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## ABSTRACT

An experimental classroom instruction program in vocational information was conducted as a six-weeks civics unit in 12 selected secondary schools in New Orleans. Field trips, career days, and viewing specifically constructed television programs were the experimental activities, while the control treatment consisted of the textbook approach to providing vocational information. The results were examined in an attempt to determine the effectiveness of the two treatments. They indicated that neither method was superior in helping the student learn the textbook material, modifying his attitude toward work, self and education and effecting his willingness to seek out or become involved with vocational information. However, open-ended responses showed that the experimental activities were relatively more appealing to students. (Author/MC)

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ASSISTING VOCATIONAL DEVELOPMENT  
THROUGH A UNIT IN CIVICS:  
A COMPARISON OF TWO TECHNIQUES

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## ABSTRACT

During the 1968-69 academic year an experimental program of classroom instruction in vocational information was conducted as a six-week civics unit in twelve selected secondary schools in the New Orleans area. The experimental treatment emphasized activities such as field trips, career-days, and viewing specially constructed T.V. programs. The control treatment consisted of the usual textbook approach to providing vocational information.

Specially constructed instruments were administered as pre- and posttests to a selected sample of Ss in the experimental (n=233) and control (n=299) groups. Generally, the results were examined in an attempt to determine the relative effectiveness of the two treatments. More specifically, the data were examined to determine whether there were post-treatment differences between the groups with respect to 1) knowledge of the material presented in four chapters of the textbook, 2) attitude toward work, self, and education, 3) willingness to attend to vocational information, 4) positive-realistic perceptions of work, and 5) level of vocational development. In most instances Covariance Analysis was used to test for significant differences between the posttest means of the two groups.

The results indicated that neither method was superior in assisting the Ss to learn the material presented in the civics

textbook, modifying the Ss attitudes toward work, self, and education, nor in effecting the Ss' willingness to seek out or become involved with vocational information. Open-ended responses obtained from participating teachers, counselors, and students, however, indicated that the experimental activities were relatively more appealing to the students.

ASSISTING VOCATIONAL DEVELOPMENT  
THROUGH A UNIT IN CIVICS:  
A COMPARISON OF TWO TECHNIQUES

Introduction

During the 1966-67 academic year a pilot program of classroom instruction in vocational information and career selection was developed. This program, identified as the World of Work (WOW) project<sup>1</sup>, was conducted on a trial basis in ninth grade civics classes in several secondary schools in the New Orleans area. The program was designed to develop instructional methods and materials which would communicate to students some of the basic concepts concerning the world of work. The materials and techniques were integrated into a six-week civics unit in vocational information. Data obtained as a result of pre- and post-treatment assessment suggested that the techniques used in the experimental classes were generally more effective than the traditional methods. Also indicated was a need in local schools to update instruction in vocational information and career decision-making.

A similar WOW program was conducted during the 1967-68 academic year. A sample of ninth grade civics classes in seven secondary schools in the New Orleans area received the

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<sup>1</sup>Support for the World of Work projects was provided by the Greater New Orleans Voluntary Equal Employment Council, Plans for Progress Program, Economic Development Administration of U.S. Department of Commerce, and by Jefferson and Orleans Parish School Systems.

experimental treatment. The experimental technique emphasized textbook study, "career day" activities, field trips, and audio-visual aids; the control method was generally limited to the use of the textbook. Analysis of pre- and post-treatment data (Sturges, Bermudez, Hontz, & McCalister, 1969) indicated that

1. both the experimental and control methods were approximately equal in effectiveness in facilitating student familiarity with the kinds of vocational material presented in the textbook.
2. both methods tended to raise the level of the students' occupational aspirations.
3. males and females generally agreed in their perceptions of what would be important to them in considering an occupation.
4. the experimental method appeared to be slightly more effective in producing positive attitudes toward work, self, and education.
5. counselors, teachers, and students believed that the experimental activities had greater appeal than did the control methods.

The 1968-69 WOW project was expanded to include new materials and instructional techniques. Also, a larger number of ninth grade students were exposed to the special materials developed during the WOW projects.<sup>2</sup>

Several ninth grade civics classes in each of twelve schools were selected to participate in the 1968-69 project. In each school, although there were a number of classes being exposed to the WOW materials, only one class was designated as the experimental group and one other as the control group. The Ss in the experimental group received instructional treatment

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<sup>2</sup> Although several elementary schools participated in the 1968-69 WOW project, the discussion here is limited to secondary schools.

which emphasized activities such as career day conferences, field trips, career-oriented TV programs, discussions with guest speakers, and using a variety of audio-visual materials which had been designed for the project. The Ss in the control group received an instructional treatment consisting of the usual textbook-oriented approach to learning about occupations. Although both groups received instruction based on material in the textbook (Hartley & Vincent, Chaps. 16-19, 1967), only the Ss in the experimental group were involved in activities outside the classroom.

