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To evaluate the effectiveness of a ninth grade vocational guidance course designed in a workshop during the summer of 1967, the course was taught in an experimental situation in the two high schools in Fillmore, Utah, in the spring semester of 1968. The course objective was to help rural students develop in personal and social areas which research and experience have delineated as limiting factors in decision making and adjustment to the world of work. It was hypothesized that students in the defined 1-semester vocational guidance class would make greater gains (1) in their behavior, (2) in accurately perceiving their own attitudes, and (3) in their ability to designate future vocational goals. The results of the study tended to support the stated hypotheses; however, a discrepancy occurred when each student's behavior was rated by two of his teachers. When the students rated themselves, the results favored the experimental group. When the teachers did the rating, the results favored the control group. In neither group was the percentage of increase in positive behavior greater than the percentage of those students who remained the same or who moved in the opposite direction. Observable changes in student behavior were not visible to teachers of other classes. A follow-up study was recommended to help determine the long range effects of the course. (DM)



VOCATIONAL EDUCATION FOR RURAL YOUTH

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VOCATIONAL EDUCATION FOR RURAL YOUTH

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#### SUMMARY

During the summer of 1967 a state and locally supported workshop was held in which a vocational guidance curriculum expressed in behavioral objectives terms and designed specifically for rural youth was developed. This curriculum is a four-year coordinated career curriculum, involving realistic self-understanding, exploration of the world of work, classroom training, and onthe-job experience, The first phase of the curriculum to be developed was a ninth-grade program designed to increase self-understanding for personal growth. It was taught to ninth grade students at Delta Jr. High School in Delta, Utah, and Millard Jr. High School in Fillmore, Utah, in the spring semester 1968.

Statement of the Problem: The purpose of this study was to evaluate the effectiveness of a ninth-grade vocational guidance course which had been specifically designed to help rural students develop in those personal and social areas which research and experience have delineated as limiting factors in rural youths' being able to make satisfactory decisions and adjustments pertaining to the world of work.

Hypotheses: The following hypotheses were tested: 1. Students in the defined one-semester vocational guidance class will make greater gains in their behavior as measured by the Anderson-Payne Behavioral Rating Scale than will the ninth-grade students who have not had such a guidance course.

2. Students in the defined one-semester vocational guidance class will make greater gains in accurately perceiving their cwn aptitudes as measured by the Skill Inventory - A Self Perception Measure than will the ninth-grade students who have not had such a guidance course.

3. Students in the defined one-semester vocational guidance class will make greater gains in their ability to designate future vocational goals and to do so with greater certainty as measured by a student questionnaire than will the ninth-grade students who have not had such a guidance course.

Conclusions: The results of the study tend to support the stated hypotheses. The major area of discrepancy, however, occurred when two of each student's teachers were asked to rate his behavior. When the students rated themselves, the results favored the experimental group. When the teachers did the rating, the results favored the control group. Why this is the case is not discernible at this point but certainly indicates that further research needs to be done in this area. It must be pointed out, however, that in neither group was the percentage of increase in positive behavior greater than the percentage of those students who remained the same or who moved in the opposite direction. While the teacher of the course in Delta reported that he observed changes in students' behavior as a result of the course, perhaps the changes did not carry over into the other classes, or were too small to be discernible in so short a period by other teachers. A follow-up study in a year would be helpful to determine the long range effects of the course.



### ACKNOWLEDGMENTS

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# VOCATIONAL EDUCATION FOR RURAL YOUTH

#### INTRODUCTION

A rural area faces unique problems. When its youth graduate from high school, they are faced with major decisions and adjustments, which at times they are not adequately prepared to make. As a result, many flounder with respect to their future educational and vocational goals. They find themselves without the knowledge, attitudes, or skills necessary for integration into a new life in an urban community, a large university, and/or for successful participation in the world of work. In order to cope more successfully with the problems facing Millard County youth, the school district, in cooperation with the Research Coordinating Unit of the Utah State Board of Education, sponsored a Career Guidance Workshop during the summer of 1967. The workshop committee was charged with the following:

- 1. The development of a broad outline for a four-year coordinated career curriculum, involving realistic self-understanding, exploration of the world of work, classroom training, and onthe-job experience. The curriculum was to be designed specifically for rural youth.
- 2. The detailed development of a ninth-grade course of study designed to increase self-understanding for personal growth.

To meet this specific responsibility the following behavioral objectives were developed for the indicated courses:

Human Potential (Ninth Grade)

The student should be able to do the following:



- l. Take the initiative for decision-making.
- Demonstrate self-understanding in relation to interests, abilities, values, and goals.
- 3. Demonstrate skills relating to appearance, social relationships, self confidence, and responsible behavior.
- 4. Prepare plans for the future.

Exploration of the World of Work (Tenth Grade)

The student should be able to do the following:

- 1. Demonstrate a general knowledge of career planning.
- Demonstrate a knowledge of career possibilities in several job categories.
- 3. Demonstrate a knowledge of the benefits and limitations of career possibilities.
- 4. Demonstrate the selection and the techniques of implementation of a goal.

Training and Work Experience (Eleventh and Twelfth Grade)

The student should be able to do the following:

- Demonstrate the desire and the ability to work and live harmoniously in his group with mutual respect for the rights of others.
- 2. Demonstrate good work habits.
- 3. Demonstrate knowledge and skills necessary for success in various career areas.
- 4. Demonstrate a knowledge of procedures, regulations, and customs pertinent to his career.
- 5. Demonstrate an awareness of the importance of appropriate dress and grooming.



6. Demonstrate a knowledge of his intended career.

While these units were developed for use in the Millard County schools, the learning experiences are appropriate for rural students in general. The hope is that these units may be used as a format for the development of similar units in other rural districts.

The ninth-grade unit was completed and was taught to the students of the ninth grade at Delta Junior High School in Delta, Utah, and Millard Junior High School in Fillmore, Utah, during spring semester, 1968.

Revisions and refinements were made as the teaching proceeded.

The immediate problem was to do a controlled research study as to the effectiveness of this ninth-grade course in reaching its stated objectives. This needed to be accomplished in order to better determine the kinds of experiences that can be provided which will most effectively increase students' self-understanding and development in order to prepare them to eventually make wise vocational decisions and to function adequately in the world of work.

## Statement of the Problem

The purpose of this study was to evaluate the effectiveness of a ninth-grade vocational guidance course which had been specifically designed for rural youth in an attempt to help rural students develop in those personal and social areas which research and experience have delineated as limiting factors in rural youth's being able to make satisfactory decisions and adjustments pertaining to the world of work.

#### Rationale

The ninth grade is a critical time for the adolescent. It is at



this stage of his development that the student should begin to make decisions regarding his senior high school and post high school plans. Decisions such as the selection of his course of study for the senior high school may have a lasting influence on the student's life. Shimberg and Katz (1962) suggest that guidance at the eighth and ninth-grade level cannot only help the student make the specific decisions he must make at that time, but also " . . . if at this crucial stage a pupil is helped to increase his awareness of the choice-making process and is helped to explore and develop his self-concept, he will presumably find himself better prepared to make wise decisions at subsequent choice points" (p. 126).

The problem is even more acute as it relates to rural youth. Their limited experiences in relationship to vocational role models, work opportunities, social contacts, urban cultures, occupational and educational information, and occupational aspirations increase the school's responsibility to provide vocational guidance as an integral part of the curriculum. The data gathered by Sewell (1963) indicate that the school is an important force in the determination of the aspirations and achievements of youth. Everything possible should be done to improve the rural high school's impact on its youth. An extensive program of educational and vocational guidance should be especially useful in adequately preparing rural students for a successful and productive life. The following study was designed to evaluate such a curricular attempt.

