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ABSTRACT

Funded under ESEA Title I, this program was designed to provide income and work experience for disadvantaged junior high school youths age fourteen and above; and, to provide incentives which would motivate youths to continue their education through high school. The wages earned were intended to enable the student to provide for some of his personal needs. Additionally, it was expected that the student would view school more favorably. The specific objectives for participants were as follows: (1) to remain in school at least one year past their sixteenth birthday; (2) to improve in school attendance and punctuality; and, (3) to show growth in the ability to perform on the job along with good work habits. The evaluation procedure consisted of obtaining: (a) followup data on former participants concerning how many remained in school for at least one year beyond their sixteenth birthday; (b) absence and tardiness records of selected samples of participants and non-participants; and, (c) ratings of trainees by work sponsors early in the student's work experience on several job performance characteristics. (Author/JM)

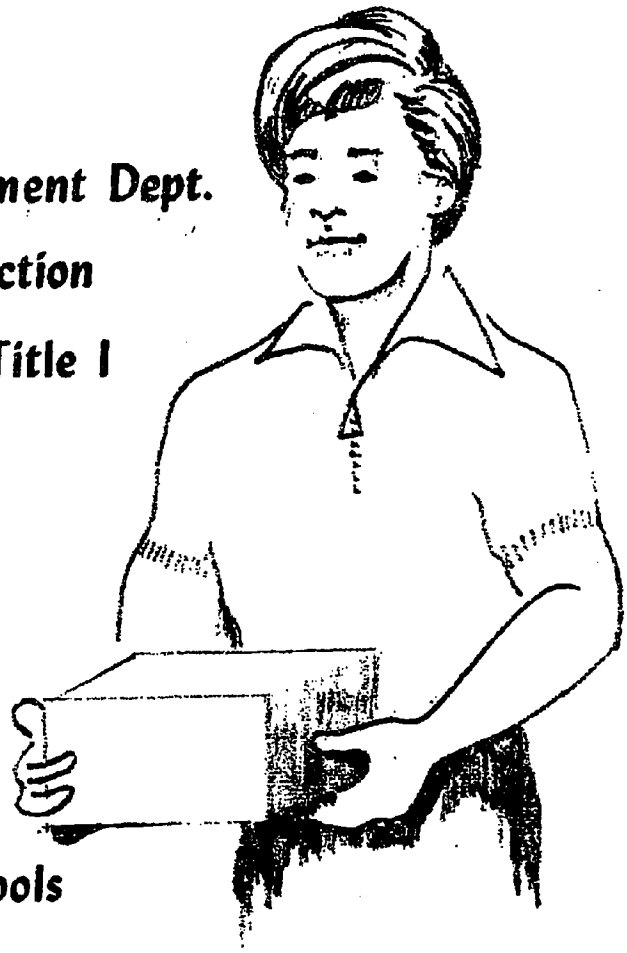
EVALUATION of the JUNIOR HIGH WORK TRAINING PROGRAM

Funded Under Title I of the Elementary and Secondary Education Act

1970 – 71

by E. Mansfield Woolfolk

Project Evaluator (Title I)



The Research and Development Dept.

Program Evaluation Section

Funded Under E.S.E.A. Title I

Detroit Public Schools

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Evaluation of the Junior High Work Training Program

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Background

The Problem

Pupils living in areas of socio-economic deprivation suffer from severe economic pressures. These pressures affect their attitudes and achievements in school and are probably among the chief reasons for the pupil's leaving school prior to graduation. The dropouts, in turn, add to the army of untrained manual laborers for whom employment is, at best, sporadic. Even among the poor youth who do remain in school, there has been little opportunity in the past for supervised work experiences which will prepare them for the demands of the world of work. As a result, a large percentage of graduates from areas of poverty have long and frequent periods of unemployment.

Organization of the Project

The project was administered by a director and six experienced counselors who served as coordinators. One of the counselors functioned as coordinator for the non-public schools in the project. Each coordinator maintained an office in one of the participating schools assigned to him. The coordinator was considered a staff member of the school in which he had an office although matters pertaining to the regular school program continued to be the responsibility of the regular school counselor.

Enrollees for the program were selected through personal application or on the basis of recommendation by the faculty or a social agency. Final determination of program eligibility in accordance with previously established criteria and enrollment in the program were made by the coordinator.

