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ABSTRACT

The study's purpose was to examine the effects of a planned program of educational-occupational information on the knowledge of occupations, level of aspiration, level of training and the self-concept of Maine elementary school students. The experimental group, from Veazie, consisted of grades 2, 3, 5, and 6. The control group was from the same grade levels at Old Town. Twelve planned lessons were presented to each class in the experimental group. The Lorge-Thorndike Intelligence Test and the Otis-Lennon Intelligence Test revealed no significant differences between mean intelligence tests in any grade except Grade 3. The Iowa Test of Basic Skills and the Stanford Achievement Test provided reading achievement data. A Knowledge of Occupations test, the Thomas Self Concept Scale, Coopersmith Self-Esteem Inventory, and the Level of Aspiration Scale pre- and posttests showed no significant differences between the two groups. Only in the Level of Training Scale was there a significant difference--Grades 3 and 5 of the experimental group had significantly higher means. The reliability of the test instruments was questioned. It was concluded that the study provides evidence of the need for a planned program of career information in the school system. (AG)



Presenting a Planned Program of Career Information To Elementary School Children

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Research and Development Series C/71-3

Presenting a Planned Program of Career Information

To Elementary School Children

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T. THTRODUCTION

It was the purpose of this study to examine the effects of a planned program of educational-occupational information on the knowledge of occupations, level of aspiration, level of training, and the self-concept of elementary school students. The experimental groups were second, third, fifth, and sixth grade classes at the John R. Graham School in Veazie, Maine, while the control groups were from the Herbert Sargent and the Jefferson Street Schools in Old Town, Maine.

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BACKGROUND

Veazie is a small commuter community (population - 1540) located on the Penobscot River, between Bangor and Orono. Its population includes retirees, University of Maine professional and service employees, and those employed in various industries within the Bangor - Brewer - Old Town area. When compared with other communities in the area, Veazie enjoys a relatively low property tax assessment. Unemployment is minimal, and the disadvantaged population is estimated at 5%.

Old Town is an industrial town of approximately 7,000 population. It is also located on the Penobscot River, and adjoins the University of Maine at Orono. Old Town has a diversified economic and educational background, and the neighborhood solools are no exception. The Herbert Sargent School is located near the University campus and has a large number of children of University students, professors, and employees, plus many rural families. The sixth grade of this school, for reasons of space, was located in the Jefferson Street School, one of the down-



town elementary schools. Old Town's unemployment rate has been calculated at 9%, and its disadvantaged population at 19%.

The John R. Graham School in Veazie encompasses grades K through 8, with a total school enrollment of approximately 260. There are 13 classroom teachers, with a two-session kindergarten. The pupil - teacher ratio is 18 to 1. The town also employs a full-time supervising principal, a reading consultant, a resource center director, two teacher aides, a part-time guidance consultant, and a part-time music instructor.

The school has recently evolved, both theoretically and structurally, from traditional self-contained classrooms to an open concept with cooperative teaching and flexible space as an integral part of the total program. Presently, Grades K and 1 are virtually self-contained, Grades 2 and 3 are semi-open, Grades 4, 5 and 6 are completely open and physically integrated with the resource center, and Grades 7 and 8 are open and departmentalized. The per pupil cost is approximately \$630.00, and while the school lacks a multipurpose room, cafeteria, or gymnasium, the town has been most enthusiastic and generous in its support of the total school program.

The Old Town elementary schools in the study operated at about a 25 to 1 pupil teacher ratio, and enjoy considerable community support.

NEED FOR STUDY

The need to integrate occupational information into the existing curricula of elementary schools has been stressed by several authors (Dinkmeyer, 1968; Hill, 1968; Peters, Shertzer, and VanHoose, 1965). Since occupational choice is generally conceived of as a process, no



single period of a child's life can be designated as the sole time when one makes his occupational choice.

Hoppock (1957) felt that the child picks up a great deal of information and misinformation in the elementary school that has a considerable impact on later occupational choice. Wrenn (1962) argued for the need for systematic presentation of occupational information in the elementary school because of the increasing requirements necessary to enter large numbers of occupations.

Both Hoppock and Wrenn call for systematic approaches to occupational information in regular classroom instruction. A planned program of this sort is needed because present incidental approaches are often distorted and incomplete, and affect the child at a time when his attitudes toward the world of work are constantly changing. Adequate, authentic, and realistic information about occupations should be systematically presented at the elementary school level, as career selection is a continuous process, not a single isolated event.

Several teachers at the John R. Graham School had become interested in occupational-educational information at their particular grade levels, and this study was an excellent vehicle to acquaint the entire faculty with the importance of a planned program in this educational area, as well as to provide the researchers with baseline information and experiences that would indicate directions for an ongoing program as an integral part of the curriculum.

Because the school at that time did not offer or provide any kind of a planned, sequential occupational-educational program, Grades 2, 3, 5 and 6 were selected to participate in the study at the Veazie school. Old Town was selected for the control groups because of proximity, and



as one of the counselors involved in the study was employed in that school system.

THE STUDY

The original plan for the study was to present twelve planned units of vocational-educational information according to the following design:

- 1. Counselor presentation to one grade at Veazie.
- Teacher presentation to another grade, at the same level, at Veazie.
- 3. No treatment to another grade at the same level in Old Town. This design was to be followed in each of the selected grades, i.e. second, third, and fifth. Pre-testing and post-testing were to be accomplished with both the experimental and control groups.

However, construction at the Veazie school during the fall of 1971, which resulted in the second, third, and fifth grades being combined in the same classroom space, necessitated some basic changes in the design. First, the teacher presentation was dropped from the study. A further development was the training of one of the Graham School third grade teachers as a career development specialist, who by the time the study was underway, had already embarked upon an inclass program of occupational-educational information as part of her daily schedule. It was decided, then, to include Grade 3 in the pretesting and post-testing, to provide this teacher with the same materials to be used in the counselor presentation, but not to structure her regular program in any way. Grade 6, one of the few single grades in the school, was then added to the study as the third



experimental group.

The final format was as follows:

Experimental groups

Pre-testing and post-testing

Grade 2 - Veazie - counselor presentation

Grade 3 - Veazie - teacher operating independently

Grade 5 - Veazie - counselor presentation

Grade 6 - Veazie - counselor presentation

Control groups

Pre-testing and post-testing

Grade 2 - Sargent School, Old Town - no treatment

Grade 3 - Sargent School, Old Town - no treatment

Grade 5 - Sargent School, Old Town - no treatment

Grade 6 - Jefferson Street School, Old Town, no treatment

A mitigating factor in the initiation of the study was the construction at the Veazio school. It postponed the beginning of the study from October to January. The post-testing was completed at both schools by May, 1972.

