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#### ABSTRACT

The field test report on the "We Need One Another" instructional unit for grade 3 is one of a series of reports on the Arizona developed Career Education Curriculum Units. Presented is specific information as to the success of the units in terms of the learner's cognitive, affective, and psychomotor behavior according to expressed performance and behavioral objectives. Cognitive and student and teacher attitudinal data were collected from six sites and projects in Arizona. Following the introduction, a brief description of the unit is given. The body of the document presents and discusses various tables showing field test results in the following areas: (1) information describing the field test, including demographic characteristics of both participating teachers and learners, (2) attitudinal data from both teachers and learners concerning the unit, (3) learner performance data on the lessons' specific items, and (4) teacher recruitment, refinement data, analysis, and comments. Four brief conclusions and recommendations are included. The document concludes with two appendixes: statistics and tabular data on student and teacher attitudes and a sample of the field test instrument package--UNIVAL (forms and questionnaires on student and teacher attitudes and student performance). (Author/BP)

ARIZONA RESEARCH COORDINATING UNIT 1535 WEST JEFFERSON PHOENIX, ARIZONA 85007

FIELD TEST REPORT Vol. 4

WE NEED ONE ANOTHER

Don Peterson Frank L. Vicino Charles Small James S. DeGracie

ONE OF A SERIES IN THE ARIZONA STATEWIDE FIELD TEST 1974-75

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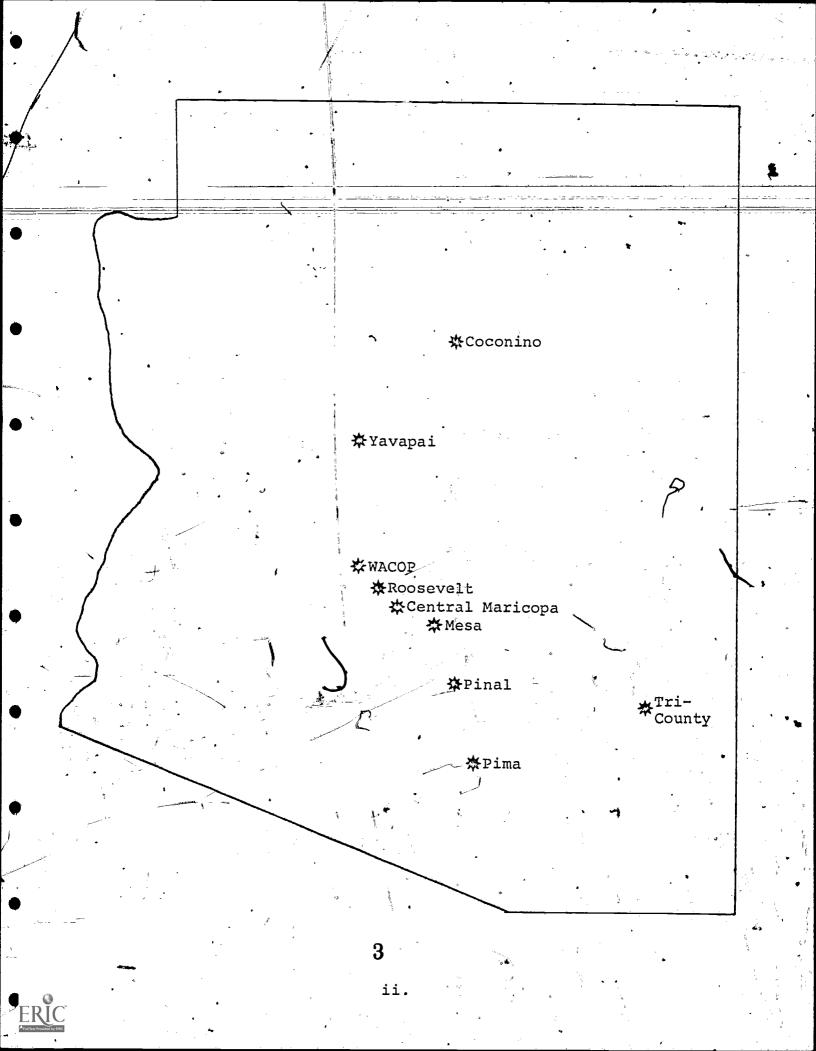
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#### FOREISORD

So many have contributed major input to the field test.

processes of unit delivery, monitoring and instrument completion,
that it is impossible to extract, note, and applaud individual

efforts. I am sure that all those involved in this major team
effort can see how much has been accomplished and have a positive view of its educational significance for the young people
of Arizona. By documenting and analyzing the capabilities of
the career education units tested, we all have contributed a
positive boost to career education in school districts across the
state.

The task of Field Test Manager has been simplified considerably by excellent staff support from the Mesa Public Schools.

Department of Research and Evaluation, responsive assistance from the State Department of Education, and the effective management shown by the field test coordinators from the respective field test projects.

Frank Leo Vicino Field Test Manager

June. 1975

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#### PREL'ACE

This is one of a series of field test reports on Arizona developed Career Education Curriculum Units. This report presents unit specific field test material. Another report in this series contains information concerning overall field test rationale and compilation of results for all field tested units.

The work presented and reported herein was performed pursuant to contract from the Arizona State Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the Arizona State Department of Education and no official endorsement by the Arizona State Department of Education should be inferred.

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#### INTRODUCTION

The major purpose of most innovative programs such as career education is to affect positively learners' cognitive, affective, and psychomotor behavior according to expressed performance and behavioral objectives. The present field test of career education curriculum units is designed to examine the success of the unit in terms of the above. Cognitive and attitudinal data have been collected from sites and projects across the state of Arizona. The following projects were involved in the effort of field testing the units: Central Maricopa, Coconino, Mesa, Pima, Pinal, Roosevelt, Tri-County, WACOP, and Yavapai.

