design. Young and Schub note that this type of design can provide a description of quantitatively-supported estimates of various group characteristics.

Other process and outcome objectives were evaluated with a descriptive design. Existing materials, files and records were examined to determine objective attainment.

# Sampling

Instruments selected for use were simultaneously administered to the 44 treatment and 33 control students in a common setting. The evaluators administered the instruments and collected the responses. The pretest was administered during mid-January, 1977, a date which coincided closely with the start of the program. The posttest was administered during the first week in May, 1977. Similar testing conditions prevailed during the pretest and posttest sessions.

Parents, students, and persons with whom students worked at experience sites comprised populations from which survey and interview data were gathered. Opinions of these groups were sought only at the end of the year.

#### Data Analysis

# Outcome Objectives 1, 2, 3, 12,

The analysis procedure for the pretest-post test, treatment-control group design was analysis of covariance. This technique statistically controls within-group variance and also controls for lower-order interaction effects. The post test mean scores for the treatment and control groups were compared with the F test while statistically controlling (covarying) the differences in pretest scores for sex and socioeconomic status. Results are reported for the nine subscales of the Differential Aptitude Tests (Form S, 1972 edition), the three subscales of the Career Development Inventory; the four subscales of the Coopersmith Self-Esteem Inventory, along with a total value for the SEI, and; the four subscales of the Sex Role Socialization Questionnaire.

# Outcome Objective 11

Descriptive statistics and qualitative procedures were used to evaluate this objective. Frequency and percentage distributions along with narrative constitute the analysis techniques.

# Other Objectives

The remaining process and outcome objectives were evaluated with data gleaned from program files and records. Narrative analysis and checklist summaries were used to evaluate these objectives.

# Reference

Malcolm B. Young and Russell G. Schub. Evaluation and Educational Decision-Making: A Functional Guide to Evaluating Career Education, (Washington, D.C.: Office of Education/DHEW, 1975).

# APPENDIX B

DATA FOR OUTCOME OBJECTIVE 1

EBCE students will demonstrate equivalent or greater gains in basic skills
than comparison group students.

## Instrumentation

The Differential Aptitude Test (DAT) provided a comprehensive measure for Outcome Objective 1. Eight different subscales constitute the DAT: verbal reasoning, numerical ability, abstract reasoning, clerical speed and accuracy, mechanical reasoning, space relations, spelling, and language usage. In addition, the verbal reasoning and numerical ability subscales are combined to form a composite indicator of general intellectual ability.

The DAT, particularly the verbal reasoning and numerical ability subscales, has been established and demonstrated by means of strength of correlations of subscale measures with course grades. The subscale reliability coefficients for the two forms of the test range from .89/to .97 (senior males, form S), .88 to .96 (senior females, form S), .89 to .96 (senior males, form T), and .88 to .97 (senior females, form T).

#### Results

Table 3 contains the data summary for evaluating this objective. The EBCE and the control groups differ significantly on only two of the nine subscales - space relations and language usage. In both instances, however, the adjusted posttest scores for the control group are higher. For the mechanical reasoning subscale, the EBCE tended to improve more than the control group mechanical reasoning (p=.14).

In summary, Outcome Objective 1 was mostly supported. With two exceptions, the EBCE students demonstrated equivalent gains in basic skills to the control group students.

TABLE 3

Means, Standard Deviations (SD), and Analysis of Covariance Summaries for the Differential Aptitude Test (DAT) scores Across the EBCE and Control Groups

DAT	EBCE	·		Control			,
Subscale	Test	Mean	SD ·	Mean	SD	. <u>F</u>	P
Verbal Reasoning (VR)	Pre Post Adj.	46.0 48.5	28.8 29.0	57.6 58.2	35.6 35.3	.04	.84
	Post	53.2		52.3			
Numerical	Pre	49.5	30.8	59 <b>.</b> 1	39.1	2.09	.16
Ability	Post	47.6	31.4	,64.0	34.3		
(NA)	Adj. Post	52.0		58.6			<u>.</u>
VR +/NA,	Pre	46,9	. 28.7	57.8	. <u></u> 39.1	.62	.44
Composite	Post	46.6	29.6	60.2 *	35.1	\^	•
۰,	Adj. Post	<sup>"</sup> . 51.3		54.3			
Abstract	Pre	48.6	26.4	. – – – – 59.7	30.78	°.77	 .38
Reasoning	Post	48.6	26.6	64.2	28.5		· \
	Adj. Post	~53.1		58.5	٠,	` `	). V:
Clerical	Pre	56,5	27.6	53.6	34.9	.06	.80
Speed and	Post	53.8	29.0	57.2	34.4	•	
Accuracy	Adj. Post	54.4		56.4			€2
Mechanical	Pre	. 43.2	25.0	65.7	26.6	2.28	.14
Reasoning	Post	53 <b>.</b> 7	27.1	65.2.	29.6		
	Adj. Post	62.8	<b>}</b>	53.8	e e		, ·
Space	Pre	48.7		48.3	32.6	7.46	.01*
Relations	Post	49.9	√ 26.8	61.6	32.5	•	
•	Adj. Post	49.1		62.5		`	•
Spelling	Pre	°`45.3	27.7	49.9	35.2	.09	·
	Post	50.7	29.9	58.9	35.0	•,	1
,	Adj. Post	· 53.7	· .	55.2	•		18.00