The Level of Aspiration Scale, Level of Training Scale, and a Knowledge of Occupations Test were administered to each group. The Thomas Self-Concept Scale was administered to each second and third grade group, and the Coopersmith Self-Esteem Inventory was administered to Grades 5 and 6 (see Appendix D and E).

In addition, intelligence tests and reading achievement tests were analyzed for both the experimental and control groups. The Veazie groups had been administered the Lorge-Thorndike Intelligence

Tests and the Iowa Tests of Basic Skills, while the Old Town groups had taken the Otis-Lennon Intelligence Test and the Stanford Achievement

Test. (The analysis of the data yielded by the testing program will be



presented in the Results section of this report. For additional data on subjects used in the study, see Tables 1, 2 and 3.)

GENERAL OBJECTIVES

General Objectives of this study were:

- 1. To determine if a planned program of educational-vocational information in Grades 2, 3, 5 and 6 would increase the student's knowledge of occupations.
- 2. To determine if the student changes his level of aspiration as he is exposed to educational-vocational information.
- 3. To determine if a planned program of educational-vocational information affects the self-concept of elementary school students.
- 4. To determine if the student becomes more aware of the level of training necessary for certain occupations.
- 5. To determine if a student with high potential will gain more occupational knowledge from the experimental program than will a student with low potential.
- 6. To determine if a student with high potential will change his level of aspiration more than a student with low potential, in the experimental program.
- 7. To determine if a student with high potential, in the experimental program, will change his self-concept more than the student with low potential.
- 8. To determine if a student with high potential, in the experimental program, will become more aware of the level of training necessary for certain occupations.

PERSONNEL

Two practicing school counselors were involved in the study.

Counselor A was a full-time elementary counselor in the Veazie - Orono school district, and a doctoral candidate in counseling at the University of Maine. He was the Director of the Study, wrote both the initial proposal and the final summary, and accomplished all the pre-testing and post-testing of the experimental groups. Counselor B



was the Director of Guidance at a local high school, then on sabbatical leave at the University of Maine, and working part-time as an elementary counselor in Old Town. Counselor B assisted in the preparation of the study and the final report, taught the twelve prepared units to each of the three participating experimental groups, and accomplished all of the pre-testing and post-testing of the control groups.

II. METHODOLOGY

Twelve planned lessons were presented to each class in the experimental group. These lessons included film presentations, film strips, field trips, guest speakers, and discussions, among other classroom approaches. The instructor used the lesson objectives as outlined in the syllabus, and then chose from a variety of follow-up activities (a sample lesson is included in Appendix A).

For example, second grade students were asked to draw pictures of what they wanted to be when they grew up; they evaluated how they saw their own abilities using a self-rating scale that encouraged them to grade themselves in the various subject areas. Students in Grade 5 surveyed the jobs that their parents held, and compared these occupations with those the students themselves indicated they wanted to pursue. Field trips were preceded by a survey of the types of jobs to be observed, and an oral evaluation followed each field trip.



THE SUBJECTS:

In Table 1, the results of intelligence tests for both groups are presented.

 $\label{eq:Table 1} \mbox{$\mbox{$\mbox{A}$ Comparison of the Intelligence Test Mean Scores}}$

of Participating Classes

Test School Grade	John Gr	-Thorndike aham School Experimental	Otis-Lennon Herbert Sargent School Old Town Control				
Grade	veazie X	SD	VIG LOWN	SD			
2	105.70	11.22	108.90	13.93			
3	98.38	12.43	107.35	13.14			
5	108.89	13.51	105.22	16.01			
6	111.47	13.62	111.05	16.63			

There were no significant differences between the mean intelligence tests in Grades 2, 5 and 6, but there was a significant difference in Grade 3. It should be noted, however, that both groups were not administered the same tests. Since the tests are somewhat similar as far as content and scaling procedure, they are reported in order for the reader to be able to compare groups and interpret the results.



In Table 2, the results of Reading Achievement Tests for both groups are presented.

Table 2

A mparison of the Reading Achievement Test Mean Grade

Equivalent Scores of Participating Classes

	Experi	imental	Control Stanford Achievement Herbert Sargent School Old Town		
Test School Grade	<u>Iowa Test of</u> John Graha Veaz	m School			
	$\overline{\mathbf{x}}$	SD	$\overline{\mathbf{x}}$	SD	
2	3.24	1.39	Not Ava	ailable	
3	3.55	1.09	4.34	1.47	
5	8.45	1.36	7.36	1.32	
6	8.26	•97	7.61	1.61	

In Table 3, the number of students and the sex distribution in each class is presented.

Table 3
Sex Distribution By Grade of Groups

Group	E	xper:	imental	Control			
Grade	John Graham School Veazie				Sar Old	gent School Iown	
	M	F	Total	М	F	Total	
2	16	14	30	9	12	21	
3	14	12	26	10	7	17	
5	11	16	27	11	12	23	
6	_6	<u>13</u>	<u>19</u>	<u>11</u>	<u>10</u>	_21	
T	47	55	102	41	41	82	



DESIGN:

A pre-test - post-test non-equivalent control group design was employed. This design was utilized because intact classes were used and the major characteristics of the students were somewhat similar in both schools. Randomization was not possible. Analysis of covariance was used to equate the two groups.

The classes at the John R. Graham School in Veazie were selected as the experimental groups. The counselor presented the vocational-educational information in Grades 2, 5 and 6. The teacher of the third grade class presented the information to her class. The classes at the Herbert Sargent School in Old Town were designated as the control groups. These classes did not receive any assistance or instruction in the vocational-educational area other than what might be a part of their regular social studies curriculum. Both groups were tested at the beginning of the program and at the conclusion.

INSTRUMENTS:

The following instruments were used in the study:

- a. The Thomas Self-Concept Scale (Grades 2 and 3)
- b. The Coopersmith Self-Esteem Inventory (Grades 5 and 6)
- c. Level of Aspiration Scale
- d. Knowledge of Occupations Test
- e. Level of Training Scale

See Appendix for sample copies of instruments used.



III. DATA ANALYSIS AND RESULTS:

The tests were scored and the results processed by the Computing and Data Processing Services of the University of Maine at Orono.

The analysis was made by the IBM 370 computer. Analysis of covariance was computed comparing the adjusted means of the experimental and control groups. Correlations were computed comparing the pre - post test results on the scales used and comparing pre- and post-test with adjusted means of the experimental and control groups.

The study was designed to test the effects of an experimental vocational-educational program on student's knowledge of occupations, self-concept, and level of aspiration.