Data on the present unit, however, have been collected from the following sites:

			. /
_	, Project	Classrooms Requested	Classrooms Used In Analysis*
	Coconino	3	1,
•	Central Maricopa	3	3
	Mesa	14	8 `
,	Pinal '	5	4
ί,	Pima	8	5
	Yavapai	3 -	3
*	Total	36 .	23
_			

<sup>&</sup>quot;Data received in time for analysis.

Significant statistics are presented and discussed in the field Test Results section of this report. Other statistics and tabular data are presented in Appendix I of this

# UNIT DESCRIPTION WE NEED ONE ANOTHER

Grade 3: We Need One Another

The primary intent of this unit is to develop selfawareness, career awareness, and economic awareness. Interdependency between individuals and groups is a theme anderlying the entire unit.

Major topics included in this unit are: interdependency between the child (like the learner), the
family, and the community for needs which are economic;
interdependency between occupations within a community;
ways in which members of a group may affect each other's
behavior; and services that social organizations provide
for the members of a community. In the final lesson,
the learners are able to incorporate all that has been
learned in the previous lessons through participation in
a group project.

FIELD TEST RESULTS
WE NEED ONE ANOTHER

This section of the report presents the data summary and analysis for the field/test of the curriculum unit. An outline of this section follows:

- A. description of the field test including demographic characteristics of both participating teachers and learners.
- B. Attitudinal data from both teachers and learners concerning the unit.
- C. Learner performance data on the lesson specific items.
- D. Teacher refinement data, analysis and comments.

# DESCRIPTION OF THE PARTICIPANTS

The data in this report was obtained from the projects, teachers, and learners described in the following tables:

#### Learners

Table I presents demographic information on the learners that were exposed to the unit in the field test. Examining Table I, it can be seen that there were slightly more male learners than female learners. There was low representation by the minority groups. Out of 611 learners 23% (145) were from minority backgrounds:

16% (100) Spanish Surname, 0.6% (4) Black, 6% (39)

# 2. Teachers

Table II presents the total number and selected demo- graphic characteristics of the teachers presenting the unit.

It can be noted from Table II that 22 of the 23 teachers that taught this unit were female.

The median years of experience for this group falls between 6-10 years. This group of teachers was quite sophisticated concerning career education. Twenty-one of the 23 teachers were familiar with career education; ten had previously taught a career education unit or program and five had actually developed a career education unit or program.



ERIC Provided by ERIC

TARLE I

# NUMBER OF LEARNERS EXPOSED BY SELECTED DEMOGRAPHIC CHARACTERISTICS

• (		S	SEX			E1	ETHNIC COMPOSITION	SITION		
'	PROJECT	MALE	FEMALE		AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO	OTHER	TOTAL
	Coconino	41	11		23	0	( 0	0	0	23
	C-Maricopa	46	43	3	<b>8</b>	H	12	74	0	68
	Mesa	124	86		.11	਼ਿਜ	. 28	192	0	222
	Pinal	, 533°.	52		0	0	19	85	Н.	105
13	Pima	49	65	À,	<b>7</b>	8	27	83.	0	114
. •	· Yavapai	31	27		## T	0	14	42	-	58
	Total Percent	315	296 . 48	<b>3</b>	9 9 9	4 0.6	100 16	476 78	2.0.3	611

TABLE II

NUMBER OF INSTRUCTORS BY SELECTED DEMOGRAPHIC CHARACTERISTICS

3.04	HAD NO	EXPOS.	TO C. ED.	I 0.	0	0	•	·	· <b>-</b>	2
PERIENCE	FAMILIAR	WITH	CAREER	0	7	0	<b>7</b>	0	0	4
CATION EX	READ A	C. ED.	UNIT OR	0	0	° • • • • • • • • • • • • • • • • • •	0	, ·	<b></b> I	7
CAREER EDUCATION EXPERIENCE	TAUGHT	C, ED.	UNIT OR	0	н	ហ	<b>8</b>	.73	0	10
O	DEV'D.	C. ED.	UNIT OR PROGRAM	H^	0	ຕໍ	· · O	0	H	ľ
ŒΪ	MORE	THAN	15 YRS	1	0	M	0	ч	0	ω <b>/</b>
FXPERIENCE			6-10 11-15	:	т.	2 1	0 1	1 1	0 1	4 5
YEARS OF			7-5	1	H	-	,	-	7	. 7
YE		LESS	THAN 1	0	0	· н	⊣.	0	0	7
SEX	The control of the co		FEMAT.E	1	ო	ω	4	ო	'n	22
S			MATE	0	<b>O</b> .	0	0	. A	0	H .
			PROJECT	0	C-Maricopa	Mesa	Pinal	Pima	Yavapai	Total

#### ATTITUDINAL DATA

#### 1. Teacher Attitude

Included in each UNIVAL (Unit Evaluation Instrument)
was an Instructor Attitudinal Data Sheet which asked
two questions concerning attitudes toward career
education in general and three questions concerning
the teacher's attitude toward the unit (See Appendix II)

## a. Teacher Attitude Toward Career Education

Examining the teachers' general attitude toward career education (Table III) it can be seen that the mean response across questions and projects is a moderately positive 3.91, on a scale where 5 is the highest positive response. Of the 46 possible responses, 37 (80%) are positive toward career education, 5 (11%) are of no opinion, and only 4 (9%) negative.

### b. Teacher Attitude Toward the Unit

Table IV summarizes the teacher attitudes toward the unit.