Table 3 continued

Language Usage	Pre Post	41.6 33.7	29.1 <sup>2</sup> 27.8	53.0 55.3	35.2 38.5	7.26	.01
~	Adj. Post	38. 🖎 🔪	;	48.9			

<sup>·1</sup> Λdj. Post = Adjusted Posttest.

<sup>\*</sup>Significantly different from zero.

# APPENDIX C

DATA FOR OUTCOME OBJECTIVE 2

EBCE students will demonstrate equivalent or greater gains in career maturity than comparison group students.

#### Instrumentation

The Career Development Inventory (CDI) was employed to evaluate Outcome Objective 2. This instrument was developed by Donald E. Super and his associates to measure three components of career development. The three subscales are the following: planning orientation, resources for exploration, and information and decision making. The students complete this form in about 30 minutes. Established reliability and validity characteristics support the use of the CDI for evaluating outcome objective number two.

#### Results

Table 4 summarizes the data analysis results for Outcome Objective 2. The EBCE had a greater gain in the planning orientation subscale score than the control group. The adjusted means are 115.1 and 98.3 respectively. No significant differences were found for the (a) resources for exploration and (b)information and decision making subscales. Therefore, the objective was accomplished.

TABLE 4

Means, Standard Deviations (SD), and Analysis of Covariance Summaries for Career Development Inventory (CDI) Scores Across the EBCE and Control Groups

CDI	•	EBCE		Contr	01		
Subscale	Test	Mean	SD	Mean	<u>so</u>	<u>F</u>	<u>P</u>
PART I Planning Orientation	Pre Post Adj.	92.4 . 113.7 . 115.1	19.0 20.6	96.5 100.1 98.3	24.1. . 26.2	12.2	.00*
PART II Resources for	Post Pre Post Adj.	277.5 302.2	 45.7 47.7	265.8 309.6	66.7	.6	.44
Exploration	Post	300.2	· 4.5	312.3			
Information	Post	16.6	6.0	15.2 17.0	6.0 1 4.5	1.36	.25
and Decision Making	Adj. Post	16.1		17.6	٠.		•

<sup>1</sup>Adjusted Post Test

<sup>\*</sup>Significantly different from zero.

# APPENDIX D

DATA FOR OUTCOME OBJECTIVE 3

EBCE students will demonstrate equivalent or greater gains in attitudinal development than comparison group students.

## Instrumentation .

The Self-Esteem Inventory, Form A (SEI) was used to measure Outcome Objective 3. This instrument, developed by Stanley Coopersmith, contains 58 items and four subscales. Form A provides an assessment of self-esteem using four components general social self-peers, home-parents, and school-academic.

The items are short statements, generally answered "like me" or "unlike me". The split half reliability ranges from .87 to .90. Test-retest reliability estimates range from .64 (12 month intervals) to .88 (five week intervals). In addition, convergent, discriminant, and predictive validity types have been established. On the basis of studies conducted to date, SEI scores are significantly related to creativity, academic achievement, resistance to group, and other important variables. This provided a reliable and valid measure for outcome objective number three.

#### Results

The data analysis summary for Outcome Objective 3 constitutes
Table 5. The EBCE students demonstrated a significantly larger gain
(p=.05) than the control students on the general subscale of the SEI.
No significant differences were found for the remaining three subscale or the total score. Therefore, Outcome Objective 3 was accomplished.