# Importance of the Study

Burchinal, et al. (1964), reviewed available literature concerning career choices of rural youth in a changing society. He concluded that:



- 1. It is becoming more and more necessary and desirable for rural youth to move to urban areas in pursuit of satisfying careers.
- 2. There is frequently a wide disparity between aspiration and fulfillment on the part of rural youth.
- 3. Rural youth appear to be at a disadvantage in the urban labor market. This is probably due to their lack of skills, training, value orientation, and personality characteristics necessary for success in an urban environment.
- 4. There appeared to be a negative influence on plans to attend college for those who intended to farm.
- 5. Rural youth from lower socio-economic levels face special problems in occupational decision-making involving both economic factors and parental attitudes.

The experience of the school officials in Utah's rural schools supports many of Burchinal's conclusions, and Utah's rural schools are believed typical of most rural schools in the Intermountain West.

In view of the special kinds of problems which our rural youth face, it is of particular importance that educators concern themselves with developing curricular experiences which will help these young people to be more competitive in the labor market and to make more satisfactory personal adjustments to the world of work. It was believed that such a curriculum had been developed in Millard School District. Research, however, needed to be done to objectively evaluate the projected outcomes of the course. If the outcomes could be verified, the curriculum could serve as a format for other rural districts in the state and nation.



# REVIEW OF THE LITERATURE

Because of combined economic and technological influences, fewer young people are entering farming. An increasing number of youth are migrating from rural to urban communities. Kaldor, et al. (1962), in completing a study of career plans of farm boys in Iowa, found that 38% of the boys surveyed planned to farm while 58% planned to enter non-farm occupations. Horner, et al. (1961) reported that economists see an urgent need for off-farm employment opportunities for rural youth. In addition, greater emphasis needs to be given to preparing youth for employment outside the home community.

Rural environmental factors, however, limit the rural youth's vocational opportunities. Haller (1966) finds that a geographically isolated boy who plans to farm and then shuts himself off from further vocational information tends to increase the tendency toward farming as a career. Lipset (1955) finds that the narrowness of the visible horizons and the lack of knowledge of opportunities retain students in small communities. A study by Straus (1962) indicates that farm boys have less opportunity to learn how to handle money than do non-farm boys. Burchinal (1965) relates that farm-reared parents lag behind urban parents in their perception of educational opportunities. This results in an inability to motivate or support their children's efforts to continue education. Slocum (1965) finds that actual working experience and influential persons are important factors in crystallizing occupational choices. Rural youth are limited in their social contacts. Burchinal (1960) believes that there is still too little occupational information available to farm youth. He also believes that farm parents show too little encouragement



or interest in educational and occupational plans for their children.

Schultz (1964) finds evidence that rural youth is handicapped in career choice because of the lack of adequate educational opportunity.

In order to be vocationally competitive, rural youth need particular help in terms of social and personal adjustment. Elias (1959) studied the self-appraisal concept in determining adjustment of farm youth as compared with other youth. He finds more social maladjustment with farm youth although they experience better adjustment with their families.

Munson (1952) reports significant differences in personal and social adjustment among urban, suburban, town, and rural youth. The suburban youth show the greatest degree of adjustment with urban, rural, and town children following in that order. Hathaway, et al. (1959) sampled 15,000 in a study of social and psychological adjustment. Their findings show that rural children are more shy, more self-depreciating, more suspicious of others, and less rebellious against authority than urban and town youth.

Rural youth need to be assisted not only directly in terms of personal adjustment, but also in adjustment into an urban society.

Zimmer (1956) reports that rural migrants entering an urban setting participate in city life less than urban natives. Burchinal (1960) indicates that a certain amount of conflict exists between the desirability of rural and urban life in the minds of boys deciding not to farm.

Vocational guidance is particularly crucial among rural youth because of their lack of desire to attend college. Cowhig, et al. (1961) found that about half of all non-farm high school seniors, but only about a third of farm seniors reported definite plans to attend college. The



study indicates that lower educational level, lower aspirations, and more economic difficulties among rural youth can be contrasted with special problems encountered by non-white rural and urban youth. Haller (1957) reports that if a boy plans to farm, he is most generally deterred from planning to go to college. Yet he also finds that boys who plan to farm have higher intelligence test scores than rural boys who do not.

Adolescence is a vital period for vocational guidance and particularly for rural youth. Horner, et al. (1967) believes that the type of
employment an individual obtains is influenced by the motivation and
direction provided by occupational aspirations, expectations, and
interests of adolescence. "These phenomena are crucial for the occupational attainment of rural youth, especially those who migrate into urban
areas. Possibly low level occupational aspirations explain to some
extent the disadvantaged position of rural migrants in the urban occupational structure. The importance attributed to the occupational orientations of youth as an explanatory variable for subsequent status attainment
is evidenced by the extensive research literature on this subject and the
increasing amount of attention being currently given to the study of these
phenomena" (p. 1).

In summary, increasing numbers of rural youth are leaving rural areas to find employment in non-farm occupations. Because of the limited opportunities in their rural communities they are disadvantaged in their new urban societies. Education must play an increasingly important role in preparing these youth to take their appropriate place in the world of work. The time of adolescence is a vital period for vocational guidance.



#### HYPOTHESES

The following hypotheses were tested:

- 1. Students in the defined one-semester vocational guidance class will make greater gains in their behavior as measured by the Anderson-Payne Behavioral Rating Scale than will the ninth-grade students who have not had such a guidance course.
- 2. Students in the defined one-semester vocational guidance class will make greater gains in accurately perceiving their own aptitudes as measured by the Skill Inventory A Self Perception Measure than will the ninth-grade students who have not had such a guidance course.
- 3. Students in the defined one-semester vocational guidance class will make greater gains in their ability to designate future vocational goals and to do so with greater certainty as measured by a student questionnaire than will the ninth-grade students who have not had such a guidance course.

#### RESEARCH DESIGN

Sampling and Procedure

During the summer of 1967 a state and locally supported workshop
was held in which a vocational guidance curriculum expressed in behavioral
objective terms and designed specifically for rural youth was developed.
This curriculum was taught in the Millard County School District during
the spring semester of the 1967-68 school year as a required subject for
all ninth-grade students.

Millard County School District's ninth-grade students from Delta



Junior High School and Millard Junior High School comprised the experimental group. The control group was composed of the ninth-grade students from Grantsville Junior High School of the Tooele County School District.

Both groups of students were from rural areas and, therefore, comparable.

The students from Millard County were given the formal class in vocational guidance; the students from Grantsville were given no formal vocational guidance course. Pre-tests were given to both the experimental and control groups in January, 1968, and post-tests were given in May, 1968.

The testing required two days on both occasions and, therefore, because of absences, the number of students involved in the study varies with the three tests used in the study. Tests were only used where there were complete pre- and post-results. Also because of a loss of tests through the mail, the teacher ratings of the Behavioral Rating Scale were unavailable for the experimental students at Millard Junior High School.

## Instruments

Behavioral Rating Scale - Alan R. Anderson and I. Reed Payne

The Behavioral Rating Scale (See Appendix A) is an instrument which
has been developed to assess non-intellectual factors as they relate to
behavioral problems and to academic success or failure. To date, data
have been gathered on 1800 students. The correlations between this
inventory and Brigham Young University GPA are relatively high--up to .50.

This instrument is designed for a student to be rated on a nine-point scale in the following twelve behavioral areas: leadership, emotional control, cooperation, initiative, dependability, social acceptance, social responsibility, teachability, trustworthiness, independence, rational control, and personal appearance. In the development of the vocational



guidance curriculum an underlying assumption was made that the same kinds of factors that are measured by the Behavioral Rating Scale would relate to success on the job and were so stated in the behavioral objectives of the course. The instrument was used to assess changes in students' behavior as reported by two of each student's teachers and by the student himself between pre- and post-testing periods.