The teachers' high positive attitude toward career education did not seem to carry to the teachers' attitude toward the unit. The teachers show a low 3.29 positive attitude toward the unit. Of the



TABLE III

TEACHER ATTITUDE TOWARD CAREER EDUCATION (Number, Percent and Mean of Instructor Responses to Attitude Items 1 and 2 Combined)

y.	MEAN		4.00	4.00	4.00	4.00	3.88	3.50	3.91
STRONGLY	NEGATIVE	۹	0 / 0	0	0 0	0 0	0 0	0 - 0	0 0
	*						• 1	٠.	
	NEGATIVE		<b>, O</b> ,	0	12	0	12	ΊŢ	6
	NE	Z	0	0 -	×	0	Н.	Ė	4 .
ON	OPINION	φ,	0	0	12	0	12	, 33	11,
4	OP.1	Z	0	0	7	0 4	Ä	2	ស
	VE P	φ.	0		7	0	0	∵ - M	: -
	POSITIVE		100	100	. 37	100	50	33	61
	DA 2	z	5	9	9	œ́	₩,	7	28
					-	4	•.	÷	
STRONGLY	POSITIVE	P	0	0	37	0	25	17	19
STR	POS	2	0	O	9	0	,	H	σ,
	a Cad	PROJECT	Coconino	C-Maricopa	Mesa	Pinal	Pima	Yavapai	Total

TABLE IV.

TEACHER ATTITUDE TOWARD UNIT (Number, Percent and Mean of Instructor Responses To Attitude Items.3, 4 and 5 Combined)

<b>i</b> .	* #4.		» .			*	
ME	3.33	4.00	3.17	3.08	3.08	3.44	3.29
X E			•			6.	
ONGI ATIV	0	,	₹ .	0	17	11	ж
STI NEC	0	<b>~</b> 0	, <del>H</del>	•	2	H	2
ATIVE 8	E. C.	· · ·	37	20	17	33	30
NEG.	1	0	<b>Ö</b>	9	7	, m	21 *
NO NION & 3	0	0	72.	0	28	0	17
OPI	. 0	0	<b>.</b> ທ	0	7	0	12
ITIVE 8		, 100 j	12.	42	25	H "	33
POS	N	6	m	2	m	<b>н</b>	23
NGLY FIVE	. 0.	0	25	, <b>co</b>	0	**	-1e
STRC POS	0.	0.4	<b>9</b>	H	0	4	Ţ
PROJECT	Coconino	C-Maricopa	Mesa	Pinal	Pima	Yavapai	Total.
	STRONGLY NO STRONGLY POSITIVE OPINION NEGATIVE N	STRONGLY POSITIVE POSITIVE OPINION NEGATIVE NEGATIVE N N & N & N & S	STRONGLY POSITIVE POSITIVE OPINION NEGATIVE NEGATIVE NEGATIVE  N \$ N	STRONGLY POSITIVE POSITIVE OPINION NEGATIVE NEGATIVE NEGATIVE NEGATIVE  0 0 0 2 67 0 0 1 33 0 0 0  0 0 0 0 0 0 0 0 0 0 0  6 25 3 12 5 21 9 37 1 • 4	STRONGLY POSITIVE NOTINION NEGATIVE STRONGLY N \$	STRONGLY POSITIVE POSITIVE OPINION NEGATIVE NEGATIVE NEGATIVE  Anino, 0 0 2 67 0 0 1 3 25 7 58 2 17 2 17 2 17	STRONGLY POSITIVE N 8 N 8 N 8 N 8 N 8 N 8 N 8 N 8 N 8 N 8

possible 69 responses, 34 (49%) are positive, 12 (17%) are of no opinion, and 23 (33%) negative.

Correlations between the Teacher Attitude toward career education and Teacher Attitude toward the unit were significant at the .05 level. (r= 0.60) (See Table V)

# 2. Learner Attitude

When learner attritude toward the unit is examined (Table VI), we see a fairly high positive feeling toward the unit across all projects. Of the 2919 responses 60% were positive toward the unit, 23% no opinion, and only 11% were negative toward the unit.

Correlations between the Teacher Attitude toward the unit and Learner Attitude were significant at the .05 level. (r= 0.60) (See Table VII)

LEARNER PERFORMANCE

In order to examine learners' performance on the unit, and to assess how well the objectives of the unit are met, cumulative scores over all the lesson items within the unit (total learner scores) were examined. Table VIII presents the total learner scores in percentages by projects. This score reflects the unit's overall success concerning delivery of its objectives.

TABLE V

Mean Instructor Attitude Toward the Unit by Instructor Attitude Toward Career Education

3.00 2.50 5 3.00 4.50 •	į,
Project Teacher # (ques. 3-5) (ques. 1,  Coconino 1 3.33 4.00  Central Maricopa 1 4.00 4.00  3 4.00 4.00  Mesa 1 2.67 2.50  2 2.33 4.00  4 3.00 2.50  5 3.00 4.50	3 -
Coconino       1       3.33       4.00         Central Maricopa       1       4.00       4.00         3       4.00       4.00       4.00         Mesa       1       2.67       2.50         2       2.33       4.00         3       1.67       3.00         4       3.00       2.50         5       3.00       4.50	- <b>-</b> -
Mesa 1 2.67 2.50 2 2.33 4.00 3 1.67 3.00 4 3.00 4 3.00 4 3.00 4 3.00 4 3.00 4 3.00 4 3.00 4 3.00	•
3       4.00       4.00         Mesa       1       2.67       2.50         2       2.33       4.00         3       1.67       3.00         4       3.00       2.50         5       3.00       4.50	
Mesa 1 2.67 2.50 2 2.33 4.00 3 1.67 3.00 4 3.00 2.50 5 3.00 4.50	
2 2.33 4.00 1.67 3.00 4 3.00 2.50 5 3.00 4.50	\
1.67 3.00 4 3.00 2.50 5 3.00 4.50	•
3.00 2.50 • 3.00 4.50 •	ļ
3.00 2.50 5 3.00 4.50 •	ļ
5.00	
7 2.67 3.50	
5.00 5.00	
Pinal 1 3.67 3.00	
2 2.67 4.00	
3 3.33 4.00	
4 2.67 4.00	
Pima 1 3.00 4.00	
2 . 2.33 2.50	
3 4.00 4.00	
3.00 5.00	
Yavapai 1 3.67 4.00	_,
1.67 2.50	
3 5.00 4.00	