TABLE 5

Means, Standard Deviations (SD), and Analysis of Covariance Summaries for the Self-Esteems Inventory (SEI) Scores Across the EBCE and Control Groups

					, ,	,	.0
SEI ·	.•	EBCE	•	Contr	<u>o1</u>	<del>-, </del>	- -, , , , , , , , , , , , , , , , , , ,
Subscale '	Test	Mean	<u>s</u>	Mean	, <u>SD</u>	<u>F</u>	<u>P</u> ,
General	Pre Post	38.7 43.2	11.3 10.1	43.1 42.5	7.8 7.5	4.2	.05* .°
	Adj. Post	44.6		40.6	•		
• -	) Pre	12.8	3.3	13.2	-	.1	.80
Social	Post	13.4	. 3.0	13.6	2.8		$\cdots \setminus \cdots$
	Adj. Post	13.6		13.4			
	Pre	9.0	5.3	11.2	4.2	2.0	.16
Home	Post	10.5	4.1	13.0	3.6		/.
	Adj. Post	11.0	-	12.3		. 45	\
\$	Pre	8.4	4.5	9.8	3.5	.4,	.52
Academic	Post .	9.8	4.2	11.1	, 3.0		
	Adj. Post	,10.1	•	10.7		• ` .	· · · · · · · · · · · · · · · · · · ·
	Pre	68.7	20.5	76.9	16.5	.9. ~	
Total 😗	Post	<b>76.9</b>	18.5	80.2	·» 13.9	•	,,,,,,
	Adj. Post	79.5	,	76.7	•	. •	
					·		<u> </u>

<sup>1</sup>Adjusted Post Test

<sup>\*</sup>Significantly different from zero.

# APPENDIX E

DATA FOR OUTCOME OBJECTIVE 11

Parents, students, employers, labor
union, and other involved community members will demonstrate a positive attitude
toward, and continual support of, the
EBCE program.

TABLE 6

# SUMMARY OF PARENT RESPONSES

# EXPERIENCE BASED CAREER EDUCATION EVALUATION

# WICHITA EAST HIGH SCHOOL\*

•	Agr	eement	Disagree	ment	.*
QUESTION	Strong N % of N	Mild Neu % of N	tral Mild of % of tal total	Strong N % of	
The results of the EBCE program were generally	6	;\	car total	totai	<del></del>
worthwhile.	8(66.6)	3(25)	0 , 0	1(8.3)	
2. The EBCE program pro- duced positive attitudes	٠.	; (		•	
and academic achievement.	6.(50)	5(41.6)	0 0	1(8.3)	•.
3. The EBCE program was run	* *		<i></i>		
efficiently.	8(66.6)	3(25)	0 0 '	1(8.3)	•
4. Student needs and inter- ests were given appro-	•	. 49			
priate consideration.	7(58.3)	4(33.3)	0 , 0	1(8.3)	بر

5. Was there any feature about the way the EBCE program operated that you thought particularly effective, appropriate, or useful?

Responses@							
N	=YES	N=PART	N=NO				
£,	10	0	2				
		,					

# Content of "YES" responses and number of comments ( ).

Positive comments related to the variety and value of the work site experiences, including career orientation, the "real nature" of work, value of education reinforcement, etc. (6); Interest of instructors in meeting student needs and efforts to match work and academic experiences (3); Aptitude and interest information provided by testing associated with the problem (2); Maintaining interest of an older student in school (1); Emphasis on academic work (1).

6. Was there any feature about the way the EBCE program operated that you thought particularly ineffective, inappropriate, or useless?

R	esponses	0 .
N=YES	N=PART	N=NO
2"	0	10

# Table 6 continued

Content of "YES" responses and number of comments ( ).

The student with a part time job has difficulty meeting all expectations of the EBCE program (1); the first EBCE work assignment was not satisfactory (parent believes this will improve as program matures) (1).

7. General comments or suggestions that would help improve the EBCE program?

Responses@
Comments No Comment
10 2

Content of comments and number of comments by category ( ).

Three respondents made general comments praising the program. They cited specific benefits such as: "Getting students away from 'peer pull' which causes so many problems; preventing one student's dropping out, improving communication with parents and convincing the student of the value of education; and--"Of all Gov. & sponsored programs this one will do more for students to realize the opportunities available and know their own potential" (3) (these are obviously not suggestions for improving the program). Improve the quality and timeliness of communication with students regarding school activities, e.g., notification's regarding commencement activities (2); Provide parents more program information via printed matter or other means such as "open houses" (1); Consider changing the work/study time ratio to provide more in-school time (1); Provide greater flexibility for leaving an unsatisfactory site assignment and being satisfactorily reassigned (1); Provide more feedback to sites to help them serve students better and keep them busy (1); Take pains to insure that motivation, ability, and part time jobs outside EBCE do not combine with the EBCE program in ways leading to failure (1).