A. Knowledge of Occupations:

It was hypothesized that there were no significant differences in knowledge of occupations between the experimental and control groups at each grade level. The pre - post test means are presented in Table 4.

Table 4

Pre - Post Test Means for Experimental and Control Groups On

Knowledge of Occupations Test

Group Schoo		•	mental m Schoo	1	Herbe		trol gent Sc	hoo1	Combined Groups Total			
Grade	Pr	:e	Pos	t	Pr	·e	Pos	t	Pr	e	Pos	t
•	\bar{x}	SD	\overline{x}	SD	$\overline{\mathbf{x}}$	SD	$\overline{\mathbf{x}}$	SD	\overline{x}	SD	\overline{x}	SD
2	6.57	1.72	7.97	2.06	6.81	2.14	7.48	1.97	6.69	1.92	7.78	2.05
3	19.81	4.53	24.35	5.24	19.18	4.28	23.24	5.33	19.93	4.68	24.20	5.31
5	13.33	3.16	14.,81	4.17	13.48	3.15	14.26	3.45	13.40	3.12	14.56	3.83
6	13.05	5.07	14.37	4.46	12.10	3.71	14.43	4.86	12.56	4.44	14.51	4,62



It should be noted that a different but similar test was given to grades two and three. The same form of the test was given to grades five and six. The sixth grade groups have lower mean scores, although not statistically significantly lower, than the fifth grade group.

The results of the analysis of covariance between the experimental and control groups at each grade level is given in Table 5 and the adjusted means for each group are listed in Table 6.

Table 5

Analysis of Covariance of Knowledge of Occupation Scores
by Grade Level

Source of Variation	Sum of Sq	d f	Mean Sq	F
Grade 2				
Treatment.	4.224	1	4.224	1.173
Error	172.876	48	3.602	
Grade 3				
Treatment	3.815	1	3.815	.240
Error	634.622	40	15.865	
Grade 5				
Treatment	5.329	1	5.329	•520
Error	481,,284	47	10.240	
Grade 6				
Treatment	2.219	1	2.219	.0118
Error	693.148	37	18.734	



Table 6
Adjusted Means by Covariance Analysis on

Knowledge of Occupation Scale

	Exper	imental	Con	ntrol
Grade	Post X	Adj X	Post X	Adj X
2	7.97	8.006	7.48	7.419
3	24.35	24.1148	23.24	23.538
5	14.81	14.861	14.26	14.206
6	14.37	14.150	14.43	14.625

All F ratio values were not significant at the .05 level. Therefore, the null hypotheses were retained. There were no significant differences on the <u>Knowledge of Occupations Scale</u> between the experimental and control groups at each grade level. These results were consistent for Grades 2, 5 and 6 where the experimental groups were taught by the elementary counselor and for Grade 3 where the group was taught by the regular classroom teacher.



The correlations between the pre- and post-test scores on the Knowledge of Occupations Scale for each grade level are presented in Table 7.

Table 7

Correlations Between Pre - Post Knowledge of Occupations For

Experimental and Control Groups at Each Grade Level

Grade	Experimental John Graham School	Control Herbert Sargent School	Both Groups Combined
2	•562 **	• 142	.358 *
3	.688 **	.631 **	.696 **
5	.629 **	•494 *	.568 **
6	.571 *	.241	.407 *

^{*}Sig at .05

For the experimental group, the correlations for each grade level were significantly different from zero. However, for the control group, two of the four comparisons showed zero or chance relationships. The correlations of the experimental group showed a moderate relationship between the performance of the students on the pre-test and post-test. However, if the scores are viewed as a test-retest reliability index, the tests had low reliability.



^{**}Sig at .01

It was also hypothesized that there would be no relationship between IQ and knowledge of occupations. The correlations between IQ and pre and post knowledge of occupations scores are presented in Table 8.

Table 8

Correlations Between IQ and Pre - Post Knowledge of Occupations

For Experimental and Control Groups

Group School Grade		xperimenta Graham Sc Pre	am School Herbert Sargent Sch			
2	28	•532 **	.312	19	.488 *	.201
3	24	.408 *	.609 **	15	.087	•375
5	25	•505 **	.394 *	21	.450 *	•265
6	17	•442	.404	19	.060	•409

^{*}Sig at .05

A consistent pattern was only true for grades three and five of the experimental groups. Intelligence had a better than chance relationship with the pre- and post-test knowledge of occupations scores. It should be noted, however, that intelligence test scores seemed to be related significantly with the pre-test rather than on the post-test scores. All of the control group correlations were zero order or chance relationships.



^{**}Sig at .01

B. Self-Concept:

It was hypothesized that there were no significant differences in self-concept between the experimental and control groups at each grade level. The pre - post test means are contained in Table 9 for the
Thomas Self-Concept Scale">Thomas Self-Concept Scale and in Table 10 for the
Esteem Inventory.

Table 9

Pre - Post Test Means For Experimental and Control Groups

on the Thomas Self-Concept Test

	Group Experimental School John Graham School			•					Combined Total			
Grade			Pos		$\frac{Pre}{X}$		Pos X		$\frac{1}{X}$	ce SD	_Pos	SD SD
. 2	42.80	10.52	43.50	8.59	51.38	7.89	43.10	11.43	45.94	10.37	43.80	9.53
3	43.65	6.92	42.23	8.86	48.29	7.52	40.47	13.79	45.31	7.41	41.44	10.73

Table 10

Pre - Post Test Means For Experimental and Control Groups

on the Coopersmith Self-Esteem Inventory

Group Experimental School John Graham School			Herbei		trol gent S	chool	Combined Total					
Grade	P	re	_Pos	st	_Pre	•	Pos	st	_ Pı	ce	_Po:	st
	<u> </u>	SD	<u> </u>	SD	<u> </u>	SD	<u> </u>	SD	<u>X</u>	SD	<u> </u>	SD
5	56.89	20.74	52.59	21.93	62.00	20.60	58.43	22.32	59.24	20.62	55.28	22.08
6	54.74	22.86	58.74	14.73	58.29	15.83	64.19	17.46	56.31	19.47	61.33	16.37

The control groups both on the <u>Thomas Self-Concept Scale</u> and the Coopersmith Self-Esteem Inventory had higher mean scores than the



Experimental group. On the <u>Thomas Self-Concept'Scale</u> (TSCT) the control group for both grades showed lower mean scores on the post-test. The second grade experimental group was the only group which showed an increase, although not statistically significant. On the <u>Coopersmith Self-Esteem Inventory</u> (CSEI) both sixth grade groups showed an increase while both fifth grade groups decreased in the post testing.