Over the period of the project, September, 1970 through June, 1971 which comprised the regular school year, approximately 1200 junior high boys and girls worked an average of five hours per week as teacher or office aides, custodial, locker room or cafeteria helpers and in other similar capacities. However, the maximum number employed at any one time was 1000. Work tasks were performed before, during and after regular school hours. The enrollee was responsible to and under the supervision of a school staff member. The rate of pay for each hour worked was $1.00 per hour.

Project Goals

The program was designed to provide income and work experience for disadvantaged junior high school youths age fourteen and above and to provide incentives which would motivate youths to continue their education through high school. The wages earned by the pupils were not much of an aid to a family operating under financial limitations, but the student would be able to provide for himself some of his personal needs with the money earned. Additionally, it was expected that the student would view school more favorably.

The specific participant objectives of the program are listed below:

1. Participants will remain in school at least one year past their sixteenth birthday.
2. Participants will show improvement in school attendance.
3. Participants will show improvement in punctuality to school.
4. Participants will show growth in the ability to perform on the job and to develop sound work habits.

The Evaluation Plan

The plan for the evaluation of the Junior High Work Training Program consisted of obtaining data relative to each objective and was intended to measure the

effectiveness of the project in achieving aforementioned goals. The phases were as follows:

1. Followup data on former participants were obtained in order to ascertain how many remained in school for at least one year beyond their sixteenth birthday.

2. Absence and tardiness data on selected samples of participants (experimentals) were obtained and compared with similar data on non-participant (control) groups of students. The data on the participants covered a two year period, the school year preceding their enrollment in the program and the school year of their participation. The period of comparable data on the control groups paralleled that of the experimentals.

3. Work sponsors rated the trainees early in their work experiences on several job performance characteristics. Near the end of the school year the trainees were rated a second time on the same criteria, making possible an analysis of work habit growth.

Analysis of the Data

In this section of the report findings are given with the discussion of each objective.

Objective: Participants will remain in school for at least one year past their sixteenth birthday.

This objective anticipates that participation in the program will have enough carryover power, after students have left the program, to influence them to remain in school for at least one school year past the compulsory attendance age of sixteen. Attainment of this goal is expected in spite of the fact that upon graduating from junior high, a participant is no longer in direct contact with the program or with a coordinator.

To help assess this goal, a follow-up study of former participants was conducted. Names and birthdates of the 1969-70 project year participants who graduated from junior high school in June, 1970, were obtained from the coordinators. Selected from the list were names of 196 former participants who satisfied the criterion of at least one year of participation in the program and who would have completed one school year beyond their sixteenth birthday by June, 1971. Of the 196 students in the follow up study 42 were excluded from the membership and the dropout data for the following reasons. Four of these had moved out of the Detroit area making a follow-up unfeasible, and the whereabouts of the other 38 were not ascertainable.

Tabulation of the data revealed that most of the former work training participants were enrolled in twenty Detroit senior high schools, thirteen of which were classified as ESEA, Title I schools. Table 1 presents the membership and dropout figures according to two classifications of schools, ESEA, Title I as opposed to all others.

Table I

Senior High School Enrollment Status of Former Participants
June, 1969, Junior High School Graduates

Classification of Schools	Enrollment Status			
	In Membership		Dropped	
	N	Pct.	N	Pct.
ESEA, Title I	79	73.8	28	26.2
Other	38	80.9	9	19.1

Table II presents the membership and dropout data obtained from a similar followup study conducted last year on former participants who graduated from junior high school in June, 1968.

Table II

Senior High School Enrollment Status of Former Participants
June, 1968, Junior High School Graduates

Classification of Schools	Enrollment Status			
	In Membership		Dropped	
	N	Pct.	N	Pct.
ESEA, Title I	87	66.4	44	33.6
Other	41	85.4	7	14.6

In an effort to average out aberrations that may occur in single followup the data from this year's study plus that from the two preceding studies have been combined and then compared with the general school population in ESEA, Title I, senior high schools. The data for this general population are for the school year 1969-70. Moreover, in the two year period elapsing between the participants graduation for junior high school and the time of a followup study, normal progress

in school would have the former participants completing the eleventh grade. Hence, the data on the general population includes only the tenth and eleventh grades in the ESEA, Title I, senior high schools.