Skill Inventory - A Self Perception Measure - Walter R. Borg

The Skill Inventory is designed to measure the student's selfperception of his skills as related to the aptitude areas of the General
Aptitude Test Battery. Its purpose is to permit a comparison of the
pupil's self-perception of his aptitudes as measured by this inventory
with his aptitude scores obtained on the GATB.

Split half reliability coefficients corrected using the Spearman-Brown formula were computed in two rural secondary schools, grades 9-12. While the subtests are short, the reliability coefficients are generally satisfactory with only three of eighteen below .70. Content validity was established by having four experienced doctoral level psychologists independently sort the test items into the aptitude areas of the GATB. Any items that were not sorted into the same aptitude area by at least three of the four psychologists were eliminated from the final form of the measure.

The Skill Inventory scores and the GATB scores are converted into deciles. Pupils whose self-perception and GATB deciles are closely comparable, i.e., within plus or minus one decile, may be considered to have realistic aptitude self-perceptions. Students who perceive their aptitude to be consistently higher or lower (2 deciles or more) are apt



to make unrealistic occupational choices because of their erroneous perception of their aptitude level.

The instrument was used to measure gains in more realistic selfperceptions between the pre- and post-testing periods. Two of the Skill
Inventory and GATB areas--Finger Dexterity and Manual Dexterity--were not
used in the present study.

Student Questionnaire

The questionnaire (See Appendix A) was used to determine the increase in the student's ability to choose a vocational goal and to determine the increase in the degree of certainty as to the choice between the pre- and post-testing periods.

## Statistical Analysis

Hypothesis I was analyzed by chi square to determine if there was any significant difference between the number of students in the experimental group and in the control group who moved in a positive direction on the Behavioral Rating Scale as rated by themselves and by two of their teachers. It was further analyzed by t-tests to determine if there was any significant difference between the mean gains made by students in the experimental group and in the control group.

Hypothesis 2 was analyzed by chi square to determine if there was any significant difference between the number of students in the experimental group and in the control group who moved in a positive direction in more accurately perceiving their own aptitudes as measured by the Skill Inventory and compared with the GATB. It was further analyzed by t-tests to determine if there was any significant difference between the mean gains made by students in the experimental group and in the control group.



Hypothesis 3 was analyzed by chi square to determine if there was any significant difference between the increase in the number of students in the experimental group and in the control group who were able to designate a future vocational goal and who were able to do so with greater certainty between pre- and post-testing periods.

# RESULTS OF THE STUDY

## Findings

The first hypothesis predicted that the students in the defined onesemester vocational guidance class would make greater gains in their
behavior than would the ninth-grade students who had not had such a
guidance course. Tables 1-3 present the results of the Behavioral Rating
Scale. Table 1 summarizes the percentages and chi squares of the number
of students who increased in positive behavior as rated by the students
themselves. Table 2 summarizes the percentages and chi squares of the
number of students who increased in positive behavior as rated by two of
each student's teachers. Table 3 summarizes the means, standard deviations, and t ratios of the mean gains in behavior for the scale as rated
by the students themselves and as rated by two of each student's teachers.
Tables 1 and 2 are broken down into boys, girls, and total experimental
and control groups. Each table is broken down into the twelve variables
of the scale in addition to giving the information for the total scale.

Data on Table 1 show that a significantly greater number of experimental boys than control boys gained on the self-rated social acceptance variable of the Behavioral Rating Scale at the .05 level of significance.

There were no significant differences between the experimental and control



Summary of percentages and chi squares for the number of experimental and control students who increased in self-rated positive behavior.

	••	Boys			Girls	3		Total	L
	Ex	Con		Ex	Con		$\mathbf{E}\mathbf{x}$	Con	
Behavioral	N=29	$\cdot$ N=18	0	N=28	N=28	2	N=57	N=46	2
Rating Scale	% up	% up	x <sup>2</sup>	% up	% up	x <sup>2</sup>	% ир	% up	x <sup>2</sup>
Leadership	55	44	0.5830	35	36	0.0032	44	39	0.3719
Emotional Control	49	44	0.1116	46	32	0.0664	47	37	1.3787
Cooperation	43	56	0.8250	39	36	0.0003	41	43	0.0995
Initiative	53	39	1.0510	46	36	0.7537	49	37	1.9105
Dependability	37	39	0.0151	32	29	0.0799	34	33	0.0393
Social Acceptance	53	22	5.0741*	26	29	0.0484	39	26	2.3219
Social									
Responsibility	41	28	1.0171	35	29	0.3609	38	28	1.3336
Teachability	49	50	0.0051	44	36	0.5143	46	41	0.3250
Trustworthiness	45	28	1.6552	25	25	0.0019	34	26	0.9931
Independence	43	44	0.0092	35	21	1.6499	39	30	0.9963
Rational Control	45	56	0.5830	39	46	0.4755	42	50	0.9085
Personal									
Appearance	55	33	2.4762	39	25	1.5442	46	28	4.3408*
TOTAL	47	40	3.2523	37	32	2.4813	42	35	7.2676*
*3.841		.05							
6.635	-								
0,000		,							

girls. Combining boys and girls, there were significant differences in favor of the experimental group on the variable of personal appearance at the .05 level of significance and on the total test at the .01 level of significance. The majority of the other variables were in the direction of prediction but were not statistically significant.

Data on Table 2 show that a significantly greater number of control boys than experimental boys gained on the teacher-rated leadership variable of the Behavioral Rating Scale at the .05 level of significance and on the test as a whole at the .05 level of significance. The control



girls were significantly higher than the experimental girls on five of the variables--cooperation, social acceptance, teachability, trustworthiness, and independence--as well as on the test as a whole which was at the .001 level of significance. The total control group was significantly higher

Summary of percentages and chi squares for the number of experimental and control students who increased in teacher-rated positive behavior.

		Boys	S		Gir	ls	7	lota 1	
	Ex	Con		Ex	Con				
Behavioral	N=29	N=18	•	N=28	N=28	•			2
Rating Scale	% up	% up	$x^2$	% <b>u</b> p	% <b>u</b> p	x <sup>2</sup>		% up	x <sup>2</sup>
Leadership	24	<b>5</b> 6	4.7483*	46	61	1.1487	35	59	5.7187*
Emotional Control	<b>3</b> 8	44	0.1956	29	43	1.2444	33	43	1.1135
Cooperation	34	<b>5</b> 0	1.1104	32	68	7,1428*	33	61	7.7802*
Initiative	27	44	1.4057	29	57	4.6666	28	52	6.2264*
Dependability	34	27	0.2297	21	32	0.8195	28	30	0.0689
Social Acceptance	41	<b>3</b> 9	0.0286	21	54	6.1714*	32	48	2.8289
Social									
Responsibility	41	<b>3</b> 9	0.0286	<b>3</b> 9	50	0.6503	49	46	0.1417
Teachability	24	<b>5</b> 0	3.3083	29	57	4.6666*	26	54	8.4212*
Trustworthiness	28	28	0.0000	11	46	8.7500*	19	<b>3</b> 9	4.9497*
Independence	<b>3</b> 8	56	1.3957	29	71	10.285*	33	65	10.3759*
Rational Control	34	<b>5</b> 6	2.0175	<b>3</b> 9	61	2.5714	37	<b>5</b> 9	4.8855*
Personal	•					•			
Appearance	<b>3</b> 8	28	0.5509	29	36	0.3274	33	32	0.006
TOTAL	33	43	4.6807*		53	38.820*	32	49	39.2496*
	05			_,					
	01								
10.827 < .0									
10.02/	<b>.</b>								

than the experimental group on seven of the twelve variables--leadership, cooperation, initiative, teachability, trustworthiness, independence, and rational control--and on the test as a whole which was at the .001 level of significance.

Data on Table 3 show that in terms of total mean gains in behavior, when the students rated themselves there was a significant difference in



Table 3

Summary of means, standard deviations, and t ratios of the gains in self-rated and teacher-rated behavior of the experimental and control groups.