The results of the analysis of covariance between the experimental and control groups at each grade level is given in Table 11 and the adjusted means for each group are listed in Table 12.

Table 11

Analysis of Covariance of Self-Concept Scores by Grade Level

<u> </u>				
Source of Variation	Sum of Sq	df	Mean Sq	F
Grade 2 TSCT				
Treatment	57.116	1	57.116	0.606
Error	4524.237	48	94.255	
Grade 3 <u>TSCT</u>				
Treatment	205.084	1	205.084	1.972
Error	4160.968	40	104.024	
Grade 5 <u>CSEI</u>				
Treatment	45.787	1	45.787	0.1874
Error	11482.739	47	244.314	
Grade 6 CSEI				
Treatment	132.457	1	132.457	0.776
Error	6316.946	37	170.728	



Table 12

Adjusted Means by Covariance Analysis on Self-Concept Scales

	Experi	mental	Con	trol	
Grade	Post X	Adj X	Post X	Adj X	-
2	43.50	44.305	43.10	41.945	
3	42.23	43.391	40.47	38.696	
5	52.59	54.39	58.43	56.325	
6	58.74	59.678	64.19	63.338	_

All F ratio values were not significant at the .05 level.

Therefore, the null hypotheses were retained. There were no significant differences on scores on the self-concept scales between the experimental and control groups at each grade level. These results were consistent for grades 2, 5 and 6 where the experimental groups were taught by the counselor and for Grade 3 where the group was taught by the regular classroom teacher.

The correlations between the pre- and post-test <u>TSCT</u> scores for grades 2 and 3 are presented in Table 13. The correlations between both administrations of the <u>SCEI</u> are presented in Table 14.

Table 13

Correlations Between Pre- and Post-Administrations

οf	the	<u>Thomas</u>	Self-Concept	Test
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Grade	df	Experimental	df	Contro 1	df	Total
2	28	.379 *	19	•012	47	•246
3	24	•527 **	15	.315	39	•372 *

^{*}Sig at .05

^{**}Sig at .01



The correlations between the pre- and post-tests on the <u>TSCT</u> for the experimental group were significantly different from zero; however, as any indicator of test stability or reliability, the correlations were very low. The correlations of the control group only indicated a chance relationship.

Table 14

Correlations Between the Pre- and Post-Administrations

of the Coopersmith Self-Esteem Inventory

Grade	df	Experimental	df	Control	df	Total
5	25	.736 **	21	.689 **	46	.719 **
6	17	.679 **	19	•575 **	36	.607 **

**Sig at .01

The correlations between the pre- and post-testing on the <u>CSEI</u> for both groups were significant beyond the .01 level. The correlations were moderate and the analysis indicated greater stability of results.

It was also hypothesized that there would be no relationship between IQ and self-concept. The correlations between intelligence test scores and the <u>TSCT</u> are presented in Table 15 and the <u>CSEI</u> and IQ in Table 16.

Table 15

Correlations Between Intelligence Pre- and Post-Testing

on the Thomas Self-Concept Test

		Experimen	nta·l		Contro	1
Grade	df_	Pre	Post	df	Pre	Post
2	28	142	286	19	046	019
3	24	.271	.021	15	112	.113



Table 16

Correlations Between Intelligence and Pre- and Post-Testing

on the Coopersmith Self-Esteem Inventory

	Е	xperimenta	.1	•	Contro	1
Grade	df	Pre	Post	df	Pre	Post
5	25	•505 **	.354	21	•354	•325
6	17	.182	•435	19	•060	.297

**Sig at .01 level

An analysis of results indicated that there were no significant correlations between the <u>TSCT</u> and intelligence. There were only chance relationships, five of which were low negative. Only one of the correlations was significant between the <u>CSEI</u> and IQ, the pre-test comparison for the fifth grade experimental group. Although the relationship between IQ and <u>CSEI</u> are positive and vary from low to moderate for the degrees of freedom indicated, only one was significantly different from zero.

C. Level of Aspiration:

Level of Aspiration Scale scores between the experimental and control groups at each grade level. The pre-post tests means are presented in Table 17. The results varied with grade level. The control group had higher means, although not statistically in Grades 3, 5 and 6.



Table 17

Pre-Post Test Means for Experimental and Control Groups

on Level of Aspiration Scale

		Experi	mental			Cont	rol			Tot	a 1	
Grade	\overline{X}^{P}	re	$\frac{P}{X}$	st	- P	re	$\frac{\mathbf{P}}{\mathbf{X}}$	st	$\frac{1}{x}$	re	_Po	
	X	SD	X		X	- <u>, sd</u>	X	SD	X	SD	X	SD
2	3.53	1.46	3.20	1.47	2.95	1.53	3.33	1.32	3.29	1.50	3.24	1.39
3	2.65	1.44	3.58	1.06	3.12	1.49	3.06	1.59	2 .80	1.46	3.40	1.30
5	2.41	1.34	3.63	1.18	3.44	1.73	3.22	1.65	2.88	1.60	3.44	1.42
6	2.61	1.71	3.89	• 9 9	3.14	1.68	3.62	2.01	2.77	1.69	3.67	1.20

The results of the analysis of covariance between the experimental and control groups at each level are given in Table 18. The adjusted means for each group are listed in Table 19.

Table 18

Analysis of Covariance of <u>Level of Aspiration</u> scores by Grade Level

Source of Variation	Sum of Sq	df	Mean Sq	F
Grade 2				
Treatment	0.924	1	. 924	.489
Error	90.676	48	1.889	
Grade 3				
Treatment	2.222	1	2.222	1.300
Error	68.378	40	1.709	
Grade 5				
Treatment	5.375	1	5.375	2,881
Error	87.697	47	1.866	
Grade 6				
Treatment	2.01	1	2.01	1,405
Error	52.915	37	1.43	



Table 19

Adjusted Means by Covariance Analysis on Level of Aspiration Scale

	Experim	ental	Cont	ro1
Grade	Post X	Adj X	Post X	Adj X
2	3.20	3.1 40	3.33	3.418
3	3.58	3.56	3.06	3.087
5	3.63	3.759	3.22	3.064
6	3.89	3.890	3.62	3.432

All F ratio values were not significant at the .05 level. Therefore, the null hypotheses were retained. There were no significant differences on the <u>Level of Aspirations Scale</u> between the experimental group and control group at each grade level. The results were consistent for grades two, five and six where the experimental group was taught by the counselor and for grade three where the class was taught by the regular teacher.

The correlations between the pre- and post-scores on the <u>Level of</u>

Aspiration Scale for each grade level are presented in Table 20.