r= 0.60

TABLE VI

# LEARNER ATTITUDE TOWARDS UNIT (NUMBER, PERCENT AND MEAN OR COMPOSITE LEARNER ATTITUDE RESPONSES)

	<u>·                                      </u>		Ii	T' NOC			<u> </u>
	YES/	НАРРУ		RE/OK	NO.	/SAD	
PROJECT	N_	' G	N	8_	N *	ક	MEAN
Coconino	. 75	57	28	21	29	22	2.35
C-Maricopa	417	68 .	149	24	45	· <b>7</b>	2.61
Mesa	773	68	218	19	137	12	2.56
Pinal	326	66	144	29 ·	26	5	2,60
Pima	107 .	54	72	37	- 17	. · و · ·	2.46
Yavapai	229	64	65	18 '	62	17	2.47
Total	1927	66	676	2.3	316	11	2.55

TABLE VII

MEAN INSTRUCTOR ATTITUDE TOWARD THE UNIT BY MEAN LEARNER ATTITUDE

PROJECT	TEACHER NUMBER	'INSTRUCTOR UNIT 'ATTITUDE	LEARNER ATTITUDE
Coconino	1.	3.33	2.35
Central Mario	copa l	. 4.00	2.69
	2	4.00	2.63 .
	3	4.00	2.51
Mesa .	1	2.67	2.63
	, 2	2.331	2.26
	3 ,	1.67	1.89
, <u>,</u>	4	3.00	2.55
4	5	3.00	• 2.95
•	6	5.00	2.86
	7	2.67	2.88
,	8	5.00	
*Pinal	1	3.67	2.55
÷	2	2.67	2.56
	3	3.33	••
• •	4	2.67	2.70
†Pima	<b>`</b> 1	3.00	•
•	2	2.33	· / -
1 3	3	4.00	2.46
	4	3.00	<del>-</del> · .
Yavapai	, '1	3.67	2.46
	2	1.67	2.09
•	* 3	5.00	2.92

21

TABLE VIII

# NUMBER AND PERCENT OF CORRECT LEARNER RESPONSES TO LESSON IMBEDDED ITEMS FOR A GIVEN UNIT

	,	NUMBER OF	PERCENT OF
PROJECT	NUMBER OF RESPONSES	CORRECT RESPONSES	CORRECT RESPONSES
Coconino	208	178	85
C-Maricopá	1020	978	96
Mesa ·	2309	2067	89
Pinal	617	530	86
Pima	310	268	86 -
Yavapai	671	620	92 .
Total	5135	4641	90

The scores from each project range from a low of 85% at Coconino to a high of 96% at Central Maricopa. These responses appear uniform with no one project varying far from the mean score (90%) thereby exerting a disproportionate influence.

Various other data was collected from the teachers involved in the field test of the units.

The data collected included the following information:

- 1. Teachers indicated whether they had experience in jobs other than teaching and whether thes information helps in teaching the unit. It was found that 11 of the 23 teachers (48%) had previous experience in a job other than teaching. Of these eleven, eight (73%) indicated that the previous experience helped in teaching the unit. (See Tables IX and X)
- 2. The teachers were asked how many guest speakers they used. Eight of the 23 teachers (35%) did not use guest speakers. A total of 18 guest speakers were used in the 23 classrooms. (Table XI)
- 3. The teachers were also asked to indicate the amount of time devoted to the unit per week and what time of day (AM or PM) the unit was primarily taught. The median number of hours spent per week teaching the unit fell between 1-2 hours.

  Sixteen (69%) teachers taught the unit in the afternoon while 7 (30%) taught the unit in the

(Tables XII and XIII)

morning.

ERIC

TABLE IX

NUMBER AND PERCENT OF INSTRUCTORS THAT TAUGHT EACH UNIT BY OCCUPATION OTHER THAN TEACHING

TOTAL	NO.		<b>Н</b>	. <b>vo</b>	∞.	₩-	4	23	23	
NOME	640		100	۹.	50	75	. 50	. 19	52	
. 2	Z		<b>н</b>	, 0	***	M	7	<b>7</b>	12	-
OTHER	92	7	0	100	25	٠ 0	Q*	o '	22	
OTF	N		Н	_m	7	0	0	0	rv.	-
TRY	90		Ó	0	0	25	0	0	4	
TNDHSTRY	'n		0	0	0	щ	0		- 2, <b>-</b> 3,€.	
- <u></u> 2					-			***		
CONSTRUC-	c/o		0	0	0	0	0	•0	9	
CON	'z		0	0	0	0	0.	0	0	
TECHNI-	- %		o '	0	0	0	0 1	0	0	
TECH CAL	; Z		0	0	۰.	0.	0	o. ·	0	
NEGS	) ) ) )		0	. 0	. 25	0	50	33	22	
BIISTNESS	Z		0	0	7	,o *	2	٠.	2	
CAL	90		0	0	0	0	0	0	0	
CHEMICAL	Z		O	0	0	Q	0	0	0	·
CAL	<b>%</b>		Q	0 ,	0		0_		0	<b>:</b>
PHYSICAL SCIENCES	N		0	, O	0	o.	0,	· •	Ö	
AL NCE	90	¥	0	0	0,	0	ď	0	· 0 <u>.</u>	
SOCIAL SCIENCE.	N		0	O.	0	Ó,	0	0	, Oʻ	ľ
	PROJECT	-	Coconino	C-Maricopa	Mesa	Pinal	Pima	Yavapai	Total	g-
1		. <u> </u>			•	17			,	