	Self-Evalua	valuation			L	leacher	eacher-Evaluation	tion	
	Total Ex N=108	Total C	Con		Total N=5	L Ex 58	Total N=4	1 Con 47	
Behavioral Rating Scale	M SD	М	SD	t)	Σ	SD	Σ	SD	4
Isadership	0.546 1.512	0,319 1,	46	0.868	-0.224	2,193	0.936	2,131	-2.730*
Fmotional Confirol	2.07	35 1	58	$\infty$	-0.293	.01	-0.468	3.028	0,354
_	417 1.71	91	362	0.795	0.172	.37	0.745	2,080	-1.688*
Thitiative Thitative	1 1.64	٠,	821	2,133*	-0.552	_	.08	۲.	_
Denendahilitv	0 1.53	149	285	*	-0.155	.58	.10	.01	13
Social Accentance	435 1,48	0,106 1	• OC 5	1,388	-0.086	1,261	0,383	1,883	-1,523
Social Responsibility	0.046 2,111	149	.744	.55	.05	.92	.77	44	.27
Teachability		234	.549	$\infty$	.27	.92	.70	87	.08
Trustworthiness	<b>-</b>	90	.507	0.495	.34	_	-0.255	44	. 23
Independence	2	σ	.719	.33	.27	S	.85	86	• 30
Rational Control	9 7	0,340	.773	9.	0.224	1.644	0.957	• 94	60.
Personal Annearance	393 1	0.255	.510	.47	000.0		-0.426	.7	, 136
TOTAL	6	1,383 7	.341	1,677	-1,138	11,176	4.234	12,371	-2.335*
	t of 1.645	required	at .0	5 level	t of 1	.671	required	<b>ب</b>	eve
	*sig. at .05	level			o <b>ţ</b>	.390 r	equired	at .01	level
					မ	t .05	o c		
					rxsig. a	٠ د	rever		

favor of the experimental group on one of the twelve variables--initiative--at the .05 level of significance and on the test as a whole at the
.05 level. When the students were rated by two of each of their teachers
there was a significant difference in favor of the control group on six
of the twelve variables--leadership, cooperation, initiative, teachability, trustworthiness, and independence--and on the test as a whole at
the .05 level of significance. This is in the opposite direction from
prediction.

The information on Tables 1-3 indicates that when the students rated themselves, the data tend to uphold the hypothesis that students receiving the guidance course would increase in positive behavior. When rated by the students' teachers, however, the data are in the opposite direction from prediction and fail, therefore, to uphold the hypothesis. This is particularly true with the girls.

The second hypothesis predicted that the students in the defined onesemester vocational guidance class would make greater gains in accurately
perceiving their own aptitudes than would the ninth-grade students who
had not had such a guidance course. Tables 4 and 5 present the results
of the Skill Inventory - A Self Perception Measure. Table 4 summarizes
the percentages and chi squares of the number of students who increased in
accurately perceiving self-aptitudes. Table 5 summarizes the means,
standard deviations, and t ratios of the mean gains in more accurately
perceiving self-aptitudes. Table 4 is broken down into boys, girls, and
total experimental and control groups. Both tables are broken down into
the seven variables of the scale in addition to giving the information
for the total scale.



Data on Table 4 show that a significantly greater number of experimental boys than control boys gained on two of the seven variables of the

Summary of percentages and chi squares for the number of experimental and control students who increased in accurately perceiving self-aptitudes.

Skill Inventory		Boys Con N=24 % up	x <sup>2</sup>	Ex N=64 % up	Girls Con N=29 % up	x <sup>2</sup>	Total Ex N=114 % up	Con	x <sup>2</sup>
General Learning Ability	44	8	9.4136		41	0.0447	41	26 42	3.4241 0.0814
Verbal Aptitude Numerical	31	33	0.0454	52	48	0.0862	44		-
Aptitude	40	29	0.8212	38	28	0.8690	39 41	28 36	1.6781 0.4379
Spacial Aptitude Form Perception	44 56	29 29	1.4972 4.6841	39 * 33	41 38	0.0447 0.2316	43	34	1.2253
Clerical Perception	22	33	1.0914	41	31	0.7820	33	32	G.0024
Motor	40	21	2.6629	25	38	1.6196	32	30	0.0236
Coordination TOTAL	40	26	9.4514		38	0.0000	39	33	4.2266*
*3.841 < 6.635 <									

Skill Inventory--general ability at the .01 level of significance and form perception at the .05 level--and on the test as a whole at the .01 level of significance. There were no significant differences between the experimental and control girls. Combining boys and girls, there were significant differences in favor of the experimental group on the test as a whole at the .05 level of significance. All of the other variables were in the direction of prediction, but were not statistically significant.

Data on Table 5 show that there was no significant difference in total mean gains in accurately perceiving self-aptitudes. The majority of



the variables were in the direction of prediction but were not statistically significant.

Summary of means, standard deviations, and t ratios of the gains in accurately perceiving self-aptitudes of the experimental and control groups.

Ch:11 Inventory	E	tal x 113	Tot Co N=5	n	t
General Learning Ability Verbal Aptitude Numerical Aptitude Spacial Aptitude Form Perception Clinical Perception Motor Coordination TOTAL  t of 1.645 requires	M 0.186 0.372 0.221 0.265 0.221 -0.248 -0.168 0.823	SD 1.948 1.886 1.816 2.280 1.898 2.020 2.287 7.963	M -0.294 0.196 -0.039 -0.098 0.176 -0.118 0.157 -0.098	SD 2.013 1.721 1.811 2.032 2.251 1.976 1.859 7.106	1.445 0.567 0.851 0.977 0.132 -0.384 -0.890 0.708

The information on Tables 4 and 5 tend to uphold the hypothesis that students receiving the guidance course would increase in their ability to accurately perceive their own aptitudes.

The third hypothesis predicted that the students in the defined onesemester vocational guidance class would make greater gains in their
ability to designate future vocational goals and to do so with greater
certainty than would the ninth-grade students who had not had such a
guidance course. Table 6 presents the results of the student questionnaire. It summarizes the percentages and chi squares of those students
who designated a vocation on the post-test who did not do so on the pretest, and the gains in the degree of certainty of choice for those
students who selected vocations on both the pre- and post-tests.



Data on Table 6 show there was no significant difference between the experimental and control groups in the number of students who did not select a future vocational goal on the pre-test but who did so on the post-test. There was, however, a significant difference in favor of the experimental group at the .05 level of significance in the increase in the degree of certainty of choice between the pre- and post-testing periods.

Summary of percentages and chi squares for the number of experimental and control students who increased in designating a future vocational goal and those who did so with greater certainty.

	Expe1 N	imental % up;	Con N	trol % up	x <sup>2</sup>
Vocational Choice	20	45	7	43	0.0096
Degree of Certainty	76	45	38	24	4.7795*
ż	3.841 < .05				

#### Conclusions

It was predicted that students receiving the defined vocational guidance course would increase in positive behavior, in more accurately perceiving their own aptitudes, in being able to select a future vocational goal, and in being able to do so with a greater degree of certainty than students who had not received such a guidance course. The results of the study tend to support these predictions. The major area of discrepancy, however, occurred when two of each student's teachers were asked to rate this behavior. When the students rated themselves, the results favored the experimental group. When the teachers did the rating, the results favored the control group. Why this is the case is not



needs to be done in this area. It must be pointed out, however, that in neither group was the percentage of increase in positive behavior greater than the percentage of those students who remained the same or who moved in the opposite direction. While the teacher of the course in Delta reported that he observed changes in students' behavior as a result of the course, perhaps the changes did not carry over into the other classes or were too small to be discernible in so short a period by other teachers. A follow-up study in a year from now would be helpful to determine the long range effects of the course.