#### Characteristics of the Ss

The two groups consisted of ninth grade students who were enrolled in public schools in Orleans and Jefferson Parishes (counties). Since it was not possible to randomly assign Ss to treatment groups, teachers and counselors from each of the twelve participating schools were asked to randomly select intact classes to receive the experimental and control treatments. They also selected the two civics classes in their schools in which the Ss appeared to be most representative of the ninth grade student body. One of these two classes from each school was randomly assigned to the experimental treatment and one to the control treatment. The data reported here were obtained from these Ss since they were considered to be a sample of all Ss receiving the two treatments.

Table 1 shows the number of Ss in each group by sex, race, IQ, and number of years of school attendance.

Table 1  
 Characteristics of Ss by Treatment Group and by Total

Characteristic	Treatment Groups					
	Experimental (n=233)		Control (n=299)		Total (N=532)	
	n	%	n	%	N	%
<u>Sex</u>						
Male . . . . .	96	41	128	43	224	42
Female . . . . .	137	59	171	57	308	58
<u>Race</u>						
Caucasian . . . . .	128	55	170	57	298	56
Negro . . . . .	105	45	129	43	234	44
<u>Years in School</u>						
9 . . . . .	144	62	203	68	347	65
10 . . . . .	63	27	72	24	135	26
11+ . . . . .	26	11	24	8	50	9
<u>IQ</u>						
62-91 . . . . .	103	44	122	41	225	42
92-108 . . . . .	89	38	114	38	203	38
109+ . . . . .	41	18	63	21	104	20



The data in Table 1 show that approximately 40% of the Ss in each group were male. Approximately 45% of the Ss in each group were Negro. The data also show that more than 30% of the Ss had failed one or more grades and that more than 40% had measured IQ's (Otis-Beta) of 91 or less. Although the data in Table 1 show that there were some slight differences between the two groups, application of t test and chi square techniques produced no significant values.

Prior to treatment, some of the Ss (n=250) were asked what they believed constituted occupational success. A modification of an instrument developed by Sorenson and Morris (1962) was administered. Table 2 shows the relative frequency of males and females who chose, from selected definitions, the one which best defined occupational success.

Table 2  
 Number and Percentage<sup>a</sup> of Ss  
 Choosing from Selected Definitions the  
 One Which Best Defined Occupational Success

Definitions	Males (n=110)		Females (n=140)		Total (n=250)	
	N	%	N	%	N	%
Success means enjoying the tasks of the job	10	9	9	6	19	8
Success means earning the respect of one's fellow workers and employers	9	8	17	12	26	10
Success means gaining satisfaction from helping others	11	10	25	18	36	14
Success means getting promoted on the job	6	5	6	4	12	5
Success means having a prestige job that other people envy	1	1	6	4	7	3
Success means doing the best one can within one's capabilities	54	49	64	46	118	47
Success means doing as little as possible for the highest pay	4	4	1	1	5	2
Success means earning the highest possible salary for that kind of work.	15	14	12	9	27	11

<sup>a</sup> Percentages rounded to nearest whole numbers

Examination of the data in Table 2 show that about 47% of the students indicated that the best definition of occupational success means doing the best one can within one's capabilities. The other definitions which were selected by the students as being most descriptive of success were: 1) success means gaining satisfaction from helping others and 2) success means earning the highest possible salary for that kind of work. The data also suggest that the male and female students do not differ in their perceptions of what constitutes job success.

Prior to treatment, some of the Ss (n=117) were also assessed in order to determine 1) the kinds of job factors that would be important to them in choosing an occupation, 2) whether ninth grade male and female Ss differed in their perception of how important these job factors would be to them.

A questionnaire consisting of 30 job factors, in random order, was administered to the Ss. They were asked to respond to each of the job factors by indicating whether the factor would be either "very important," "important," "not too important," or "not at all important" to them in considering an occupation. Table 3 shows the relative frequency of males and females indicating that a job factor would be either "very important" or "important" to them.

Table 3

Proportion<sup>a</sup> of Males and Females Indicating that a Job Factor Would be Either Very Important or Important to them in Considering an Occupation

Job Factors	Males (n=44)		Females (n=73)		b P
	%	%	%	%	
1. A job close to home . . . . .	48	29	29	29	.05
2. Praise for good work from the boss. . . . .	68	68	68	68	NS
3. Respect for holding a good job from friends . . . . .	68	67	67	67	NS
and family . . . . .	89	84	84	84	NS
4. Chance for a promotion. . . . .	91	84	84	84	NS
5. Chance for a pay raise. . . . .					
6. Steady job. . . . .	96	93	93	93	NS
7. Liking the job itself. . . . .	91	92	92	92	NS
8. Time to be with my family . . . . .	93	95	95	95	NS
9. A place where I can work with other people. . . . .	84	82	82	82	NS
10. Interesting work. . . . .	91	95	95	95	NS
11. Vacations and holidays with pay . . . . .	82	68	68	68	NS
12. A chance to be my own boss. . . . .	68	52	52	52	NS
13. Opportunity to be creative and original . . . . .	77	79	79	79	NS
14. Secure future. . . . .	98	95	95	95	NS
15. Job extras such as pensions, sick benefits, etc	90	78	78	78	NS
16. Personal satisfaction from doing a job right. . . . .	95	99	99	99	NS
17. A good boss . . . . .	86	89	89	89	NS
18. A chance to exercise leadership. . . . .	73	66	66	66	NS