NUMBER AND PERCENT OF INSTRUCTORS THAT TAUGHT EACH UNIT BY WHETHER PREVIOUS EXPERIENCE HELPS IN CAREER EDUCATION

PROJECT	YES	NO S	NO PREVIOUS EXPERIENCE N 0	TOTAL NUMBER
Coconino	0 0	0 0	1 100	1
C-Maricopa	100	0 0	0. 0	~~ <u>3</u>
Mesa -	3 .38	1 12	4 50	8
Pinal	1 25	0 0	3 75	4
Pima	l 25	1 25	2° 50	6• <b>4</b>
Yavapai	0 0	1 33	2 67	3
Total	8 35	3 13	12 .52	23



TABLE XI

NUMBER AND PERCENT OF INSTRUCTORS THAT TAUGHT EACH
UNIT BY THE NUMBER OF GUEST SPEAKERS USED

	ļ	0	-	1 .	-	2	. 3		. 4		
PROJECT	N	1 8 <u> </u>	Ñ	ુર	N· _		N	· • •	N.	8	TOTAL NUMBER
Coconino	Ò	0	. 1	100	0	, 0	0,3	. 0	0.	0	1
C-Maricopa	ļ	33	2	67	0	0	. 0	4 0	0	0	3 //
Mesa	0.	0	7	87	. 1	12	0	0	0	0	8
Pinal	4	100	0	0	0	0	0	0	0	0	4
Pima	2	50	1	.25	0	0	1	25	0	0	4
Yavapai	. 1	33.	.2	67	0 -	0	0	0	0 -	or j	. 3
Total	8	35	13	56	6 1	4	1	4	0	• 0	23

TABLE XII

NUMBER AND PERCENT OF INSTRUCTORS THAT TAUGHT
EACH UNIT BY TIME TAUGHT

	•		AM	•	PM	TOTAL
PROJECT	* *.	N	<u></u> 8	N	- 8	NUMBER
Coconino		1	100	0	0;	1
C-Maricópa		0	0	3	100 •	3
Mesa		3	37	5	62	8
Pinal	•	1	25	* 3 *	75	4.
Pima		1	25	3	,* 75	4
, Yavapai	*	1	. 33	2	67	<b>. 3</b>
Total		7	30	16 •	. 69	23



TABLE XIII

NUMBER AND PERCENT OF INSTRUCTORS THAT TAUGHT EACH UNIT BY AMOUNT OF TIME DEVOTED TO THE UNIT EACH WEEK

LESS THAN 1-2	1 HR. HRS.	8 N 8 N	0 0 0	0 0 3 100	0 0 4 50	1 25 200056	3 75 0 (	) 0 0 0	4 18 9 35
	HRS. HRS.	8, N 8	0 0	100 0 001	. 50 / 3 37	0 0 0	0 0 0	0 1 33	39 4 17
r I	HRS.	8 N	1 100	0 0 0	1 12	1 25	1 25	2 - 67	6 . 26
MORE .	5 HRS.	8 N	0 0	Ö	0	0 0	0 0	0,	0 0
-	TOTAL	NUMBER	. <b>-</b>	ო	<b>∞</b>	4	₹.	m "	23

TABLE XIV

NUMBER OF INSTRUCTORS THAT TAUGHT EACH UNIT
BY TYPE OF CLASSROOM AND METHOD OF TEACHING

PROJECT	OPEN CLASSROOM N %	SELF CONTAINED	TEAM TAUGHT		
I ROBLET	, N 6	N 8	N 8		
Coconino	0 0	1 100	0 . 0		
C-Maricopa	0 0	3 100 .	0 0		
Mesa	1 , 12	5 62	2 25		
Pinal	1 25	3 75	0 0		
Pima :	1 25	2 50	1 25		
Yavapai	0 0	3 100	0 0		
rotal	3 13	17 74	3 13		

 $\begin{array}{c} \text{TABLE XV}, \\ \\ \text{Mean Student Attitude by Time of Day Unit Taught} \end{array}$ 