Table III

Comparison of Membership and Dropout Data on Former Participants and General Population in ESEA, Title I, Senior High Schools

Student Population	Enrollment Status			
	In Membership		Dropped	
	N	Pct.	N	Pct.
Former Participants	425	75.2	140	24.7
General Population	21,375	80.8	5,089	19.2

Any comparison between these two groups should be viewed in perspective. The data on the general population are given as background against which to view the data on the former participants. Primarily, the two groups are not formally comparable in the classical sense of an experimental versus a control group. The general population group includes all students--those with high motivations, continuous records of successful academic performance, as well as youngsters from families who are not classified as low income.

On the other hand, not only were participants for the Junior High Work Training Program selected on the basis of exhibiting dropout-prone characteristics, but the selection process was expected to concentrate on choosing those students who exhibited these characteristics to the greatest degree. That is, a student who was judged to be most likely a school dropout would have been the best candidate for participation. Assuming that the selection criteria differentiated and that the selection process worked efficiently, then, as a group, the former participants

in the followup study could be considered as having a high probability of being school dropouts.

In the light of the foregoing discussion, the retention of approximately 75% of former participants for the year beyond the sixteenth birthday as viewed against the nearly 81% retention of the general population would certainly indicate that the first objective of the project has been met.

Objective: Participants will show improvement in school attendance.

Objective: Participants will show improvement in punctuality to school.

Two of the specific objectives of the Junior High Work Training Program were to improve the school attendance and punctuality of those students who were selected for the program on the basis of a poor record in either or both of these behaviors. A student who was selected because of poor attendance had to meet the criterion of being absent 20 or more times during the semester immediately prior to enrollment. In similar manner selection of a participant on the basis of poor punctuality required that he have a minimum of 20 tardinesses during the semester preceding enrollment.

To assist in analyzing the performance of the participants, comparable data were obtained on control groups of students. A control group was selected for each of the two behavioral objectives relating to improved attendance and punctuality. Criteria employed in the selection of the control groups paralleled those used in the selection of the experimental pupils. Students for the control groups were selected from the same schools as the participants.

Scattergrams showing pre- and post records of both groups in numbers of absences and tardinesses were constructed to facilitate the analysis of the data. As a pictorial representation of pre- and post records, the scattergram has the particularly unique advantage of indicating at a glance improvement or retrogression

of individuals. In the scattergrams presented in this report, numbers in cells which form the diagonal from the lower left hand corner to the upper right hand corner indicate the number of pupils for whom there was no change in performance. Numbers in cells above the diagonal indicate students for whom there was regression on the pre- to post measure, whereas cells below the diagonal indicate improvement. The further a cell is from the diagonal, the greater the improvement or retrogression.

In addition, the chi square test for statistically significant differences was applied to the data from the pre- enrollment period of the experimentals and controls as well as to the post enrollment data.

There were 1000 students enrolled in the program during the fall 1970. Of this number, 35 met the criterion of 20 or more absences during the spring term of 1970 and remained in the program through June, 1971. These 35 participants formed the experimental group for the evaluation of the objective relative to improved attendance.

Students from the same schools as the experimentals were selected to act as a control group. These students, 19 in number, also met the criterion of 20 or more absences during the spring term of 1970.

The number of absences accumulated by each student in each group for the school year 1969-70, the school year preceding participation in the program by the experimentals, was compared with the number of absences for the school year 1970-71. The numbers of absences were rank ordered and intervalized for scattergram matrices. The movement of these measures from pre- to post are given in Tables 4 and 5.

Table IV

Matrix of Pre- and Post Numbers of Absences
Participant Group

1969-70 Number of Absences

1970-71 Number of Absences	29 or less	30-34	35-39	40-44	45+
45+	1	1	1	2	14
40-44				1	
35-39	1			1	2
30-34					5
29 or less			1		5

Year	N	Mean	Median
1969-70	35	58.9	52.3
1970-71	35	53.4	44.4

The data from Table IV show that 14 (40%) of the 35 participants succeeded in improving their attendance from one to four intervals, 15 (43%) made no progress, and 6 (17%) regressed from one to three intervals. Of the 14 enrollees who showed improvement 5 improved by 4 intervals, 5 by 3 intervals, 3 by 2 intervals, and 1 by one interval, actually reducing their absences by as much as approximately 25 days.

Of the 6 (17%) participants who showed retrogression, 2 regressed by one interval and 4 by two or more intervals.