Table 20

Correlations for Experimental and Control Groups

at Each Grade Level Between Pre-Post Knowledge of Occupations

Grade	df	Experimental	df	Control	Both Combined
2	28	099	19	.826 **	.215
3	24	 516 **	15	•284	172
5	25	120	21	.571 **	•231
6	17	 296	19	•327	039

**Sig at .01 level



Grade 2 and Grade 5 of the control group had significant correlations beyond the .01 level. Grade 3 of the experimental group had a significant correlation at the .01 level. The low and negative correlations indicated little stability of scores over the period of twelve weeks for the experimental group.

The distribution of changes are presented in Figures 1 to 4.

Pre/Po	Experimental st	Control Pre/Post 1 2 3 4 5
1	20130	1 1 1 1 0 0
2	00011	2 1 5 0 0 1
3	2 1 1 0 1	3 0 2 2 0 0
4	0 1 0 5 2	4 00020
5	3 1 3 1 2	5 00015

Figure 1. Pre-Post Level of Aspiration Scale Scores for Grade 2

Pre/Po	Experimental st	Control Pre/Post 1 2 3 4 5
<u> </u>	1 2 3 4 3	
1	00226	1 30001
2	00230	2 00001
3	0 0 2 1 2	3 00510
4	05020	4 10011
5	0 1 1 1 0	5 10102

Figure 2. Pre-Post Level of Aspiration Scale Scores for Grade 3



Pre/Po	Experimental st _1 2 3 4 5	Control Pre/Post 1 2 3 4 5	
1	0 1 1 1 2	1 40110	
2	20112	2 00010	
3	00100	3 10300	
4	00000	4 00010	
. 5	0 2 1 0 2	5 20027	

Figure 3. Pre-Post Level of Aspiration Scale Scores for Grade 5

Pre/Po	Experimental st	Control Pre/Post 1 2 3 4 5
1	0 0 1 2 4	1 10231
2	10040	2 00000
3	00011	3 10110
4	00000	4 1 1 1 2 0
5	00320	5 00204

Figure 4. Pre-Post Level of Aspiration Scale Scores for Grade 6



It was also hypothesized that there would be no relationship between IQ and <u>Level of Aspiration</u>. The correlations between IQ and <u>Level of Aspiration</u> scores are presented in Table 21.

Table 21

Correlations Between IQ and Pre-Post Level of Aspiration Scale

for Experimental and Control Groups

	I	Experiment	a1			
Grade	df	Pre	Post	df	Pre	Post
2	28	260	028	19	.266	•386
3	24	322	•345	1 5	 098	•079
5	25	•008	•325	21	•133	.124
6	17	263	•213	19	•327	•405

No significant correlations were found between the level of aspiration pre- and post-test scores and intelligance.

D. Level of Training:

It was hypothesized that there were no significant differences in <u>Level of Training Scale</u> scores between the experimental and control groups at each grade level. The pre-post test means are presented in Table 22. As the grade level increased, the mean score on the <u>Level of Training Scale</u> for the experimental group increased, whereas for the control group, the means for each grade level remained virtually the same.



Table 22

Pre-Post Test Means for Experimental and Control Groups

on the <u>Level of Training Scale</u>

Group	Experimental			Control				Total				
Test		re	_Pos	st		re	· _Po	st	_ P	re .	_ P	ost
Grade	X	SD	X	S D_	X	S D	X	SD	<u> </u>	S D	<u> </u>	SD
2	2.27	1.55	2.73	1.80	3.38	1.86	2.86	1.85	2.76	1.77	2.82	1.82
3	2.92	1.38	3.77	1.75	3.12	1.49	3.06	1.59	3.31	1.62	3.64	1.90
5	4.00	1.86	4.85	.91	3.26	1.96	3.65	1.97	3.66	1.92	4.30	1.59
6	4.79	1.75	4.89	1.41	3.62	2.16	3.62	2.01	4.13	2.04	4.28	1.83

The results of the analysis of covariance between the experimental and control groups at each level is given is Table 23. The adjusted means for each group are listed in Table 24.

Table 23

Analysis of Covariance of <u>Level of Training Scale</u> by Grade

Source of Variation	Sum of Sq	df	Mean Sq	F
Grade 2			· · · · · · · · · · · · · · · · · · ·	
Treatment	.056	1	•056	.017
Error	158.19 3	48	3.296	
Grade 3		·		
Treatment	13.176	1	13.176	6.717 *
Error	78.465	40	1.961	
Grade 5				
Treatment	8.848	1	8.848	5.954 **
Error	69.855	. 47	1.486	
Grade 6				
Treatment	7.661	1	7.661	2.758
Error	102.744	37	2.776	



**Sig at .01 level

Table 24

Adjusted Means by Covariance Analyses on the Level of Training Scale

	E x per:	imental	Con	tro1	
Grade	Post	Ad j	Post	A d j	
2	2.73	2.814	2.86	2.743	
3	3.77	4.044	3.06	2.873	
5	4.85	4.696	3.65	3.835	
6	4.89	4.706	3.62	3.789	

Two ratio values were significant at the .05 level. The null hypotheses for Grades 3 and 5 were rejected. The null hypotheses for Grade 6 was retained. The experimental groups in Grades 3 and 5 had significantly higher means. The Grade Three group was instructed by the classroom teacher while the counselor taught the Grade Five group.

Correlations between the pre- and post-scores on the <u>Level of</u>

Training Scale for each grade level are presented in Table 25.

Table 25

Correlations Between Pre-Post <u>Level of Training Scales</u> for Experimental and Control Groups at Each Grade Level

Grade	df	Experimental	df	Control	đf	Combined
2	28	. .36 0	19	071	4 7	. 147
3	24	.653 **	15	.728 **	39	.643 **
5	25	•456 *	21	.708 **	46	.606 **
6	17	•508 *	19	.265	36	•454 **

^{*}Sig at .05 level

^{**}Sig at .01 level



Only the correlations between the pre-post test scores for the second grade were not significant for the experimental group. Two grade groups had significant differences at the .01 level for the control group; the third grade and the fifth grade groups.

It was also hypothesized that there would be no relationship between IQ and Level of Training. The correlations between IQ and Level of Training are presented in Table 26.

Table 26

Correlations Between IQ and Pre-Post <u>Level of Training Scale</u>

Scores for Experimental and Control Groups

		Experimen	tal		Control	1
Grade	df	Pre	Post	df	Pre	Post
2	28	•213	.028	19	.168	.385
3	24	.2 39	.372	15	•160	013
5	25	.191	.071	21	.321	. 353
6	17	•302	•379	19	.058	.676 **

^{**}Sig at .01 level

There were no significant correlations between IQ level and Level of Training Scale scores for the experimental group and only one for the control group.