Project         Teacher #         Student Attitude Attitude 1=pm 2=ar           Coconino         1         2.35         2           Central Maricopa         1         2.69         1           2         2.63         1           3         2.51         1           Mesa         1         2.63         1           3         1.89         1           4         2.55         1           5         2.95         2           6         2.86         2           7         2.88         1           8         -         2           Pinal         1         2.55         1           2         2.56         1           3         -         1           4         2.70         2           Pima         1         -         2           3         2.46         1           4         -         1           4         -         1           2         2.46         1           2         2.09         1			· Ohra Arair t	Time of
Coconino       1       2.35       2         Central Maricopa       1       2.69       1         2       2.63       1         3       2.51       1         Mesa       1       2.63       1         2       2.26       1         3       1.89       1         4       2.55       1         5       2.95       2         6       2.86       2         7       2.88       1         8       -       2         Pinal       1       2.55       1         3       -       1         4       2.70       2         Pima       1       -       2         3       2.46       1         4       -       1         4       -       1	Project	Teacher #	Attitude	
Central Maricopa 1 2.69 1 2 2.63 1 3 2.51 1  Mesa 1 2.63 1 2 2.26 1 3 1.89 1 4 2.55 1 5 2.95 2 6 2.86 2 7 2.88 1 8 - 2 Pinal 1 2.55 1 2 2.56 1 3 1 4 2.70 2  Pima 1 - 2 Pima 1 - 2 Yavapai 1 2.46 1  Yavapai 1 2.46 1			11001040	I-Dit Z-dit
2 2.63	Coconino .	1	2.35	2 .
Mesa 1 2.63 1 2 2.26 1 3 1.89 1 4 2.55 1 5 2.95 2 6 2.86 2 7 2.88 1 8 - 2 Pinal 1 2.55 1 2.56 1 3 1 4 2.70 2 Pima 1 - 2 2 - 1 3 2.46 1 4 - 1 Yavapai 1 2.46 1	Central Maricopa	1	2.69	1
Mesa 1 2.63 1 2 2.26 1 3 1.89 1 4 2.55 1 5 2.95 2 6 2.86 2 7 2.88 1 8 - 2 Pinal 1 2.55 1 2 2.56 1 3 7 1 4 2.70 2 Pima 1 - 2 Pima 1 - 2 Yavapai 1 2.46 1		2	2.63	r
2 2.26 1 3 1.89 1 4 2.55 1 5 2.95 2 6 2.86 2 7 2.88 1 8 - 2 Pinal 1 2.55 1 2.70 2 Pima 1 - 2 Pima 1 - 2 7 2.46 1 7 3 2.46 1 7 3 2.46 1 7 3 2.46 1		. 3	2.51	1
3 1.89 1 4 2.55 1 5 2.95 2 6 2.86 2 7 2.88 1 8 - 2 Pinal 1 2.55 1 2 2.56 1 3 - 1 4 2.70 2 Pima 1 - 2 2 1 3 2.46 1 4 1 Yavapai 1 2.46 1	Mesa	1	2.63	1
4   2.55   1		2	2.26	1
5 2.95 2 6 2.86 2 7 2.88 1 8 - 2 Pinal 1 2.55 1 2 2.56 1 3 - 1 4 2.70 2 Pima 1 - 2 2 1 3 2.46 1 4 Yavapai 1 2.46 1		3	1.89	1
6 2.86 2 7 2.88 1 8 - 2 Pinal 1 2.55 1 2 2.56 1 3 - 1 4 2.70 2 Pima 1 - 2 Pima 1 - 2 Yavapai 1 2.46 1		4	2.55	. 1
7       2.88       1         8       -       2         Pinal       1       2.55       1         2       2.56       1         3       -       1         4       2.70       2         Pima       1       -       2         2       -       1         3       2.46       1         4       -       1         Yavapai       1       2.46       1		5	2.95	2.
7       2.88       1         8       -       2         Pinal       1       2.55       1         2       2.56       1         3       -       1         4       2.70       2         Pima       1       -       2         2       -       1         3       2.46       1         4       -       1         Yavapai       1       2.46       1		6		- 2
Pinal       1       2.55       1         2       2.56       1         3        1         4       2.70       2         Pima       1       -       2         2       -       1         3       2.46       1         4       -       1         Yavapai       1       2.46       1	;	7		1
2 2.56 1 3 1 2.70 2  Pima 1 - 2 2,46 1 4 - 1  Yavapai 1 2.46 1		2799	<u>-</u>	2,
3	Pinal	1	2.55	1 .
Pima 1 - 2 2 - 1 3 2.46 1 - 1 Yavapai 1 2.46 1		2	2.56	1
Pima 1 - 2 2 - 1 3 2.46 1 - 1 Yavapai 1 2.46 1		3		1
2 - 1 3 2.46 1 , 4 - 1 Yavapai 1 2.46 1		4	2.70	2
3 2.46 1 - 4 - 1 Yavapai 1 2.46 1	Pima	1	_	2
Yavapai 1 2.46 1		2	_	1
Yavapai 1 2.46 1		3	2.46	1
	,	4	<u>-</u> 2	1
2 2.09 1	Yavapai	1	2.46	1
1		2	2.09	$\overline{\mathbf{i}}$
3 2.92 2		3	2.92	2

r = 0.46

4. The teachers were also asked what kind of classroom or method of teaching they used.

Seventeen (74%) of the classrooms were self-contained, 3 (13%) were open classrooms and 3 (13%) were team taught. (Table XIV)

Correlations were calculated between the above data and Student Attitude, Teacher Attitude, and Student Performance. Significant correlations were found between Student Attitude and Time of Day the unit, was taught. When the unit was taught in the morning the students attitude tended to be more positive. (Table XV)

TEACHER REFINEMENT, ANALYSIS AND COMMENTS

Specific revision data was obtained by asking the field test teachers to make comments regarding each lesson taught. These comments were solicited in the UNIVAL.

The following list represents a composite of teacher comments regarding the various aspects of the unit, as well as a lesson by lesson critique of the unit. These comments have been analyzed and recommendations for revision presented.

#### TEACHER COMMENTS

When reading the teacher comments it should be noted that not all teachers respond to the open ended items. Therefore, some of the responses seem inconsistent with the teacher responses to the closed items. The closed items, it is felt, reflect a true attitude toward the unit over the teachers sampled. The teacher comments are from selected teachers that felt strongly enough to take the opportunity to respond. The comments, are, therefore, more for curriculum refinement than for overall evaluation of the unit.

#### Central Maricopa

Mobile are fun but difficult to get materials for, and not mecessary. Bulletin Board activity very worthwhile.