19.	A chance to help others . . . . .	90	93	NS
20.	A chance to use my special abilities . . . . .	91	85	NS
21.	A place where I can work alone . . . . .	32	11	.01
22.	A good company . . . . .	96	82	.05
23.	Good working conditions . . . . .	98	92	NS
24.	A boss that does not bawl out workers . . . . .	45	57	NS
25.	Praise for good work from fellow workers . . . . .	56	53	NS
26.	Nice people to work with . . . . .	88	88	NS
27.	Chance to prove I can do as well as anyone else	75	83	NS
28.	Good pay . . . . .	100	96	NS
29.	Working with friends and neighbors . . . . .	46	60	NS
30.	Duty to do my best on the job . . . . .	100	99	NS

a Percentages rounded to nearest whole number

b Reported probabilities determined by application of chi square tests of significance

The data reported in Table 3 show that there was a tendency for the Ss to see many of the job factors as being either very important or important to them in considering an occupation. The job factors which were seen by more than 95% of the Ss as being either very important or important were: a secure future (item 14), personal satisfaction from doing a job right (item 16), good pay (item 28), and duty to do their best on the job (item 30). The job factors which were seen as being relatively less important by the Ss were: a job close to home (item 11), a place where they could work alone (item 21), a boss that does not bawl out workers (item 24), praise for good work from fellow workers (item 25), and working with friends and neighbors (item 29).

The data in Table 3 also show that, generally, males and females agreed in their perceptions of the importance of the job factors. There were, however, three instances in which males and females did not agree. Relatively more males indicated that a job close to home (item 1), a place where they could work alone (item 21), and a good company (item 22), would be important to them. The three significant differences reported in Table 3, however, may be chance differences since the probability of 3 differences occurring by chance in 30 comparisons is relatively high.

#### Instruments Used in Obtaining Data

In the attempt to assess the relative effectiveness of the two treatments, several instruments were used to obtain

pre- and post-treatment data. The instruments administered to the Ss were:

- 1) an achievement test designed to measure knowledge of the vocational information presented in the civics textbook. The test consisted of 42 items which were drawn from a pool of items which had been constructed by the participating civics teachers and from items in a test manual (Hartley & Vincent, 1967) developed by the authors of the textbook. Scores obtained from local Ss showed a satisfactory range of variability and yielded test-retest reliabilities ranging from  $r=.94$  to  $r=.69$  with a median of  $r=.79$ . Appendix A shows sample items.
- 2) a questionnaire which consisted of 28 items designed to measure attitudes toward work, self, and education. These items were drawn largely from instruments developed by Champagne (1966), Champagne (1967), and Coleman (1966). The instrument was scored in a manner which yielded three scores: attitude toward work (9 items), self (15 items), and education (4 items). Data obtained in New Orleans produced average test-retest reliabilities of the work, education, and self subscales of approximately  $r=.45$ ,  $r=.60$ , and  $r=.40$ , respectively.
- 3) the Attitude Toward Work Survey (ATWS) which was designed to obtain measures of willingness to attend to vocational information (Part A), positive-negative perceptions of work (Part B), and level of vocational development, i.e., the extent to which an individual has

accurate conceptions about making an occupational choice and the extent to which he is involved in the choice process (Part C). Part A consisted of items constructed locally, Part B consisted of items used in the Youth Opinion Questionnaire developed by Groen & Dawis (1965), and Part C consisted of modifications of items constructed by Crites (1965). The average subscale reliability yielded by New Orleans data was near  $r=.60$ . The ATWS is included as Appendix C.

It should be noted that the instruments used had moderate levels of reliability. There is no evidence, however, concerning the validity of the instruments, and therefore they must be regarded as experimental.

#### Analysis of the Data

The data which were analyzed consisted of the Ss responses to the achievement test, the questionnaire, and to the ATWS. Generally, the data were analyzed to determine the relative effectiveness of the two treatments. More specifically, the data were examined to determine whether there were post-treatment differences between the groups with respect to 1) knowledge of the content of the civics textbook (chaps. 16-19), 2) attitude toward work, self, and education, 3) willingness to attend to vocational information, 4) positive-realistic perceptions of work, and 5) level of vocational development.

Achievement test results: In order to compare the relative effectiveness of the two treatments in increasing the Ss knowledge of the vocational information presented in the textbook,

posttest means of the groups on the civics achievement test were compared. Since there were slight differences between the pretest means of the two groups, analysis of covariance was used in making the comparison of the posttest means. Table 4 reports pretest and posttest means, by sex and by total, of the two groups and the significance of the F ratios.

Table 4

Pretest and Posttest Means on the  
Civics Achievement Test by Sex and by Total

Sex	Group						F <sup>a</sup>
	Experimental			Control			
	n	Pre M	Post M	n	Pre M	Post M	
Males	96	28.95	30.00	128	27.98	29.75	NS
Females	137	28.45	30.94	171	30.80	33.26	NS
Total	233	28.69	30.55	299	29.59	31.76	NS

<sup>a</sup> F computed by Covariance Analysis using Ss' pretest scores on the Civics Achievement Test as the Concomitant measure.