IV. SUMMARY

No significant differences were found on the self-concept scale scores, emphasizing that there are many factors other than occupational information that contribute to self-concept. The reliability of the instruments used, especially the Thomas Self-Concept Scale, is very questionable. The reliability of the Coopersmith Self-Esteem Inventory for the fifth and sixth grades is somewhat higher but only moderate for a personality inventory. The accuracy of measurement of self-concept would be hampered under these conditions. Also, a twelve-week program might not be enough time to produce change in self-concept, or, for that matter, in the other variables used in the study.

No differences were found on the <u>Knowledge of Occupations Scale</u>.

An item analysis of the test should be completed to see whether the content of the course was reflected in the information measured by the instrument. The reliability of the instrument is low for a cognitive type of test.

No significant changes were found on the <u>Level of Aspiration Scale</u>. The low reliability of the scale is indicated by the low test-retest correlations. An alternative explanation of the lack of significant results might relate to the developmental aspects of job choice, and with these age groups and maturity levels, stability should not be expected.

There were significant differences in the <u>Level of Training Scale</u>, indicating that counselors and teachers can change misconceptions and provide information about the amount of training necessary for an occupation. Again, there seems to be a developmental trend.



Students at early grade levels have little idea of the industrial structure, let alone the variety of different career options and the training involved. Students at this age and grade level have little stability of career choice and are influenced by a variety of factors.

Although there were few significant differences statistically, there were several positive results of the study.

- 1. The students demonstrated through their active participation in the classroom program a genuine interest in careers and job opportunities. The diversity of information in this area generated many thoughtful and provoking questions from the students.
- 2. Parents, although their direct contacts with the program were somewhat limited in scope, were very positive in their support of a program of educational occupational information in the elementary school.
- 3. The teachers, although their actual involvement in the study was minimal, have begun to incorporate career information material and approaches used in the study as part of their on-going classroom programs. Their interest and knowledge in the educational occupational realm has grown considerably during the past year, and this is very evident in the classroom projects observed in the Fall of 1972 in the experimental school.
- 4. Both the teachers and counselors feel that a program of educational occupational information should be an integral part of the total curriculum, and not merely something superimposed on the regular school program once a week.
- 5. The teacher is the key implementer of a program of educational occupational information in the elementary school and is more qualified than a career information specialist to handle the follow-up activities that occur from a program of this sort. Student questions, the involvement of the local community and its resources, and the provision of continuity can be arranged by the teacher. The counselor should serve as a resource person, i.e., provide speakers, arrange field trips, secure materials, and encourage teachers to plan and initiate their own programs.



RECOMMENDATIONS:

- 1. The spontaneity of elementary school children in discussing career information requires that the teacher and counselor develop expertise in leading group discussions.
- 2. Single weekly lessons over a twelve-week period seemed to be too few and too isolated to make more than a minor impact in the career development consciousness of the elementary school student.

 A program of this kind needs depth, continuity, and daily involvement on the part of those involved, i.e., students, teachers, counselors, and parents.
- 3. Educational occupational information in the elementary school should be an important part of each student's school program, with opportunities provided for each child to secure information that is important to him at each stage of his development, and to provide further opportunities for each child to pursue those educational occupational avenues in which he becomes interested at the time he becomes interested in them.
- 4. A review and analysis of the item content for the <u>Knowledge</u> of Occupations Test should be conducted to determine the correlation between classroom subject matter and test content.
- 5. Career exploration programs should develop criterion referenced tests that relate to the behavioral objectives for subject matter units.
- 6. Professionally produced career education materials should be used to provide continuity and uniformity to the program. For example, the <u>Career Education Program</u>, Grades K 12 of Houghton-Mifflin or the <u>Work Experience Kit</u> of Science Research Associates are



available for use.

- 7. Additional research is needed to determine the impact of the classroom teacher's career bias on the aspirations or career choice of elementary school children. Do teachers transmit a preference for certain types of careers to the exclusion of others? Do teachers bias the career selection or aspirations of females by their acceptance or rejection of career stereotypes that exist in our culture?
- 8. What impact are counselors having on the development of career knowledge and aspiration of elementary school children? We need to design research studies that will assess the role school counselors are assuming in career development.

In summary, the evidence for a planned program of career information as generated by this study is supportive of our need for massive infusions of this procedure into the school system. It will not serve the goals of American society to leave the career development of children to chance. A priority for education must be the revising of all curriculum efforts to include a substantial infusion of career education. Education must become relevant and action-oriented if we are to demonstrate the relevancy of staying in school. Perhaps we can demonstrate to our youth that "schools really care, they want to help you succeed in life." Career education can be responsive to the evolving needs of youth and employers.



BIBLIOGRAPHY

- Coopersmith, S. The Antecendents of Self-Esteem. San Francisco: W. H. Freeman and Company, 1967.
- Dinkmeyer, D. C. (Ed.) <u>Guidance and Counseling in Elementary Schools</u>:

 <u>Readings in Theory and Practice</u>. New York: Holt, Rinehart, and Winston, 1968.
- Heath, R. W. (Project Director) <u>Comprehensive Evaluation Project</u>. Washington, D.C.: U.S. Office of Education, December, 1969. (EC-0-9-099017-4424)
- Hill, G. E. <u>Guidance in Elementary Schools</u>. In D. C. Dinkmeyer (Ed.) <u>Guidance and Counseling in Elementary Schools</u>: <u>Readings in Theory and Practice</u>. New York: Holt, Rinehart, and Winston, 1968, 17-26.
- Hoppock, Robert. Occupational Information. New York: McGraw-Hill Book Company, Inc., 1957.
- Peters, H. J., Shertzer, B., and VanHoose, W. <u>Guidance in Elementary</u> Schools. Chicago: Rand McNally, 1965.
- Thomas, W. L. <u>The Thomas Self-Concept Values Test</u>. Rosemont, Illinois: Combined Motivation Education Systems.
- Wrenn, C. G. The Counselor in a Changing World. Washington: American Personnel and Guidance Association, 1962.



Appendix A

Fourth Grade

Lesson Plan #1

WORK AT HOME

<u>PURPOSE</u> To make boys and girls aware of the jobs they are presently doing at home.

VOCABULARY TO THE TEACHER

RESPECT QUALIFICATIONS SCHEDULE PUNCTUALITY DEPENDABLE

A discussion of the jobs the boys and girls do at home may be used as a motivational opening. Perhaps listing them on the board or have each child make his own list will be a thought-motivating process. Some of the jobs on the list may be of the type that will make the pupils sneer and laugh. An example of this might be taking garbage out. Have them talk about WHY some jobs are the kind that people like to do and there are others that people do not like to do as well. Draw from them the idea of attitudes and feelings about some kinds of work.