<sup>\*</sup> N=12

<sup>@</sup> Responses were content-analyzed. Parents provided comments only with a "yes" or "comment" response. Total N of content may exceed "yes" or "comment" total because of multiple responses per respondent.

#### TABLE 7

# SUMMARY OF STUDENT RESPONSES

# EXPERIENCE BASED CAREER EDUCATION EVALUATION

## WICHITA EAST HIGH SCHOOL\*

۵		Agr	eement	. <u>ī</u>	Disagreeme	ent	
Que	stion	N Strong total	N Z of total	Neutral % of total	7 of	Strong % of total	•
٧'	The results of the EBCE program were generally worthwhile.	. , .			1		• ,
, ,-*	MOLCHMITTE. 4	21 (52,.5).	13(32.5)	4(10)	1(2.5)	1(2.5)	
2.	The EBCE program produced positive attitudes and academic		,	, . 1	ا م <del>نطق</del> ت ا	\$	<b></b> •
•	achievement.	19(47.5)	14(35)	4(10)	1(2.5)	2(5)·	
3.	The EBCE program was run efficiently.	17(42.5)	12(30)	10(25)	0(0)	1(2.5)	
<b>4.</b> .	Student needs and interests were given appropriate consid-				· \$		
	eration.	15 (37.5)	19(475)	5(12.5	5) 1(2.5)	0(0)	,

5. Was there any feature about the way the EBCE program operated that you thought particularly effective, appropriate, or useful?

# Responses@ N=YES N=PART N=NO 3

# Content of "YES" responses and number of comments ( ).

Opportunities for career exploration (14); Positive relationship with learning coordinator (7); Individualization of learning experiences (6); Program efficiency (1); Range of job placement opportunities (1); Opportunity to experience a variety of work experiences (1); Freedom from working people (1); The opportunity to emphasize subjects of particular interest (1); Learning to work independently (1); Calling parents about even the "smallest thing" (a negative compliment") (1).

Table 7 continued

Question

6. Was there any feature about the way the EBCE program operated that you thought particularly ineffective, inapproriate, or useless?

	Respons	es@ .
N=YES	N=PART	N=NO.
12	14	14

Content of "YES" responses and number of comments ( ).

Difficulty of completing academic requirements given work time requirements (6); Insufficient resource and reference materials (2); Career awareness experiences associated with program (workbook) (2); Lack of instructor with expertise in technical subjects (1); Mandatory, rather than job placement by choice (1); perceived lack of organization in making academic assignments (1); Perceived lack of academic challenge (1); Perceived alienation from school activities because of time requirements on job (1).

Question

7. General comments of suggestion that would help improve the EBCE program?

Responses@					
Comments No Comment					
28	,	12			

Content of comments and number of comments by category ( ).

Unfocused postive comments (6); Increase number and interest level of work sites (4), Keep students better informed of school activities (4); Improve the relationship between work and study (3); provide more time for or increase emphasis on academics (3); Give more attention to student selection/supervision (3); Shorten the length of assignment on-site (2) Unfocussed, negative comments (2); Increase variety of career exploration opportunities (1); Provide better access to teachers of "my subjects (1).

<sup>\*</sup> N=40

<sup>@</sup> Responses were content-analyzed. Students provided comments only with a "Yes", or "comment" response. Total N of content may exceed "Yes" or "comment" total because of multiple responses per respondent.

TABLE 8

# SUMMARY OF RESOURCE PERSONS' COMMENTS

# EXPERIENCE BASIC CAREER EDUCATION EVALUATION

## WICHITA EAST HIGH SCHOOL\*

	J, , , , , , , , , , , , , , , , , , ,	Agre	ement	<u>Di</u>	sagrèem	ent	
Que	stion		Mild % of total	Neutral % of total	Mild % of total	Strong % of total	• •
1.	The results of the EBCE program were generally worth-while.	11(50)	9(40.9)	2(9.1)	0(0)	0(0)	` ,
2.	The EBCE program produced positive attitudes and academic achievement.	6(27.3)	10(45.5)	) 5(22.7)	1(4.5)	0(0)	
3.	The EBCE program was run efficiently.	10(45.5)	, 6(27.3)	6(27.3)	0(0)	0(ó) 	
<b>4.</b>	Student needs and interests were given appropriate consideration.	10(45.5)	9(40.9)	3(13.6)	0(0)	0(0)	./

5. Was there any feature about the way the EBCE program operated that you thought particularly effective, appropriate, or useful?