The data in Table 4 show that the two groups had similar pre- and posttest means. It appears that the experimental and control units produced a similar amount of learning of the material presented in the textbook. It might also be noted that the means shown in Table 4 suggest that the increase in mean scores for both groups was relatively small, i.e., both groups had posttest means which were only slightly larger than

their pretest means. This appears to offer some evidence that neither the traditional textbook method nor the experimental method was very effective in producing the kinds of learnings which were measured by the civics achievement test. These data reflect the same trend found in the data obtained during the 1967-68 WOW project (Sturges, et al, 1969).

Responses to the questionnaire: The Ss responded to each of the 28 statements on the questionnaire by indicating whether they "strongly agreed," "agreed," "disagreed," or "strongly disagreed," with the statement. The questionnaire contained statements such as "a man should always do his best for his employers" and "there is a real chance for me to succeed in life." Responses to such statements were scored by assigning strongly agree, agree, disagree, and strongly disagree, raw score values of 4, 3, 2, and 1, respectively. In an attempt to determine what effect the two treatments had on the Ss attitudes toward work, self, and education, posttest means on each of the three scales were compared. Tables 5, 6, and 7 show pretest and posttest means for the two groups on each of the scales.

Table 5

Pretest and Posttest Means on the Attitude  
Toward Work Scale by Sex and by Total

Sex	Group						F <sup>a</sup>
	Experimental			Control			
	n	Pre M	Post M	n	Pre M	Post M	
Males	96	24.43	24.61	128	24.55	24.28	NS
Females	137	24.64	24.85	171	24.80	25.30	NS
Total	233	24.55	24.75	299	24.69	24.86	NS

<sup>a</sup> F computed by Covariance Analysis using Ss' pretest scores on the Attitude Toward Work Scale as the Concomitant measure.

Table 6

Pretest and Posttest Means on the Attitude  
Toward Self Scale by Sex and by Total

Sex	Group						F <sup>a</sup>
	Experimental			Control			
	n	Pre M	Post M	n	Pre M	Post M	
Males	96	44.88	44.46	128	45.46	44.22	NS
Females	137	44.28	45.34	171	45.64	45.99	NS
Total	233	44.36	44.98	299	45.56	45.23	NS

<sup>a</sup> F computed by Covariance Analysis using Ss' pretest scores on the Attitude Toward Self Scale as the Concomitant measure.

Table 7

Pretest and Posttest Means on the Attitude  
Toward Education Scale by Sex and by Total

Sex	Group						F <sup>a</sup>
	Experimental			Control			
	n	Pre M	Post M	n	Pre M	Post M	
Males	96	11.78	12.11	128	12.14	11.98	NS
Females	137	11.98	12.06	171	12.52	12.45	NS
Total	233	11.90	12.08	299	12.36	12.25	NS

<sup>a</sup> F computed by Covariance Analysis using Ss' pretest scores on the Attitude Toward Education Scale as the Concomitant measure.

The data reported in Tables 5, 6, and 7 show that males and females had similar means on each of the three scales. The data also show that the two groups has similar pretest and posttest means. This similarity suggests that the experimental and control methods were comparable in their effect on the Ss' attitudes toward work, self, and education. It might also be noted that the means shown in Tables 5, 6, and 7 suggest that the increase in mean scores for both groups was negligible. It appears that such slight differences between pre- and posttest means offers some evidence that neither method was very effective in producing changes in attitude toward work, self, and education. It should be

noted that although there is no normative data for the three scales, it appears that the Ss held reasonably positive attitudes toward the three areas.

To examine effects of the two treatments on the Ss' willingness to attend to, seek out, or be involved with vocational information, the responses of the Ss in the two groups on the ATWS, Part A, were compared. Part A (items 1-8) allows the student to respond either "yes," "probably yes," "probably no," or "no," to items such as "Would you watch a T.V. program that tells about kinds of jobs in your community?" The items were scored by assigning score values of 4, 3, 2, and 1, respectively, to the four response categories. Table 8 shows pre- and post-test means on Part A.

Table 8

Pretest and Posttest Means on the Attitude Toward Work Survey, Part A-- by Sex and by Total

Sex	Group						F <sup>a</sup>
	Experimental			Control			
	n	Pre M	Post M	n	Pre M	Post M	
Males	96	28.07	27.42	128	27.90	27.96	NS
Females	137	28.20	28.64	171	28.41	28.46	NS
Total	233	28.15	28.14	299	28.19	28.25	NS

<sup>a</sup> F computed by Covariance Analysis using Ss' pretest scores on the Attitude Toward Work Survey, Part A-- as the Concomitant measure.

The means shown in Table 8 indicate that the Ss responded that they possessed, both prior to and following treatment, a moderately high willingness to seek out or become involved with vocational information. Since the F ratios reported in Table 8 are not significant, it appears that the two treatments were similar in their effect.

Table 9 reports the relative frequency of responses to the ATWS (items 9-13).