Although some of the trends indicated in this study were not statistically significant, they were nonetheless encouraging to the members of the workshop. Aware that a single effort rarely produces all of the desired results, they feel that this project was a step in the right direction and, it is hoped, merely the first step.



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APPENDIX A
UNPUBLISHED TESTS



# BEHAVIORAL RATING SCALE (OTHER)

I. Reed Payne, Ph.D. Alan R. Andersen, Ph.D.

St	Student Name Ratur: Please indicate (by the student you are choosing the appropriate of the student state of the student state of the s	te (by circling a letter) the you are evaluating. Read each appropriate letter to circle.	e place along each continuum which best describes h of the four descriptions for each scale before • This information will remain confidential.	ch best describes ach scale before confidential.
My	contact with this student has been as:	s been as: Teacher	Parent	
1 SC	SCALE (Circle a letter for each I a	h scale) c d e	<b>ب</b>	h
	works alone; avoids others; keeps ideas	•H €	contributes; cooperates and follows; seldom leads	ates oth others
	to self	involved in some activity		has an impact on what others do
II	a d	о р	£	•⊢
	handles ne	remains fairly calm;	often acts on impulse; becomes	usually acts on impulse; becomes angry or depressed
	With ease and confidence; exercises appropriate	exercises fair control;	restraint	eas
	emotional control	<pre>emotion usually is appro- priate to situation</pre>	1	with slight provocation
11	rr a	မ ဗု	f	h i
i	ı	usually insists on	usually tries to work with	works effectively with
	defies orders; ignores	having his own way; goes		most everyone; extremely
	suggestions	along with others only when it is clearly to	to do his share	helptul in nearly all situations
		his advantage		
IΛ	V a b	မ ပြ		, ,
	needs prodding; waits	does what is required	starts some things on his	and sets goals
	to1d	and no more	own	selt; iigures tnings out with a minimum of help
	others to start things			•
>	a D	e P	to by	T
	constantly assumes	generally follows	often neglects duties; does	does not finish anything
	responsibility for own behavior: always ful-		ווסר ופמחוז מככלה חומווים	vised; cannot be depended
	fills obligations and			uodn
	usually goes beyond the call of duty			



	a brothed by group members; not accepted at all; avoided by others a brothuntarily attempts to help others; shows genuine concern for the welfare of	ø c	fenerally liked; others respond to him in a friendly manner g shows concern for a select few; avoids becoming involved with others	iked; others  bim in a  nner  g  h  rn for a select  becoming  cf others; seldom inter- th others  continue  continu
others a habitua suggest accept back	others  a habitually disregards suggestions; does not accept or utilize feed- back	others  c  d  e  will discuss sugges- tions for improvement but seldom acts on them; becomes defensive when	accepts criticism but does not ask for it; responds raturely to positive criticism but resents negative	h i actively or tease actively solicits feed-back; can maturely utilize positive or negative criticism to
a differ Wrong extrem and re persis and ma	differentiates right from wrong and does the right; extremely conscientious and reliable  a b  persists; organizes time and material effectively; independent worker	c e generally can be relied upon and trusted; usu-ally straightforward and fairly consistent c d e e usually concentrates on work, does it first, then plays; gets things	f sometimes honest but inconsistent; does what is expedient or necessary for group acceptance  f g does just enough to get by; needs a push; would rather play than work	h i cannot be trusted; tries to deceive others; appears insincere h i wastes time; produces nothing; does not concentrate or organize time and material
a gradif dif rea cle	a b grasps ideas with difficulty; does not reason logically or clearly; irrational at times	some but not outstanding c d e slowly understands with repetition; needs help in formulating ideas	fassimilates quite readily; does some independent thinking; adjusts to situa- tions and accepts new ideas fairly well	h i analyzes; synthesizes; discriminates; adapts extremely well
a on dr dr	a boutstanding in appearance; sets pace in styles; dresses to enhance own personality	dresses appropriately for the occasion; is neat and clean; maintains good posture; above average in appearance	f average in appearance; does not attract attention by dress	h i careless in posture and care of clothes; demonstrates little concern about personal appearance; at times extreme in styles

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Il impression. Initial judgments are more likely to be correct. Do not hesitate to give yourself Although your c of yourself. On each scale below consider each characteristic separately in order to avoid behavior varies from day, to day, it is usually possible to select from the range of behavior that is most RATING DIRECTIONS: Read these behavioral statements as if you were the person being described. extreme ratings if warranted. This information will remain confidential. characteristi single overa

Please indicate (by circling a letter) the place along each continuum which best describes yourself, b c NOTE:

works alone; avoids remains others; keeps ideas to occasic sclf

II a handles new situations with ease and confidence; exercises appropriate emotional control

III a
 openly resists authority;
 defies orders; ignores
 suggestions

IV a needs prodding; waits to be told; relics on others to start things v a constantly assumes responsibility for own behavior; always fulfills obligations and usually goes beyond the call of duty

c d e t remains in background; contributes; cooperatoccasionally becomes follows; seldom leads involved in some activity

remains fairly calm; cannot too changeable; texercises fair control; shemotion usually is appro-

priate to situation
c
d
e
usually insists on
having his own way;
goes along with others
only when it is clearly

to his advantage c does what is required and no more

c d generally follows through; does what is expected

contributes; cooperates and stimulates others;
follows; seldom leads causes others to think;
has an impact on what
others do
i

cften acts on impulse; tecomes easily excited; shows some restraint fusually tries to work with others pleasantly; tries to do his share

 $\begin{array}{c} \epsilon \\ \text{starts some things on his} \\ \text{cwn} \end{array}$ 

f often neglects duties; does not readily accept blame

n
usually acts on impulse;
becomes angry or depressed
very easily; changes mood
with slight provocation

n works effectively with most everyone; extremely helpful in nearly all situations seeks and sets goals for self; figures things out with a minimum of help h does not finish anything unless constantly supervised; cannot be depended upon