Lesson 4 difficult. Students enjoyed unit. More variety in assessment items. Helps in handling discussion situations.

#### Mesa

Vocabulary needs to be reviewed. Too much teacher participation. Too teacher directed. Too long. Need more activities and less discussion. Lessons not challenging. Too many preparation tasks. Very appropriate for grade level. Will use again.

#### Pinal

Too long. First part should be 3rd grade, last part 4th grade. Too much drawing and coloring.





#### Pima

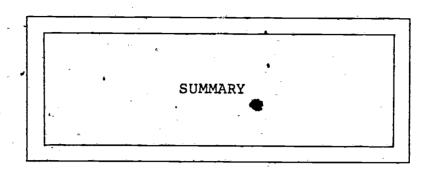
Lessons dealing with social and group behavior, very well accepted Too long, somewhat boring.

#### Yavapai

Plan to use it each year. Lessons 1, 4, 7, 10, and 12, only lessons that helped meet objective. Omit lessons 5, combine lessons 2, 3, and 4 and combine lessons 8 and 9. Extremely long. Takes too much time to prepare.

Probably could be made into 3 units.





The revelant data collected during the field test is summarized below:

- 1. A total of 611 learners were exposed to this unit in 6 of the 9 participating projects. Fifty-two percent of the learners were male and 23% of the learners were of minority backgrounds.
- 2. Of the 23 teachers that presented the unit 22 were female, the median years of experience was between 6-10 years, and 15 had taught or developed career education material.
- 3. Teachers expressed a positive attitude toward career education in general (3.91 on a scale where 5 was the highest positive response). Though still positive, the teachers' attitude toward this particular unit was somewhat lower (3.29).
- 4. The learners also exhibited a positive attitude toward the unit with 66% of the 2919 responses positive, 23% no opinion, and 11% negative.
- 5. The learners' overall performance was very high (90% correct). There was very little variability across lessons and units.

6. A list of the teachers critical comments and recommendations was presented in the body of this report.

CONCLUSIONS AND RECOMMENDATIONS

- 1. Future users of this unit should review the unit in its entirety paying particular attention to the content of each activity noting when during their teaching year it is best to be taught.
- 2. During installation the teachers, while not constrained by field testing, should be made aware that
  the lessons as presented are only suggestions and
  may be modified, resequenced, augmented or reduced
  as desired.
- 3. This unit presented a wide range of activity suggestions, many of which may be extracted to constitute an enrichment program in addition to the unit.
- 4. This unit was well received by students who scored a very high 90% on the test items. Even though Teacher Attitude is low, it is recommended that this unit be included in the implementation phase of curriculum development on the strength of a high Student Attitude and a high Student Performance.

APPENDIX I
Additional Data

Mean Student Performance by Time of Day Unit Taught

	1	*Learner	Time of Day
Project	Teacher #	Performance	1=pm 2=am
Coconino .	1	86	2
Central Maricopa	1	96	1
	2	. 97	1
J •	-3	95	1
Mesa	1	99	1.
	2	93	1
	3	89	<u>.</u>
,	4 .	92	1
,	5	95	2
	6	94 a	2
	7	92	, 1,
	8	78	2
Pinal	1	89	1
* * * * * * * * * * * * * * * * * * *	2 .	82	1
4,	3	-	1 '
	4	90	2
Pima	1	-	2
	· 2 -	_	i
•	3	86	1
	4		. 1
Yavapai	. 1	98	1
• ·	2	88	1
٠	3	87	2



r=-0.32 . Percent of students attaining the unit objectives

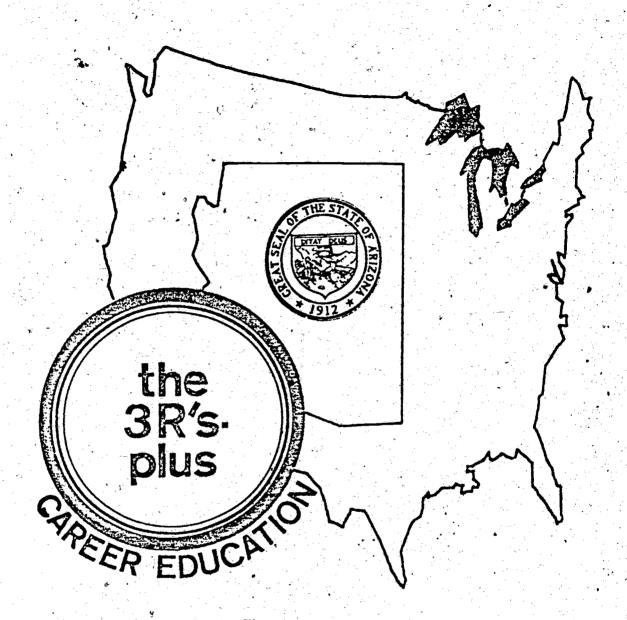
Mean Learners Perfromance on a Unit by Mean Instructor Attitude Toward the Unit

Project	Teachér #	*Learner Performance	Instructor Unit Attitude
Coconino	1	86	4.00
Central Maricopa	1	96	4.00
•	2	97	4.00
	3	95	4.00
Mesa	. 1 .	99	2.67
	2	93	2.33
	<b>'3</b>	89	1.67
	4	92	3.00
	5	95	3.00
•	6 .	94	5.00
	7	92	<b>2.</b> 67
	8	78	5.00.
Pinal	1	89	. 3.67
	2	82	2.67
	3 4	· <b>-</b> -,	3.33
	4	90	2.67
Pima .	1	<b>—</b>	3.00
4	2	• •	2.33
	3	86	4.00
	4	- ( )	3.00
Yavapai	1	98	3.67
•	2	88	1.67
	3	87	5.00