Table 9  
Frequency of Pre- and Posttest Responses to ATWS Items 9-13

Item	Group					
	Experimental (n=233)			Control (n=299)		
	Pre n	Post n	Pre n	Post n	Pre n	Post n
9. Which of these ideas do you think is most true about work?						
a) work is always hard and boring. . . . .	2	5	9	2		
b) work is usually the same hard grind in whatever job you have. . . . .	14	18	23	13		
c) work is sometimes hard and sometimes fun. . . . .	212	201	260	273		
d) work is often fun. . . . .	5	6	7	9		
e) work is always fun. . . . .	0	3	0	2		
10. Which of these do you think is most true about jobs?						
a) any job that pays a lot will be OK with me. . . . .	8	5	7	12		
b) I would like to do a job which I am good at. . . . .	217	223	287	284		
c) I don't care what job I will have, just so I can work. . . . .	8	5	5	3		
11. Which of these do you think is most true of work?						
a) Getting paid a lot is more important than liking a job. . . . .	43	27	54	44		

b) liking a job is more important than getting paid a lot. . . . .	190	206	245	255
12. Work is:				
a) something a person has to do . . . . .	19	14	37	30
b) doing something to help the community. . . . .	27	37	75	71
c) doing something to help yourself . . . . .	181	177	179	190
d) doing something just for the money . . . . .	6	3	8	8
13. About the jobs of some of the people in my family, I know				
a) many things. . . . .	89	81	123	128
b) some things. . . . .	100	110	146	132
c) only a few things. . . . .	44	42	30	37
d) nothing. . . . .	0	0	0	0

The data in Table 9 show that, both prior to and following treatment, a large percentage of the Ss responded that they had positive or realistic attitudes about work. For example, they tended to respond that work is sometimes hard and sometimes fun and that liking a job is more important than getting paid a lot.

The data also suggest that while there were relatively few Ss, prior to the treatment, who had negative or unrealistic attitudes about work, about 50% of these Ss in both groups held more positive or realistic attitudes following treatment. Again, the data suggest that neither treatment was more effective than the other in shaping attitudes about work.

The Ss responded to Part C (items 14-20) of the ATWS by answering either "yes" or "no" to questions such as "In choosing a job, would you need to know what kind of a person you are?" Positive and negative answers were assigned score values of 2 and 1, respectively. Table 10 shows means for the two groups on Part C of the ATWS.

Table 10

Pretest and Posttest Means on the Attitude Toward  
Work Survey, Part C-- by Sex and by Total

Sex	Group						F <sup>a</sup>
	Experimental			Control			
	n	Pre M	Post M	n	Pre M	Post M	
Males	96	11.42	11.60	128	11.71	11.18	NS
Females	137	11.67	11.98	171	12.09	12.08	NS
Total	233	11.61	11.82	299	11.93	11.70	NS

<sup>a</sup> F computed by Covariance Analysis using Ss' pretest scores on the Attitude Toward Work Survey, Part C-- as the Concomitant measure.

Examination of the data in Table 10 suggests that the Ss in both groups responded in a similar manner to the pre- and posttests. Since the F ratios are nonsignificant, it appears that neither treatment was more effective than the other in raising the Ss' level of vocational development.

Teachers evaluation of the experimental treatment: Each of the civics teachers from the twelve participating schools was asked to respond to a questionnaire designed to elicit their evaluation of the project. The questionnaire consisted of open-ended questions and items which asked the teachers to rate specific activities as being either very effective, moderately effective, slightly effective, or not effective.

Almost all of the teachers stated that the Teacher's Manual which had been prepared as a guide for teaching units dealing with work, self, and education, was very valuable to them and, in general, provided an excellent source for facts and ideas for class activities.

The majority of teachers indicated that they believed that the TV series were either very effective or moderately effective. It appeared that those teachers who felt that the TV programs were only slightly, or not effective, were those teachers whose students were required to view the program in groups of 150 students or more. While most of the teachers stated that the TV lessons were effective, approximately one-half of the teachers indicated that the time spent in viewing the programs could have been better used by taking the students on field trips, or having workers talk to the students in the classroom.

Most of the teachers stated that the field trips taken by the students were the most effective activity in assisting students in learning about the world of work.

"Career Day" activities were seen by all teachers as being an effective method in helping their students to learn more about the variety of occupations. The major criticism of the "Career Days" was that the students did not have enough time to talk with workers representing a variety of occupations in which they were interested.

The teachers also indicated that they found the weekly WOW Reader to be at least moderately effective in motivating

the students to learn about the world of work.

Although the counselors from the participating schools did not respond to the questionnaire, their verbal responses to many of the items on the questionnaire were solicited. The counselors' evaluations of the different activities were very similar to those of the teachers.

The teachers, counselors, and consultants who participated in the project were asked to write a brief evaluation of the project. Excerpts, which are representative of their responses, are included as Appendix D.

#### Summary of Data Analysis

Data obtained prior to treatment suggested that males and females agreed that the definitions which were most descriptive of job success were "success means gaining satisfaction from helping others," and "success means earning the highest possible salary for that kind of work." Pre-treatment data also indicated that a secure future, duty to do one's best on the job, good pay, and personal satisfaction from doing a job right were important job factors to be considered in choosing an occupation.