QUESTIONS such as these may be helpful for discussion:

"What are some jobs that you do at home?"

'Which jobs do you like to do?"

"Which jobs are the kind you like to do the least?"

'Why do we like some jobs?"

'Do we laugh at some jobs because other people laugh at them?"

"Do some people have jobs that other people may not respect?"

"How should we feel about all jobs?"



BEHAVIOR RATING FORM (BRF)

1.	Does this child adapt easily to new situations, feel comfortable in new settings, enter easily into new activities?
	alwaysusuallysometimesseldomnever
2.	Does this child hesitate to express his opinions, as evidenced by extreme caution, failure to contribute, or a subdued manner in speaking situations?
	alwaysusuallysometimesseldomnever
3.	Does this child become epset by failures or other strong stresses as evidenced by such behaviors as pouting, whining, or withdrawing?
	alwaysusuallysometimesseldomnever
4.	How often is this child chosen for activities by his classmates? Is his companionship sought for and valued?
	alwaysusuallysometimesseldomnever
5.	Does this child become alarmed or frightened easily? Does he become very restless or jittery when procedures are changed, exams are scheduled or strange individuals are in the room?
	alwaysusuallysometimesseldomnever
6.	Does this child seek much support and reassurance from his peers or the teacher, as evidenced by seeking their nearness or frequent inquiries as to whether he is doing well?
	alwaysusuallysometimesseldomnever
7.	When this child is scolded or criticized, does he become either very aggressive or very sullen and withdrawn?
	alwaysusuallysometimesseldomnever
8.	Does this child deprecate his school work, grades, activities, and work products? Does he indicate he is not doing as well as expected
	alwaysusuallysometimesseldomnever
9.	Does this child show confidence and assurance in his actions toward his teachers and classmates?
	alwaysusuallysometimesseldomnever
10.	To what extent does this child show a sense of self-esteem, self-respect, and appreciation of his own worthiness?
	always usually sometimes seldom never



11.	Does this child	publicly br	ag or boast abo	ut his explo	its?
	always	usually	sometimes	seldom	never
12.	Does this child	attempt to	d omi nate or bul	ly other chi	ldren?
	always	usually	sometimes	seld o m	ne v er
13.	Does this child behaviors as sp				
	always	us ually	sometimes	seldom	never



FIFTH & SIXTH GRADE OCCUPATIONS TEST (Form D)

- 1. Which of the following does a DIEMAKER most likely do:
 - 0 1. mixes and blends dyes
 - 0 2. assembles parts in a watch factory
 - 0 3. makes cutting and shaping
 - 0 4. applies waterproofing to roofing shingles
- 2. If a person were a <u>GLAZIER</u>, he would most likely be working for:
 - 0 1. a detective agency
 - 0 2. a law firm
 - 0 3. a pistol manufacturer
 - 0 4. a construction company
- 3. Which of the following most likely works with a PEDIATRICIAN:
 - 0 l. electrician
 - 0 2. nurse
 - 0 3. penologist
 - 0 4. nurseryman
- 4. Which of the following most likely works with a CHEMIST:
 - 0 1. psychologist
 - 0 2. bacteriologist
 - 0 3. medium
 - 0 4. receptionist
- 5. A college education is <u>NOT</u> required to be a:
 - 0 1. civil engineer
 - 0 2. secretary
 - 0 3. teacher
 - 0 4. barrister
- 6. Which of the following most likely works with a MODEL:
 - 0 1. translator
 - 0 2. stewardess
 - 0 3. actress
 - 0 4. dress designer

- 7. Which of the following is \underline{NOT} in the field of $\underline{AVIATION}$:
 - 0 1. traffic controller
 - 0 2. meteorologist
 - 0 3. navigator
 - 0 4. agronomist
- 8. If a person were a <u>CIAIMS AGENT</u>, he would most likely be working in:
 - 0 1. a newspaper office
 - 0 2. an insurance company
 - 0 3. a welfare office
 - 0 4. a department store
- 9. Which of the following is <u>NOT</u> in the field of COSMETOLOGY:
 - 0 1. manicurist
 - 0 2. hair stylist
 - 0 3. meteorologist
 - 0 4. pedicurist
- 10. Which of the following is <u>NOT</u> in the field of HEALTH:
 - 0 1. taxidermist
 - 0 2. physician
 - 0 3. therapist
 - 0 4. ophtholmologist
- 11. A college education is usually needed to be a:
 - 0 l. cryptologist
 - 0 2. actress
 - 0 3. geologist
 - 0 4. copywriter
- 12. Army officers usually have completed:
 - 0 1. high school
 - 0 2. two years of high school
 - 0 3. college
 - 0 4. elementary school

FIFTH AND SIXTH GRADE OCCUPATIONS TEST (Form E)

- 1. Most librarians have completed:
 - 0 1. high school
 - 0 2. college
 - 0 3. two years of high school
 - 0 4. elementary school
- What kind of work does a <u>DIETICIAN</u> most likely do:
 - 0 1. supervises exercise and weight control at health clubs
 - 0 2. plans menus and supervises preparation of meals
 - 0 3. sells books on how to reduce
 - 0 4. sterilizes instruments in a dental clinic
- 3. Which of the following most likely works with a GEOLOGIST:
 - 0 1. chemist
 - 0 2. landscaper
 - 0 3. teacher
 - 0 4. physiologist
- 4. What kind of work does a FLORICULTURIST do:
 - 0 1. installs floors in buildings
 - 0 2. maintains and repairs flooring
 - 0 3. mixes dough in a bakery
 - 0 4. raises flowers
- 5. Which of the following is <u>NOT</u> in the field of OFFICE WORK:
 - 0 1, accountant
 - 0 2. bookkeeper
 - 0 3. photographer
 - 0 4. stenographer
- 6. Which of the following requires the least professional training:
 - 0 1. pilot
 - 0 2. ship steward
 - 0 3. silversmith
 - 0 4. journalist