Responses@					
N=YES	N=PART	N=NO			
11	3	8			

# Content of "yes" responses and number of comments ( ).

Opportunities provided for career orientation (5); Usefulness of the unique program concept (2); Clarity of program policies provide for resource people(1); Evidence of effective student selection (1); Effective student/resource person orientation provided by program staff (1); Flexibility (1).

6. Was there any feature about the way the EBCE program operated that you thought particularly ineffective, inappropriate, or useless?

<u>Responses@</u>						
N=YES	N=PART	N=NO				
7	· 0	15				

#### Table 8 continued

# Content of "yes" responses and number of comments.

Carefully monitor student experiences at the work site and provide feedback to the resource person at the site so modification of work experience for improvement will be enhanced (2); Match student career interests and site assignments more carefully via student screening (1); Strengthen relationship between work and study (1); Provide sites more lead time with respect to announcing assignment of new student(s) and duration of stay (1); Provide more specific information regarding the resource person's role and authority over students at the work site (1); Provide clearer definition of expectations regarding student attendance and responsibility for monitoring and reporting (1).

#### Question

7. General Comments or suggestions that would help improve the EBCE program?

Responses@
Comments No Comments
12 8

# Content of comments and number of comments by category ( ).

Comments related to resource persons' concern with apparent lack of student interest in site activities (one respondent expressed lack of interest in continued association with the program if students are not more carefully screened for interest in and commitment to site activities) (4); General comments related to positive outcomes associated with apparent presence of student interest (3); References to the amount of time students spend at sites being either too little or too much (the implication in the two foregoing comments seems to be for more careful assessment of the interaction of the complexity of task(s) at the site with level(s) of student interest. Varied assignments as functions of the interaction may be indicated) (3); Insure that the relationship between work and study is strong(1); Reduce the (apparently) inordinate amount of paperwork required by learning coordinators and site analysts: "Surely such a good program could be. continued with less effort (of this sort) on their part" (1); Excellent opportunity for career exploration (1); Schedule work more carefully for students with part time (paying) jobs. (1).

Two comments impressed the evaluators as being sufficiently unique to warrant direct quotation. "Three weeks (on site) is a long time. Although we are rather diversified in what the student can participate in, two weeks' would be sufficient to let the student know if the interest is there."

"Is the student's original choice of career field necessarily his final choice for life? Of course not. I have changed major areas over four times, from military, factory worker, full-time farmer, basic researcher, and now applied research. This should be emphasized to the student. You learn as you go.



<sup>\*</sup> N=22

<sup>@</sup> Responses were content-analyzed. Resource persons provided comments only with a "yes" or "comment" response. Total N of content may exceed "yes" or "comment" total because of multiple responses per respondent.