Analysis of the data obtained from the administration of pre- and posttest instruments indicated, generally, that the effects of the two treatments were similar. More specifically, the data analysis indicated that there were no significant post-treatment differences between the groups with respect to 1) knowledge of the content of the civics textbook (chaps. 16-19), 2) attitude toward work, self, and education, 3) willingness

to attend to vocational information, 4) positive-realistic perception of work, and 5) level of vocational development. Further, it appears that the slight differences between the groups' pre- and posttest means on all scales offer some evidence that neither method was very effective in increasing student knowledge of vocational information nor in producing changes in attitude toward work, self, and education. However, students and teachers expressed the feeling that the experimental unit was more effective in promoting student enthusiasm and interest in the study of occupations and career information.

It should be noted that the instruments used in obtaining data had acceptable levels of reliability but unknown validity; therefore, they must be regarded as experimental. Assuming that the instruments yielded dependable data, the analysis of those data produced little or no evidence that would support the continuation of the instructional methods used with the experimental group nor did it produce evidence which would strongly suggest discontinuance. In summary, the analysis of the data supports the conclusion that the experimental treatment could, at best, be described as a "qualified success."

Since neither method appeared to be very effective, it may be that a six-week unit provides too little time in which to have a significant impact upon students' knowledge of occupational information and upon their attitudes toward such things as work, self, and education. If this be true, the lack of impact may argue for both earlier and greater exposure to vocational information.

## REFERENCES

- Champagne, J. E. (Principal Investigator) The attitudes and motivation of southern underprivileged workers, Research Report No. 2, Columbia, South Carolina: South Carolina Commission for Technical Education, 1966.
- Champagne, J. E. The recruitment of southern unskilled workers, Research Report No. 1, Houston, Texas: Center for Research in Business and Economics, University of Houston, 1967.
- Coleman, J. S. (Principal Investigator) Equality of Educational opportunity. #OE 38001: U.S. Department of Health, Education, and Welfare, 1966.
- Crites, J. O. Measurement of vocational maturity in adolescence. Psychological Monographs, 1965, 79(2, Whole No. 595).
- Graen, G. B., & Dawis, R. V. Minnesota studies in work attitudes: Report No. 2. Minneapolis: University of Minnesota, 1965. ERIC No. ED 018 582.
- Hartley, W. H., & Vincent, W. S. American civics. New York: Harcourt Brace, 1967.
- Hartley, W. H., & Vincent, W. S. Tests for use with American civics. New York: Harcourt Brace, 1967.
- Sorenson, A., & Morris, I. Attitudes and beliefs as sources of vocational preference. The Journal of Education Research. 1962, 56, 20-27.
- Sturges, J., Bermudez, R., Hontz, G., & McCalister, D. V. A comparison of two methods of providing information to ninth grade students about the world of work. Mimeo., New Orleans, La.: Educational Systems Development Corp., 1969.

APPENDIX

I N S T R U C T I O N S

The purpose of this test is to find out how much you know about some of the things which you will be learning about in Civics. Some of the questions will be easier for you than others, but you should do the very best you can on each question.

This booklet will be used by many students after you. Please handle the booklet very carefully. Do NOT make marks of any kind on the booklet. Mark your answers only on the answer sheet.

For each question in the test there are four possible answers. You are to decide which answer is the best one. You may answer a question even when you are not perfectly sure that your answer is correct, but you should avoid wild guessing. Do not spend too much time on any one question.

Study the Example question below, and notice how the answers are to be marked on the separate answer sheet.

Example A. A beagle is a kind of

- A. bird
- B. fish
- C. dog
- D. coin

SAMPLE ANSWER SHEET

A            B            C            D

=====

Of course the answer for Example A is "dog" which is answer C. Notice that on the sample answer sheet above the Example question was answered by making a heavy black mark in the space (the pair of lines) marked C.

Example B. The United States flag is blue, white, and

- A. green
- B. red
- C. yellow
- D. black

SAMPLE ANSWER SHEET

A            B            C            D

=====

The correct answer for Example B is "red" which is answer B; so you would answer Example B by making a heavy black mark that fills the space under the letter B. Do this now.

Read each question carefully and decide which one of the answers is best. Notice what letter your choice is. Then on the separate answer sheet, make a heavy black space under that letter. In marking your answers, always be sure that the question number in the test booklet is the same as the question number on the answer sheet. Erase completely any answer you wish to change, and be careful not to make stray marks of any kind on your answer sheet or on your test booklet.

You will have this class period only to complete the test so work as rapidly and as accurately as you can.

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CIVICS TEST

1. Citizens of the United States
  - A. have freedom to choose a job
  - B. must follow the careers of their parents
  - C. must take jobs assigned by government agencies
  - D. have few job opportunities
2. In choosing a career, the first thing to do is
  - A. to get a job
  - B. to ask for a raise
  - C. to explore job possibilities
  - D. to ask for an interview
3. An example of a technician would be a
  - A. dentist
  - B. bricklayer
  - C. X-ray machine operator
  - D. trash collector
4. A period of apprenticeship is usually required for
  - A. service workers
  - B. people in skilled trades
  - C. professional workers
  - D. unskilled workers
5. An example of a worker in high demand is
  - A. harnessmaker
  - B. vaudeville actor
  - C. ditch digger
  - D. aeronautical engineer
6. Scientists who are experts in growing crops are called
  - A. zoologists
  - B. pharmacists
  - C. agronomists
  - D. geologists
7. A subject of special importance to a clerical worker would be
  - A. shop work
  - B. typing
  - C. astronomy
  - D. botany