<sup>\*</sup>Percent of students attaining unit-objectives r= 0.12 39



APPENDIX II
UNIVAL



# Unit Evaluation United

WE NEED ONE ANOTHER GRADE LEVEL: 3

### PART I

# CAREER EDUCATION FIELD TEST PROGRAM INFORMATION

Please print:	
Instructor	School
Unit or Kit Title	District
Grade Level	Project
Date unit or Kit introduced i	
	mo. day year
Student data: (*the numbers sho	uld agree)
*Total number of students exp	osed to the unit
*Number of students of each s	ex: a. male b. female
*Number of students in each e	thnic group:
a. American Indian	d. Anglo White
b. Black	e. Other
c. Spanish Surname	
DIRECTIONS: Circle the letter o following questions  Teachers:	
How many years have you worke	d in the field of education?
a. Less than one	d. 11-15 years
b. 1-5 years	e. More than 15 years
c. 6-10 years	
	best describe your exposure to
a. Developed a Career Edu	cation unit or program
b. Taught a Career Educat	ion unit or program
c. Read a Career Education	n unit or program
d. Had some exposure to C	areer Education
e. Had no exposure to Car	eer Education

What is your sex?	•
a. Male	
b. Female	· · · · · · · · · · · · · · · · · · ·
Is your classroom: (more than	one answer may be applicable)
a. Open	
b. Self-contained	
c. Team taught	
What time of day were the less	ons taught (predominantly)?
a. AM	
b. PM	
How much time did you devote to	o the unit each week?
a. Less than 1 hour	
b. 1-2 hours	
c. 2-3 hours	
d. 3-5 hours	
e. More than 5 hours	
How many guest speakers were us unit?	sed in conjunction with the
a. 0	
<b>b.</b> 1	
c,2	
<b>d.</b> 3	•
e. 4 or more	
Have you had another occupation	
a. Social sciences	e. Technical
b. Physical sciences	f. Construction
c. Chemical sciences	g. Industry'
d. Business	h

Did this experience help in teaching the Career Education unit?

- a. Yes
- b. No

#### PART II

#### Learner Performance Data

pirections:

Please provide an indication of how well the lessons delivered the performance objectives. The lesson numbers and methods of evaluation for each have been indicated. Page numbers, objective specifications, and item numbers are indicated as appropriate. Please indicate the total number of learners responding. Then record the number that responded correctly. Complete this form as you teach each lesson of the unit.

···		Method of .Evaluation			Number of Learners		
Lesson Number	<b>J</b>		Checklist	Instructor Judgment	Responding	Responding Correctly	
1	p. 30-31	•					
2	p. 43-45				,		
3 .	p. 53-55			•			
4	p. 65-67			•	2	· · · · · · · · · · · · · · · · · · ·	
5	p. 79-81						
6	p. 88-89			to be the state of			
7	p. 97-99		Water to			•	
8	p.109-111						
9	p.117-119						
10	p.125-127	3.0				4.	
11	p.134-135						
12	p.146-147		i i			e e	
12	p.146-147						

We Need One Another Grade Level 3

### PART III

# Instructor Attitudinal Data

Directions: Read each statement and place a check in the box under the heading that describes your response.

	Strongly Agree	Agree	Mo Opinion	Disagree	Strongly Disagree
Classes in my subject grade level would be more meaningful and rele- vant if focused around Career Education objec- tives.					
Career Education is just another fad that will soon be forgotten.				•	
After minimal revisions this unit will be ready for statewide distribution.			ė	•	
The learning activities were very effective in helping meet the performance stated.			۸۰		
The content of the unit relates directly to my regular class program.	and the second s		•		# 3.
Indicate below any further weaknesses of the unit.	comments c	oncerni	ng the st	rengths or	•
er je se samen en e	÷				. 1
	4.		•		
			_	•	ده ني دويونون مخه
	•				
•		•	·		•
				•	



## Learner Attitudinal Pata

On the following page is an attitudinal survey which we would like your learners to respond to. Please remove that page from this instrument and reproduce enough copies for each of your learners. We feel that it would be best if your learners responded to this survey at the completion of the unit. If your learners do not have the needed reading ability to complete the survey, please read and explain the items to them. After the learners have completed the survey, please tally their responses and record the total number of learners responding in each manner of the form provided below.

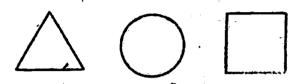
	YES	_	I DON'T	•	NO
1.				est.	
• .				Harry St. No.	
2.		-			
				<b>)</b>	<del></del>
3.	n.	•		4	to to
		•		J 9 - *	
4.		e	.s	•	•
**		, i			
	НАРРУ		OK		SAD
5.					
· ·		i i			
6.		•			
			· ·	<b>.</b>	
7.		ı		,	٠
		l .			



í.	Would	you	want	to I	KNOW	more
	about	what	we l	làve	lear	ned
	in the	ese l	es s ci	18?	•	



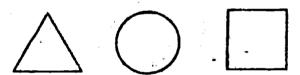
2. Do you know more now about these lessons than before?



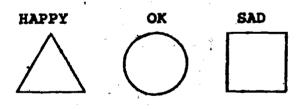
3. Were the lessons interesting to you?



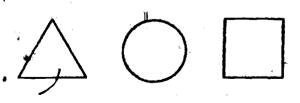
4. Do you think that next year's class should be given these lessons?



5. How did you feel about the lessons?



6. How did most of your other classmates feel about the lessons?



7. How did your teacher feel about the lessons?