ccepted at ed by othe tarily att others; sh refer the stions; do to ut litt or ut litt or ut lible sheet wor aterial effendent wor logicall fly; irratist	b ts to genuine lfare of not hot feed- tious and	d e stands and listens hers; shows some rn but does not go f his way to help s discuss sugges- for improvement eldom acts on them; es defensive when cized d e ally can be relied and trusted; usu-	o him in a frie hows concern fo ew; avoids beco nvolved with ot ccepts criticis	
a voluntarily att help others; sh concern for the others others  I a habitually disr suggestions; do accept or ut ii back accept or ut ii back a differentiates wrong and does extremely conscreliable a persists; crgan and material efindependent wor independent wor difficuity; doerason logicall clearly; irratitimes a outstanding in outstanding in	ts to genuine lfare of hot feed- ht from right;	created and listens thers; shows some ern but does not go of his way to help rs discuss sugges- s for improvement seldom acts on them; nes defensive when icized d e rally can be relied and trusted; usu-	hows concern for a seew; avoids becoming nvolved with others  ccepts criticism but	
help others; she concern for the others suggestions; do accept or ut liback a differentiates wrong and does extremely conscreliable a persists; crgan and material efindependent wor independent wor findependent wor clearly; irratitimes a outstanding in outstanding in	Senuine Senuine lfare of not hot feed- tious and	thers; shows some sun but does not go of his way to help rs discuss sugges-seldom acts on them; nes defensive when icized deribe relied and trusted; usu-	nows concern for a seew; avoids becoming nvolved with others ccepts criticism but	•
concern for the others  a habitually disr suggestions; do accept or ut li back  a differentiates wrong and does extremely conscreliable  a persists; crgan and material efindependent wor independent wor independent wor independent wor independent irrations clearly; irratitimes  a clearly; irratitimes  a outstanding in other sanding in	of om bud	ern but does not go of his way to help rs discuss sugges- s for improvement seldom acts on them; nes defensive when icized d e rally can be relied and trusted; usu-	nvolved with others  ccepts criticism but	hurts or is inconsiderate of others; seldom inter-
a habitually disr suggestions; do accept or ut li back  a differentiates wrong and does extremely conscreliable a persists; crgan and material ef independent wor independent wor clearly; irrati times a outstanding in outstanding in	ຸ ວິດ ສຸກດີ	discuss sugges- s for improvement seldom acts on them; nes defensive when icized defensive and trusted; usu-	ccepts criticism but	acts with others except to annoy or tease
habitually disr suggestions; do accept or ut li back  differentiates wrong and does extremely consc reliable a persists; crgan and material ef independent wor independent wor clearly; irrati times  II a outstanding in	om t;	discuss sugges- s for improvement seldom acts on them; nes defensive when icized d e rally can be relied and trusted; usu-	ccepts criticism but	h
suggestions; do accept or ut li back  k a differentiates wrong and does extremely conscretiable a persists; crgan and material efindependent wor independent wor difficulty; doereason logicall clearly; irratitimes  I a clearly; irratitimes  II a outstanding in cotstanding in	om t;	for improvement eldom acts on them; es defensive when cized d e ally can be relied and trusted; usu-	the solution in	actively solicits feed-
k a differentiates wrong and does extremely conscretiable a persists; crgan and material efindependent wor independent wor difficulty; doereason logicall clearly; irratitimes  II a cutstanding in cotts tanding in	om t; and	cized defensive when cized defensive when ally can be relied and trusted; usu-	not ask for it; responds	back; can maturely
differentiates wrong and does extremely conscretiable a persists; crgan and material ef independent wor fideficulty; doe reason logicall clearly; irrati times  II a outstanding in	om t; and	cized d ally can be and trusted;	ism but resents negative	
differentiates wrong and does extremely consc reliable a persists; crgan and material ef independent wor difficulty; doe reason logicall clearly; irrati times II a outstanding in	om t; and	d ally can be and trusted;	riticism	improve behavior
differentiates wrong and does extremely consc reliable a persists; crgan and material ef independent wor la grasps ideas wi difficulty; doe reason logicall clearly; irrati times  II a outstanding in	om t; and	ally can be and trusted;	೪	T.
wrong and does extremely consc reliable a persists; crgan and material ef independent wor independent wor difficulty; doe reason logicall clearly; irrati times  II a outstanding in	t; and	upon and trusted; usu-	sometimes honest but incon-	cannot be trusted; tries
extremely consoreliable  a persists; crgan and material ef independent wor difficulty; doereason logicall clearly; irratitimes  II a outstanding in constanding in	and	•		┅
persists; crgan and material ef independent wor  grasps ideas wi difficulty; doe reason logicall clearly; irrati times  II a outstanding in		ally straightforward and fairly consistent	ent or necessary for group acceptance	appears insincere
persists; crgan and material ef independent wor  grasps ideas wi difficulty; doe reason logicall clearly; irrati times  II a outstanding in	Д	မ ပြ	f ,	h
and material ef independent wor  I a grasps ideas wi difficulty; doe reason logicall clearly; irrati times  II a outstanding in	izes time	usually concentrates on	does just enough to get by;	wastes time; produces
independent wor  grasps ideas wi difficulty; doe reason logicall clearly; irrati times  II a outstanding in	ively;	work, does it first,	a push; would	nothing; does not con-
grasps ideas widifficulty; doe reason logicall clearly; irratitimes  II a outstanding in		then plays; gets things	play than work	centrate or organize time and material
grasps ideas widifficulty; doereason logicall clearly; irratitimes  II a outstanding in	Ą	) ; ; ;	<b>6</b> 10	
difficulty; doe reason logicall clearly; irratitimes  II a outstanding in		slowly understands with	assimilates quite readily;	analyzes; synthesizes;
reason logicall clearly; irrati times II a outstanding in	s not	repetition; needs help	independ	adapts
clearly; irratitimes  II a  outstanding in	y or	in formulating ideas	adjusts	extremely well
times II a cutstanding in	onal at		tions and accepts new ideas	
outstanding in	٠c	·c	tairi) acri	r,
	appearance;	resses appropriately	verage in appearance	careless in posture and
sers pace III sey.	ഗ		not attract attention by	care of clothes; demon-
dresses to enhance personality	nce own	good pos	0 <b>1</b> 000	personal
		above average in appearance		ance; at times extreme in styles

# QUESTIONNAIRE

Name			SCHOOT				
Date	of Birth_		Во	у	_Girl		
1.	Indicate your comake a choice,	hoice of a futur write undecided.	e occupation.	If you are	e unable to		
2.	How certain are	you of your cho	ice?				
	Absolutely Certain	Reasonably Certain	Fairly Certain	Somewhat Doubtful	_		
3.	In making the a influenced your	bove choice whice decision? (Che	h of the follock two items)	wing two f	actors most		
	Parents		Work experience				
	Prestige		Teache	rs			
	Interest	s	Friend	s			
	School e	xperiences	Abilit	:y			
	Future i	ncome	Person	al satisfa	ction		
4.	Check the type	of education whi	ch you plan or	completin	g•		
	Less tha	n high school	Two ye	ear college			
	High sch	0001	Four y	vear colleg	e		
	Technica school	l or vocational	Gradua	te program			
	Cn the j	ob training					



APPENDIX B
TABLES OF RAW DATA



Table 7

Raw data on the number of experimental and control students who gained and failed to gain in behavior as rated by selves and teachers.