#### TABLE 9

## SUMMARY OF RESOURCE PERSON INTERVIEW

# RESPONSE'S TO THE EXPERIENCE BASE CAREER

# EDUCATION PROGRAM AT WICHITA EAST HIGH SCHOOL

,		Agre	eement	Disagreement		
`		Strong N(%)	Mild N(%)	Neutral N(%)	Mild N(%)	Strong N(%)
1.	The results of the EBCE program were generally	•	•	• •		
. '	worthwhile.	9(90)	1(10)	,		1
2.	The EBCE program produced positive attitudes and			.`	•	<b>`</b> _
•	academic achievement.	5(50)	. 3(30)	2(20)		1
3.	The EBCE program was run efficiently.	8(80)	2(20)		٠	
4.	Student needs and interests were given appro-				}•	
```	priate consideration.	6(60)	1(10)	2(20)	1(10)	` .

- 5. Was there any feature about the way the EBCE program operated that you thought particularly effective, appropriate, or useful?
- $\begin{array}{c|c} & Responses \\ \hline Yes & Part & No \\ \hline 10 & 0 & 0 \\ \end{array}$

- a. Four comment each.
  - -Opportunities for students to explore jobs and test their talents.
  - -Interaction of students and resource persons.
    - -Feedback from the program staff.
    - -Gaining familiarity with specific types of work and workers:
    - -Complementing work experience and academic study,
- b. Three comments each.
  - -The unique nature of work at specific sites.
  - -The uniqueness of the program itself.
- g. Two comments each
  - -Good quality and attitudes of students.
  - -Interaction of school and resource person.
- d. One comment each.
  - -Student opportunities to share information about work.
  - -Provision of information on job searches.
  - -Minimum effort and time required by the resource persons.

#### Table 9 continued

6. Was there any feature about the way the EBCE program operated that you thought particularly ineffective, inappropriate, or useless?

	Response	<u>s</u>
Yes	Part	No
4	1	5

- a. Four comments each.
  - -Problems associated with work conflicts between academic and site requirements.
  - -Space at work sites.
- b. One comment each.
  - -Greater effort to increase the value of site experience.
  - -Inadequate planning time for resource person.
- 7. General comments or suggestions that would help improve the EBCE program?
- a: Three comments each:
  - -Need for more effective coordination of the time allocated for study and work.
- b. Two comments each.
  - -Use of pre and post interview would help improve on site evaluations.
- c. One comment each.
  - -Introduce greater flexibility into the ability of students to change job sites when their interest is low.
  - -Make the orientation of students to job sites more systematic.
  - -Make the work schedule more regular in terms of daily, rather than intermittent experience.
  - Increase frequency of feedback from learning coordinator to resource person.
  - -Hold resource person coordinating services to reduce duplication of experience at site.

# General comments

The overall affective response of resource persons was quite positive and supportive of the program. At least five of the resource persons said they would like their child to participate in the program, and all but one (n=9) indicated they would be enthusiastic about continuing their relationship with the program next year. One resource person indicated plans to terminate a relationship with another program in order to place more effort on the EBCE effort.

# APPENDIX F

DATA FOR OUTCOME OBJECTIVE 12

Students participating in the EBCE program will participate, during orientatation, in sex bias, sex-role stereotyping small-group workshops and will demonstrate a greater awareness and acceptance of, and participation in non-traditional job-roles.

#### Instrumentation

The Sex Role Socialization (SRS) Questionnaire provided the evaluation data for Outcome Objective 12. This measure was developed by Broverman, Broverman, Clarkson, Rosenkrantz, and Voyel (1970). The 36 items are completed twice by the respondent, once using the items to describe an adult male. Twenty-five items are male-valued and 11 female-valued. The items are scored separately for the male and female descriptions for the male-valued items and then the female-valued items. The result is four subscales: male-male, male-female, female-male, and female-female.

The developers hold that the items are typical stereotypes of socially desirable male and female behaviors or traits. The reliability and validity of the SRS supported its use to evaluate Outcome Objective 12.

#### Results

The summary of the results for this objective comprise Table 10. None of the analyses are significant at the five percent level but two approach significance. The responses to the socially desirable items for males when used to describe males tended to increase (greater stereotyping) for the EBCE group (pretest mean = 4.7 and posttest mean = 5.0 on a seven point scale). On the other hand, the responses to the socially desirable items for females when used to describe females tended to decrease for the EBCE students (5.5 to 4.9). Therefore, the stereotypes of females decreased for the EBCE students and remained the same for the control students. The conclusion is that no differences are apparent between the EBCE and control groups.

TABLE 10

Means, Standard Deviations (SD), and Analysis of Covariance Summaries for the Sex Role Socialization (SRS) Scores Across the EBCE and Control Groups

SRS ,	EBCE		Contr	:01	<b>%</b>	2 mags	•
Subscale	Test	Mean	<u>s</u> d	" <u>Mean</u>	SD	.: <u>F</u>	~ <u>P</u>
Male-	Pre	4.7	.52	4.7	.41	2.6	.12
Male	Post,	5.0	.38	4.8	.42		• • • •
-	Adj.¹	5.0		4.8			-
•	Post			ř.	*	• \	-
		- · - <del>-</del> -				/	~
Male-	Pre	4.4	.8'	4.4	.6	.8	.37
Female .		. 4.0	.8	4.2	.6	•	1
•	Adj.	4.0	•	4.2			À.,
·.	Post						
Female .	Pre	3.8	.5	. 4.0	.5	.4	.52
Malė	Post '	3.8	5	3.8	.5	• •	
	· Adj.	3.8	-	3.4	•	<i>‡</i>	Α.
	Post	•				•	
Female	Pre	 5.5	.4	~ ·	;		
Female ,				5.3	.6	3.8	•06`,
remate	Post	4.9	•9	5.3 7 5.4	7	1	
•	Adj.	4.8		5.4	1	ج, چ	•
	Post	.3*			bet.		

Adjusted Post Test

<sup>\*</sup>Significantly different from zero.