## STUDENT QUESTIONNAIRE

Instructions:

The purpose of this questionnaire is to learn about your opinions on certain issues. On the next page are 28 statements. You are to read each statement and decide whether you strongly agree, agree, disagree, or strongly disagree with the statement. Once you decide how you feel about the statement, place a check mark (✓) under the column heading which best describes your feelings. Before you start, read the example given below:

Example A:	Strongly Agree	Agree	Disagree	Strongly Disagree
A steady job is a good job . . . . .	_____	_____ ✓	_____	_____

If you feel that you agree with the statement in Example A, you would place a check mark (✓) on the line under the heading "Agree," as shown above. If you disagree with the statement in Example A, you would have placed a check mark (✓) on the line under the heading "Disagree."

Here is another example:

Example B:	Strongly Agree	Agree	Disagree	Strongly Disagree
A high school education helps one to get a better job . . . . .	_____	_____	_____	_____

Your task is to decide whether you strongly agree, agree, disagree, or strongly disagree with the statement of Example B. You should then place a check mark (✓) on the line under the column heading which best describes your feelings about the statement. Do this now.

Now turn the page and respond to the 28 statements. Remember that there are no right or wrong answers, so you can be honest. We only wish to know how 9th graders feel about certain issues.

DO NOT SKIP ANY STATEMENTS OR MAKE MORE THAN ONE CHECK MARK FOR ANY STATEMENT.

STUDENT QUESTIONNAIRE

Name \_\_\_\_\_

Strongly Agree    Agree    Disagree    Strongly Disagree

- 1. The only reason people work is to earn a living . . . . .
- 2. There is a real chance for me to succeed in life. . . . .
- 3. The best way to improve yourself is through education . . . . .
- 4. There is a great deal of sense in trying very hard to succeed on your job . . . . .
- 5. Nobody really cares about people like me. . . . .
- 6. Education should help people to be better citizens. . . . .
- 7. Most employers think more of themselves than of their workers . . . . .
- 8. The major responsibility for finding a good job when I finish school rests with me . . . . .
- 9. Most teachers don't understand the problems of the average student . . . . .
- 10. A worker should not take a day off whenever he feels like it . . . . .
- 11. There is little chance for advancement unless a man is lucky
- 12. The only reason for going to school is to be able to get a job . . . . .
- 13. Most supervisors understand the problems of the average worker. . . . .



Student Questionnaire - Page 2

Strongly Agree Disagree Strongly Agree Disagree

- 14. Success depends more on luck than on real ability. . . . .
- 15. It pays to work hard, because employers generally will not take advantage of you . . . . .
- 16. The most important thing in life is to earn a lot of money . . . . .
- 17. Most workers do not really earn their pay checks . . . . .
- 18. A poor person has a real chance to get ahead in our society. . . . .
- 19. Money is not the most important thought in choosing a job. . . . .
- 20. When I finish school, I will not have much trouble in finding a job . . . . .
- 21. A man should always do his best for his employers. . . . .
- 22. Anyone can get ahead if he puts his mind to it . . . . .
- 23. People who accept their condition in life are happier than those who try to change things. . . . .
- 24. Good luck is more important than hard work for success . . . . .
- 25. Every time I try to get ahead, something or somebody stops me . . . . .
- 26. If a person is not successful in life, it is his own fault. . . . .



Student Questionnaire - Page 3

Strongly Agree Disagree Strongly Disagree  
Agree

27. Even with a good education, I'll have a hard time  
getting the right kind of job . . . . . \_\_\_\_\_

28. People like me don't have much of a chance to be  
successful in life. . . . . \_\_\_\_\_

Write your name here.....Age.....

School.....Grade.....

We want to know what you think about jobs and work.  
 You can tell us what you think by answering some questions.  
 On the next three pages there are 20 questions to answer.

Directions:

Read each question.  
 Read the answers.  
 Pick out the answer that tells how you would answer  
 the question.  
 Draw a line under that answer.

Before you start, look at these samples.

Sample A

Do you think an adult who has a job should be paid for doing  
 his work?

Yes                  Probably Yes                  Probably No                  No

If you think that the answer to the question is "Yes,"  
 you would draw a line under "Yes" as shown above.

Here is another sample.

Sample B

Which of these do you think is most true about jobs?

All people have jobs.  
 Many people have jobs.  
 Only a few people have jobs.

Which answer tells how you would answer the question?  
 Draw a line under that answer.

There are no right or wrong answers. You will not be  
 asked to explain your answers. We only want to know what you  
 think about jobs and work.

Remember, read the question and draw a line under the  
 answer that tells how you would answer the question.

Here are some questions that can be answered

Yes                  Probably Yes                  Probably No                  No

Draw a line under ONE of these answers for each question. Do not skip any questions.

-----

1. Would you like to listen to someone tell about the kind of work they do on their job?

Yes                  Probably Yes                  Probably No                  No

2. Two people are talking about the kind of work you want to do when you are grown up. Would you listen carefully to learn something about the job?