n.11	E		Con		E:		_	on rls	To Ex	tal		tal on
Behaviora 1	Во	-	Boy	•		rls	N=			108	N=	
Rating Scale -	N=		N=		N=			None		None		None
Self Ratings		None 23	<u> </u>	None 10	20	None 37	10	18	48	60	18	28
Leadership	28	23	0	10	20	37	10	10	40	00	10	20
Emotional	2.5	26	0	10	26	21	0	10	51	57	17	29
Control	25	26	8	10	26	31	9	19		64	20	26
Cooperation	22	29	10	8	22	35	10	18	44 52	-		29
Initiative	27	24	7	11	26	31	10	18	53	55 71	17	31
Dependability	19	32	7	11	18	39	8	20	37	71	15	31
Social							•	0.0			10	21
Acceptance	27	24	4	14	15	42	8	20	42	66	1.2	34
Social												
Responsibility		30	5	13	20	37	8	20	41	67	13	33
Teachability	25	26	9	9	25	32	10	18	50	58	19	27
Trustworthiness	23	28	5	13	14	43	7	21	37	71	12	34
Independence	22	29	8	10	20	37	6	22	42	66	14	32
Rational												
Control	23	28	10	8	22	35	13	15	45	63	23	23
Personal												
Appearance	28	23	6	12	22	35	7	21	50	58	13	33
TOTAL	290	322	87	129	250	434	106	230	540	756	193	359
Behavioral	Ex	ς	Cor	)	Ex	ς	Co		Tot	al	Tot	al
Behavioral Rating Scale -	E2 Boy		Cor Boy		Ex Gir		Co Gir		Ex	:	Tot Co	
Rating Scale - Teacher	Boy N=2	7s 29	Boy N=1	7s .8	Giı N=	:1s =28	Gii N=2	1s 28	Ex N=5	; 57		on
Rating Scale - Teacher	Boy N=2	/S	Boy N=1	7s .8	Giı N=	:1s =28	Gii N=2	1s 28	Ex N=5	; 57	Co	on 46
Rating Scale - Teacher	Boy N=2	7s 29	Boy N=1	7s .8	Giı N=	:1s =28	Gii N=2	1s 28	Ex N=5	; 57	Co N=4	on 46
Rating Scale - Teacher Ratings	Boy N=2 Gain	ys 29 None	Boy N=1 Gain	rs .8 None	Gir N= Gain	1s 28 None	Gir N=2 Gain	ls 28 None	Ex N=5 Gain	7 None	Co N=4 Gain	on 46 None
Rating Scale - Teacher Ratings Leadership	Boy N=2 Gain	ys 29 None	Boy N=1 Gain	rs .8 None	Gir N= Gain	1s 28 None	Gir N=2 Gain	ls 28 None	Ex N=5 Gain	7 None	Co N=4 Gain	on 46 None
Rating Scale - Teacher Ratings Leadership Emotional Control	Boy N=2 Gain 7	ys 29 None 22	Boy N=1 Gain	None	Gin N= Gain 13	1s =28 None 15	Gin N=2 Gain	None	Ex N=5 Gain 20	7 None 37	N=4 Gain 27	on 46 None
Rating Scale - Teacher Ratings Leadership Emotional	Boy N=2 Gain 7	None 22 18	Boy N=1 Gain 10	None 8	Gin N= Gain 13	1s =28 None 15	Gin N=2 Gain 17	11s None 11	Ex N=5 Gain 20	7 None 37 38	Co N=4 Gain 27	None 19 26
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation Initiative	Boy N=2 Gain 7 11 10	None 22 18 19	Boy N=1 Gain 10 8 9	None 8 10 9	Gin N= Gain 13 8 9	11s =28 None 15 20 19	Gin N=2 Gain 17 12 19	11s None 11 1.6 9	Ex N=5 Gain 20 19 19	37 None 37 38 38	Co N=4 Gain 27 20 28 24	None 19 26 18 22
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation	Boy N=2 Gain 7 11 10 8	None  22  18 19 21	Boy N=1 Gain 10 8 9	8 None 8 10 9	Gir N= Gain 13 8 9	11s =28 None 15 20 19 20	Gin N=2 Gain 17 12 19 16	11s None 11 16 9	Ex N=5 Gain 20 19	37 None 37 38 38 41	Co N=4 Gain 27 20 28	None 19 26 18
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation Initiative Dependability Social	Boy N=2 Gain 7 11 10 8 10	None  22  18 19 21 19	Boy N=1 Gain 10 8 9	8 None 8 10 9 10 13	Gir N= Gain 13 8 9 8	11s =28 None 15 20 19 20 22	Gin N=2 Gain 17 12 19 16 9	11 16 9 12 19	Ex N=5 Gain 20 19 19 16 16	37 None 37 38 38 41 41	Co N=4 Gain 27 20 28 24 14	None 19 26 18 22 32
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation Initiative Dependability	Boy N=2 Gain 7 11 10 8	None  22  18 19 21	Boy N=1 Gain 10 8 9 8 5	8 None 8 10 9	Gir N= Gain 13 8 9	11s =28 None 15 20 19 20	Gin N=2 Gain 17 12 19 16	11s None 11 16 9	Ex N=5 Gain 20 19 19	37 None 37 38 38 41	Co N=4 Gain 27 20 28 24	None 19 26 18 22
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation Initiative Dependability Social Acceptance Social	Boy N=2 Gain 7 11 10 8 10	None  22  18 19 21 19	Boy N=1 Gain 10 8 9 8 5	None 8 10 9 10 13	Gin N= Gain 13 8 9 8 6	11s =28 None 15 20 19 20 22	Gin N=2 Gain 17 12 19 16 9	11 16 9 12 19	Ex N=5 Gain 20 19 19 16 16	37 None 37 38 38 41 41	Co N=4 Gain 27 20 28 24 14	None 19 26 18 22 32
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation Initiative Dependability Social Acceptance Social Responsibility	Boy N=2 Gain 7 11 10 8 10 12	None  22  18 19 21 19 17	Boy N=1 Gain 10 8 9 8 5 7	8 None 8 10 9 10 13 11	Gin N= Gain 13 8 9 8 6	11s =28 None 15 20 19 20 22 22	Gin N=2 Gain 17 12 19 16 9 15	11 1.6 9 12 19 13 14	Ex N=5 Gain 20 19 19 16 16 16	37 None 37 38 38 41 41 41 39	Co N=4 Gain 27 20 28 24 14 22	26 18 22 32 24 25
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation Initiative Dependability Social Acceptance Social Responsibility Teachability	Boy N=2 Gain 7 11 10 8 10 12 12 7	None  22  18 19 21 19 17 17 22	Boy N=1 Gain 10 8 9 8 5 7 7	None 8 10 9 10 13 11	Gin N= Gain 13 8 9 8 6 6	28 None 15 20 19 20 22 22 27 20	Gin N=2 Gain 17 12 19 16 9 15	11 16 9 12 19 13	Ex N=5 Gain 20 19 19 16 16 18 23 15	37 None 37 38 38 41 41 39 34 42	Co N=4 Gain 27 20 28 24 14 22 21 25	26 18 22 32 24 25 21
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation Initiative Dependability Social Acceptance Social Responsibility Teachability Trustworthiness	Boy N=2 Gain 7 11 10 8 10 12 12 7 8	None  22  18 19 21 19 17 17 22 21	Boy N=1 Gain 10 8 9 8 5 7 7 9 5	8 None 8 10 9 10 13 11 11 9 13	Gin N= Gain 13 8 9 8 6 6	20 19 20 22 22 22 27 20 25	Gin N=2 Gain 17 12 19 16 9 15 14 16 13	11 16 9 12 19 13 14 12 15	Ex N=5 Gain 20 19 19 16 16 16 18 23 15	37 None 37 38 38 41 41 41 39 34 42 46	Co N=4 Gain 27 20 28 24 14 22 21 25 18	26 18 22 32 24 25 21 28
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation Initiative Dependability Social Acceptance Social Responsibility Teachability Trustworthiness Independence	Boy N=2 Gain 7 11 10 8 10 12 12 7	None  22  18 19 21 19 17 17 22	Boy N=1 Gain 10 8 9 8 5 7 7	None 8 10 9 10 13 11	Gin N= Gain 13 8 9 8 6 6	28 None 15 20 19 20 22 22 27 20	Gin N=2 Gain 17 12 19 16 9 15	11 16 9 12 19 13	Ex N=5 Gain 20 19 19 16 16 18 23 15	37 None 37 38 38 41 41 39 34 42	Co N=4 Gain 27 20 28 24 14 22 21 25	26 18 22 32 24 25 21
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation Initiative Dependability Social Acceptance Social Responsibility Teachability Trustworthiness Independence Rational	Boy N=2 Gain 7 11 10 8 10 12 7 8 11	None  22  18 19 21 19 17 17 22 21 18	Boy N=1 Gain 10 8 9 8 5 7 7 9 5 10	8 None 8 10 9 10 13 11 11 9 13 8	Gin N= Gain 13 8 9 8 6 11 8 3 8	11s =28 None 15 20 19 20 22 22 22 22 22	Gin N=2 Gain 17 12 19 16 9 15 14 16 13 20	11 1.6 9 12 19 13 14 12 15 8	Ex N=5 Gain 20 19 19 16 16 18 23 13 11 19	37 None 37 38 38 41 41 39 34 42 46 38	Co N=4 Gain 27 20 28 24 14 22 21 25 18 30	26 18 22 32 24 25 21 28 16
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation Initiative Dependability Social Acceptance Social Responsibility Teachability Trustworthiness Independence Rational Control	Boy N=2 Gain 7 11 10 8 10 12 12 7 8	None  22  18 19 21 19 17 17 22 21	Boy N=1 Gain 10 8 9 8 5 7 7 9 5	8 None 8 10 9 10 13 11 11 9 13	Gin N= Gain 13 8 9 8 6 6	20 19 20 22 22 22 27 20 25	Gin N=2 Gain 17 12 19 16 9 15 14 16 13	11 16 9 12 19 13 14 12 15	Ex N=5 Gain 20 19 19 16 16 16 18 23 15	37 None 37 38 38 41 41 41 39 34 42 46	Co N=4 Gain 27 20 28 24 14 22 21 25 18	26 18 22 32 24 25 21 28
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation Initiative Dependability Social Acceptance Social Responsibility Teachability Trustworthiness Independence Rational Control Personal	Boy N=2 Gain 7 11 10 8 10 12 7 8 11	None  22  18 19 21 19 17 17 22 21 18	Boy N=1 Gain 10 8 9 8 5 7 7 7 9 5 10	8 None 8 10 9 10 13 11 11 9 13 8	Gin N= Gain 13 8 9 8 6 6 11 8 3 8	11s =28 None 15 20 19 20 22 22 22 17 20 25 20	Gin N=2 Gain 17 12 19 16 9 15 14 16 13 20	11 1.6 9 12 19 13 14 12 15 8 11	Ex N=5 Gain 20 19 19 16 16 18 23 13 11 19 21	37 None 37 38 38 41 41 39 34 42 46 38	Co N=4 Gain 27 20 28 24 14 22 21 25 18 30 27	26 18 22 32 24 25 21 28 16
Rating Scale - Teacher Ratings Leadership Emotional Control Cooperation Initiative Dependability Social Acceptance Social Responsibility Teachability Trustworthiness Independence Rational Control Personal Appearance	Boy N=2 Gain 7 11 10 8 10 12 7 8 11 10	None  22  18 19 21 19 17 17 22 21 18	Boy N=1 Gain 10 8 9 8 5 7 7 9 5 10 10	8 None 8 10 9 10 13 11 11 9 13 8	Gin N= Gain 13 8 9 8 6 6 11 8 3 8	1s = 28 None 15 20 19 20 22 22 17 20 25 20 17 20	Gin N=2 Gain 17 12 19 16 9 15 14 16 13 20 17	11 16 9 12 19 13 14 12 15 8 11 18	Ex N=5 Gain 20 19 19 16 16 16 18 23 15 11 19 21	37 None 37 38 38 41 41 39 34 42 46 38 36	Co N=4 Gain 27 20 28 24 14 22 21 25 18 30 27	26 18 22 32 24 25 21 28 16