- 7. A college education is usually needed to be a:
 - 0 1. photographer
 - 0 2. locomotive engineer
 - 0 3. master machinist
 - 0 4. curator
- 8. Which of the following most likely works with a CONFECTIONER:
 - 0 1. caterer
 - 0 2. pilot
 - 0 3. physician
 - 0 4. publisher
- 9. Which of the following involves knowledge of <u>STATISTICS</u>:
 - 0 1. psychologist
 - 0 2. electrician
 - 0 3. mortician
 - 0 4. nurseryman
- 10. Which of the following is <u>NOT</u> in the field of <u>HEALTH</u>:
 - 0 1. cryptologist
 - 0 2. physician
 - 0 3. therapist
 - 0 4. ophtholmologist
- 11. Which of the following is <u>NOT</u> in the field of <u>ENTERTAINMENT</u>:
 - 0 1. impressionist
 - 0 2. choreographer
 - 0 3. critic
 - 0 4. confectioner
- 12. Which of the following most likely works with a <u>PATHOLOGIST</u>:
 - 0 1. taxidermist
 - 0 2. road builder
 - 0 3. physician
 - 0 4. draftsman



FIFTH & SIXTH GRADE OCCUPATIONS TEST (Form F)

- 1. Most Army officers have completed:
 - 0 1. high school
 - 0 2. two years of high school
 - 0 3. college
 - 0 4. elementary school
- Which of the following most likely works with a PHYSICIAN:
 - 0 1. curator
 - 0 2. archaeologist
 - 0 3. podiatrist
 - 0 4. philologist
- 3. Which of the following most likely works with a COMPOSITOR:
 - 0 1. draftsman
 - 0 2. editor
 - 0 3 electronics engineer
 - 0 4. accountant
- 4. A college education is <u>NOT</u> required to be a:
 - 0 1. barrister
 - 0 2. architect
 - 0 3. tailor
 - 0 4. agronomist
- 5. Which of the following does <u>NOT</u> require special schooling:
 - 0 1. nurse
 - 0 2. barber
 - 0 3. stewardess
 - 0 4. roofer
- 6. Which of the following is <u>NOT</u> in the field of COMMUNICATION:
 - 0 1. copywriter
 - 0 2. radiologist
 - 0 3. telephone operator
 - 0 4. TV announcer

- 7. Which of the following is <u>NOT</u> in the field of <u>PHARMACOLOGY</u>:
 - 0 1. bacteriologist
 - 0 2. biologist
 - 0 3. chemist
 - 0 4. archaeologist
- 8. Which of the following most likely works with a NURSE:
 - 0 1. agronomist
 - 0 2. anthropologist
 - 0 3. radiologist
 - 0 4. taxidermist
- 9. If a person were an <u>ADJUSTER</u>, he would most likely be working for:
 - 0 1. an insurance company
 - 0 2. a law firm
 - 0 3. a hotel chain
 - 0 4. a medical clinic
- 10. Which of the fcllowing is <u>NOT</u> in the field of <u>PERSONNEL</u>:
 - 0 1. veterinarian
 - 0 2. interviewer
 - 0 3. personnel clerk
 - 0 4. psychologist
- 11. What kind of work does a CARTOGRAPHER usually do:
 - 0 1. plans roads and highways
 - 0 2. draws maps and charts
 - 0 3. designs automobiles
 - 0 4. repairs automobiles
- 12. Which of the following does an ATTORNEY usually do:
 - 0 1. convicts lawbreakers
 - 0 2. writes legal documents
 - 0 3. presides at trials
 - 0 4. draws maps and charts



FIFTH & SIXTH GRADE OCCUPATIONS TEST

Put an X in the space in front of the job you are MOST LIKELY to have as an adult. You may not expect to work at any of these jobs on the list, but pick the one MOST LIKE the job you expect to have.

		BOYS			GIRLS
0	1.	Pilot	0	1.	Stewardess
0	2.	Athlete	0	2.	Athlete
0	3.	Doctor	0	3.	Doctor
0	4.	Teacher	0	4.	Teacher
0	5.	Policeman	0	5.	Cook
0	6.	Mi 1kman	0	6.	Nurse
0	7.	Mechanic	0	7.	Telephone Operator
0	8.	Soldier	0	8.	Hair Stylist
0	9.	Carpenter	0	9.	Secretary
0	10.	Truck Driver	0	10.	Sales lady
0	11.	Barber	0	11.	Lawyer
0	12.	Lawyer	0	12.	Chemist
0	13.	Farmer	0	13.	Actress
0	14.	Chemist	0	14.	Housewife
0	15.	Mai lman	0	15.	Waitress

What do you plan to do when you leave high school?

- 0 1. Go to work.
- 0 2. Become a housewife. (For girls only)
- 0 3. Take vocational or technical training.
- 0 4. Go to college or university for a while.
- 0 5. Graduate from college or university.
- 0 6. Graduate from college or university and take further advanced education.



Appendix D

Short Form SEI

School____

Coopersmith Self-Esteem Inventory

C1a	ssDate		
	ase mark each statement in the following way: If the statement describes how you usually feel, put a check ("LIKE ME." If the statement does not describe how you usually feel, put a column "UNLIKE ME." re are no right or wrong answers.		
	mple: I'm a hard worker	LIKE ME	UNLIKE ME
1.			
2.	I find it very hard to talk in front of the class.		
3.	There are lots of things about myself I'd change if I could.		
4.	I can make up my mind without too much trouble.		
5.	I'm a lot of fun to be with.		
6.	I get upset easily at home.		
7.	It takes me a long time to get used to anything new		
8.	I'm popular with kids my own age		
9.	My parents usually consider my feelings.		
LO.	I give in very easily.		
11.	My parents expect too much of me		
L2 .	It's pretty tough to be me	1	
L3.	Things are all mixed up in my life.		
4.	Kids usually follow my ideas		
L5 .	I have a low opinion of myself		
L6.	There are many times when I'd like to leave home		
L7.	I often feel upset in school.		
.8.	I'm not as nice looking as most people.	<u> </u>	
.9 .	If I have something to say, I usually say it		
20.	My parents understand me.		
21.	I usually feel as if my parents are pushing me		
22.	Most people are better liked than I am.		
23.	I often get discouraged in school.		·
24.	Things usually don't bother me		
25.	I can't be depended on.		<u> </u>



Name____

INDIVIDUAL RECORD SHEET

Thomas' S-C Values Test

Name			Date					
Age Sch Years Month			Teacher					
Years	Month							
Self Concept Self as Value Scores Subject		Mother	Teacher	Peer	Value Scores			
					Raw Scores	Stand	lard*	
1. Happiness								
2. Size								
3. Sociability	 					<u> </u>		
4. Ability	ļ			<u> </u>				
5. Sharing Male							-	
6. Acceptance7. Fear Things								
8. Fear People								
9. Strength	<u> </u>				•			
10. Cleanliness	ļ			ļ				
<u>ll. Health</u>	ļ					· -		
12. Attractivene	 ss 						_	
13. Material	-							
14. Independence								
Referent Raw Scores					Conc	Total Self- Concept		
Scores Standa Scores	4				Sco	res		

*from Table III **from Table II