Yes                  Probably Yes                  Probably No                  No

3. Would you watch a TV program that tells about the kinds of jobs in your community?

Yes                  Probably Yes                  Probably No                  No

4. If friends of your family began to tell you about their jobs, would you ask questions about the jobs?

Yes                  Probably Yes                  Probably No                  No

5. Would you enjoy visiting a place where people work so you could learn about different kinds of jobs?

Yes                  Probably Yes                  Probably No                  No

6. Are you able to picture yourself working in a certain kind of a job when you finish school?

Yes                  Probably Yes                  Probably No                  No

7. Do you think it is important for you to think about what kind of work you would like to do someday?

Yes                  Probably Yes                  Probably No                  No

8. Do you think you know about the kinds of work you would like to do when you finish school?

Yes                  Probably Yes                  Probably No                  No

Here are some questions that have several answers.  
Draw a line under the ONE answer that best tells how  
you would answer the question.

-----

9. Which of these ideas do you think is most true about work?
- a) work is always hard and boring
  - b) work is usually the same hard grind in whatever job you have
  - c) work is sometimes hard and sometimes fun
  - d) work is often fun
  - e) work is always fun
10. Which of these do you think is most true about jobs?
- a) Any job that pays a lot will be OK with me.
  - b) I would like to do a job which I am good at.
  - c) I don't care what job I will have, just so I can work.
11. Which of these do you think is most true about work?
- a) Getting paid a lot is more important than liking a job.
  - b) Liking a job is more important than getting paid a lot.
12. Work is:
- a) something a person has to do
  - b) doing something to help the community
  - c) doing something to help yourself
  - d) doing something just for the money
13. About the jobs of some of the people in my family, I know
- a) many things
  - b) some things
  - c) only a few things
  - d) nothing

Here are some questions that can be answered Yes or No.  
Draw a line under ONE of these answers for each question.  
Do not skip any.

-----

14. In choosing a job, would you need to know what kind of a person you are?

Yes

No

15. Do you know of any jobs that you think that you would like to do when you finish school?

Yes

No

16. Is work important mainly because it lets you buy the things you want?

Yes

No

17. By the time you are in high school should you be sure about the kind of work you want to do?

Yes

No

18. Could people do any job they wanted to as long as they tried very hard?

Yes

No

19. Do you have only a very little idea what having a job would be like?

Yes

No

20. Can you think of several jobs that you would like to have when you finish school?

Yes

No

## Appendix D

Representative Evaluations  
of Teachers and Counselors

"I think this is a very good program. It should be continued and possibly expanded upon in the future."

"The WOW Project is unique in many respects. It can be started at the elementary level or any progression level even though it is sequentially developed through the Junior High Social Studies Program. The material is adaptable to all schools."

"The students enjoyed reading the WOW Student Reader, especially the comic strip concerning Mal and Rickey."

". . . students enjoyed it so much that they were asking for weekly editions in advance."

". . . students seemed to enjoy some editorials, but I personally feel that a change in format should be forthcoming in future editions."

"This program is one in which all teenagers should participate. By doing so he becomes aware of the fact that he will someday have to work. It gives him some ideas as to the types of persons employers look for. Most important is the fact that it develops an interest in some type of vocation."

"TV series was very ineffective. We did not view the programs after the first one on March 11. We had a difficult time finding TV sets. It was difficult for the students to hear and see the programs. We lack proper facilities."

"I think the television programs on Tuesdays and Wednesdays could be eliminated and lessons on careers used instead. The students seemed to enjoy classroom discussions much more than the mid-week programs."

"This was well planned, however, next year more places should be included on field trips and more time allotted so that students would be allowed to visit several places of their choice."

"I feel exercise on the order of a workbook might prove helpful if these are pertinent to the World of Work including simple interest tests and personality rating scales would surely find a receptive mood with the students."

". . . some students were very much in favor of the programs, others indifferent. But one lesson they all seemed to hear Get a High School Education--Don't be a Drop-Out."

"Career Day seems unnecessary when field trips are participated in as extensively as ours have been."

"I found the interchange of ideas among those participating and the 'visitors' to be helpful in many ways. Though I felt that some goals should have been identified and would have directed our thinking I feel that the manner in which it was handled allowed for more freedom."

"We took only one field trip--an all day trip to Delgado College. The students were taken by small groups into the classroom and allowed to talk with students. It is my opinion that they learned more this way than in any other presentation."

"The program as presented stirred up more interest in the study of careers. The unit projects gave them the opportunity to be involved practically in a search for information; however, much of the material, films and the like were geared to a slow learner and the above average lost interest at times."

"To expose junior high school students to various fields of endeavor is actuality, and giving them the opportunity to question professional, skilled, or semi-skilled employees helps to broaden their horizons concerning the World of Work. Visiting various industries and the like are much better than reading about them in a book. Actuality motivates one better than just reading a job description and its requirements.

Exposing these youngsters to the real thing makes them curious to investigate the profession, technical skill, or semi-skill they might be interested in. An activity of this nature also encourages them to remain in school to achieve the goals they might have chosen."