Table 8

failed to gain in accurate	in accura	tely	ly perceiving		self-aptitudes	aptitu	ıdes.					
	EX X	·	Con	<i>-</i> -	ΕX		Con	c	Tota	a 1	Total	
	Boys	Z.	Boys	Z.	Girls	1s	Girls	ls	ΕX		Con	_
Skill Inventory	N=50	20	N=24	54	N=64	4	N=29	6	N=114	14	N=53	53
	Gains N	None	Gains	None	Gains	None	Gains	None	Gains	None	Gains	None
Ceneral Learning Ability	22	28	7	22	35	39	12	17	47	67	14	39
Works Antitude	17	33	œ	16	33	31	14	15	20	99	22	31
Numerical Aptitude	20	30	^	17	24	40	∞	21	77	70	15	38
Coorsol Aptitude	22	28	^	17	25	39	12	17	47	67	19	34
Pott Dottontion	28	22	. ~	17	21	43	11	18	67	65	18	35
rorm rerespendin	11	36	. ∞	16	26	38	6	20	37	77	1.7	36
MOTOR CONTRACTOR	20	30	· LC	19	16	<b>7</b> 8	11	18	36	78	16	37
TOTAL COLUMN CLON	140	210	77	124	170	278	11	126	310	488	121	250



Table 9

Raw data on total gains and losses of experimental and control students in behavior as rated by selves and teachers.

	Воуз	Boys	Girls	Girls	Total Ex	Total Con
Behavioral Rating Scale	Ex	Con N=19	2x N=56	Con N=28	ex N=108	N=47
Self Ratings	N=52					14
Leadership	38	10	21	4	59	
Emotional Control	28	7	-1	-3	27	4
Cooperation	17	2	28	6	45	8
Initiative	39	4	41	1	80	5
Dependability	2	8	12	0	14	8
Social Acceptance	30	0	19	5	49	5
Social Responsibility	7	2	<b>-</b> 6	8	1	10
Teachability	25	3	10	9	35	12
Trustworthiness	13	2	<b>-</b> 9	<del>-</del> 8	4	-6
Independence	17	10	6	-17	23	<b>-</b> 7
Rational Control	30	12	26	3	56	15
Personal Appearance	26	6	19	6	45	12
TOTAL	270	66	166	-2	436	64
	Boys	Boys	Girls	Girls	Total	Total
Behavioral Rating Scale	Ex	Con	Ex	Con	Ex	Con
Teacher Ratings	N=29	N=18	N=28	N=28	N=57	N=46
L <b>e</b> ade <b>r</b> ship	-17	18	4	31	-13	49
Emotional Control	4	19	-21	0	<b>-</b> 17	19
Cooperation	5	18	5	22	10	40
Initiative	-10	29	-23	27	-33	56
Dependability	-10	3	1	<b>-</b> 5	<del>-</del> 9	<b>-</b> 2
Social Acceptance	2	2	<b>-</b> 5	18	-3	20
Social Responsibility	1	0	-4	<b>-</b> 5	-3	<b>-</b> 5
Teachability	-11	19	<b>-</b> 5	21	-16	40
Trustworthiness	-2	-26	<b>-</b> 17	14	<b>-</b> 19	-12
Independence	-11	5	<b>-</b> 5	39	-16	44
Rational Control	<b>-</b> 5	19	18	29	13	48
Personal Appearance	7	<b>-</b> 9	<b>-</b> 9	-8	-2	-17
TOTAL	<b>-</b> 47	59	-61	183	-108	242



Table 10

Raw data on total gains and losses of experimental and control students in accurately perceiving self-aptitudes.

Skill Inventory General Learning Ability Verbal Aptitude Numerical Aptitude Spacial Aptitude Form Perception Clerical Perception Motor Coordination TOTAL	Boys Ex N=50 18 -7 13 25 32 -26 14 69	Boys Con N=23 -13 -8 -2 -3 1 8 -10 -27	Girls Ex N=63 7 50 16 12 -4 -1 -29 51	Girls Con N=28 -5 17 -1 -1 5 -18 18 15	Tota1 Ex N=114 25 43 29 37 28 -27 -15	Total Con N=51 -18 9 3 -4 6 -10 8 -12	
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RETRIEVAL TERMS				
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Vocati	onal education,	vocation	nal guidance, vocational counsel	ing, rural
		ment, rur	cal schools, junior high school	guidance
progra	m.			
		· · ·		·
IDENTIFIERS			<b>:.</b>	
Statement of	f the Problem: T	The purpo	se was to evaluate a ninth-grad	e voc. guidance
course which	had been specif	fically d	lesigned to help rural students	develob in thos
personal and	social areas wh	hich rese	earch and experience have deline	ons and adjust-
ing factors	in rural youths	deing a	able to make satisfactory decisi	one and adjust
Wypotheses.	ning to the worl	the spec	cial vocational guidance class w	ill make greate
gains in the	ir behavior as n	measured	by the Anderson-Payne Behaviora	I Kating Scare
than will the	e ninth-grade st	tudents w	tho have not had the course. 2.	Students in
the class wi	11 make greater	gains in	n accurately perceiving their ow	m aptitudes as
mascured by	the Skill Invent	torv - A	Self Perception Measure than wi	II the 9th grad
students who	have not had th	he course	2. 3. Students in the class wi	II make greater
gains in the	ir ability to de	esignate	future vocational goals and to student questionnaire than will	the ninth-grade
greater cert	ainty as measure have not had tl	ed by a s	Scadenc daescronnarie enan Arri	61.6
Conclusions.	The results of	f the stu	idy tend to support the stated h	ypotheses,
although fur	ther research a	nd follow	v-up are recommended to more acc	urately de-
termine the	effectiveness o	f the pro	ogram.	
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