Table V

Matrix of Pre- and Post Number of Absences
Control Group

1969-70 Number Absences

1970-71 Number of Absences	29 or less	30-34	35-39	40-44	45+
45+			3	2	7
40-44					
35-39	1				1
30-34	1				
29 or less		1	1	1	1

Year	N	Mean	Median
1969-70	19	50.0	44.0
1970-71	19	53.7	46.0

From the second scattergram, Table V, it can be seen that of the 19 students in the control group 5 (26%) showed improvement in attendance. Seven (37%) showed retrogression from one to three intervals, and 7 (37%) had no changes from pre- to post.

The chi square test applied to the absence data from the pre- enrollment period indicated no statistically significant differences between the experimentals and the controls. When applied to the post data, the test also indicated no

statistically significant differences.

A comparison of the means of the number of absences reveals that, on a pre- post basis, the average participant reduced his yearly number of absences by 5.5 days. The average control student, on the other hand, increased his yearly absences by 3.7 days.

The chi square test has indicated that the observable differences in the pre- and post attendance patterns for the experimentals and the controls could have been due to chance. Some improvement and a better performance by the project participants are evidenced by the scattergram as well as by a comparison of the means and the medians. In light of this analysis, it can be said that the objective relating to improved attendance has been met.

There were 33 participants who formed the experimental group for the evaluation of the objective relative to punctuality. They were taken into the program during the fall of 1970, met the criterion of 20 or more tardinesses during the preceding spring term, and remained in the program through June, 1971.

Students from the same schools as these experimentals were selected to act as controls. These students, 19 in number, also had a record of 20 or more tardinesses during the spring term of 1970.

Procedures used in the collection and the analysis of punctuality data were similar to those used in the preceding discussion. Scattergrams on the experimentals and controls were constructed. These matrices are given in Tables VI and VII. From the scattergrams it can be seen that 17 (52%) of the 33 experimentals reduced their number of tardinesses by at least one interval and as many as four compared to 5 (26%) of the 19 controls. The chi square test, applied to the pre- measures and to the post measures, indicated no statistically significant differences between the experimental and the control groups.

However, observable differences are noticeable in the number of students who bettered their punctuality records by two or more intervals. Of the 5 controls exhibiting improvement all improved by at least two intervals, whereas of the experimentals 13 out of 17 showing improvement made improvement of two or more intervals. Examination of the means and the medians, pre- and post, for both groups indicates improvement in favor of the experimentals. This support for the observable differences in the scattergrams on reduction in tardinesses is more pronounced than that in the analysis of data on reduction in absences. In light of this analysis, it can be said that the objective relating to improve punctuality has been met.

Table VI

Matrix of Pre- and Post Numbers of Tardinesses
Participant Group

1970-71 Number of Tardinesses \ 1969-70 Number of Tardinesses	29 or less	30-34	35-39	40-44	45+
45+	1	2	2	1	8
40-44		1		1	2
35-39					
30-34				1	1
29 or less		2	2	1	8

Year	N	Mean	Median
1969-70	33	48.3	46.5
1970-71	33	41.1	40.0

Table VII

Matrix of Pre- and Post Numbers of Tardinesses
Control Group

1969-70 Number of Tardinesses

1970-71 Number of Tardinesses	29 or less	30-34	35-39	40-44	45+
45+	1		2	2	6
40-44			1		
35-39					
30-34	1			1	1
29 or less	1				3

Year	N	Mean	Median
1969-70	19	46.8	43.5
1970-71	19	48.0	48.0

Objective: Participants will show growth in the ability to perform on the job and to develop sound work habits.

This phase of the evaluation is concerned with on-the-job progress made by the Junior High Work Training Program participants during the school year September, 1970, through June, 1971.

A Pupil Progress Report form was devised as an instrument for obtaining work performance data from the job sponsors. Each participant was evaluated by the sponsor for whom he worked. An initial rating was made during the fall of 1970 and a second rating during the spring of 1971.

The five job related facets on which the participants were evaluated were: (1) attendance, (2) punctuality, (3) attitude, (4) application, and (5) quality of work. The participants were evaluated by the sponsors using rating categories of "poor" "average" "good" or "excellent." Scattergrams were constructed based on the paired sets of ratings received by the participants.

In each of the job related facets on which participants were evaluated, the scattergrams reveal that a slightly larger number showed regression than improved. Moreover, less than 13% of the total number of ratings regressed or improved by two or more intervals; in other words, nearly 87% had a final rating either the same as or within one interval of the initial rating.

Overall, the indications are that the participants as a group did not show any improvement in the job related facets. In each of the five job related facets the following information is in evidence: (1) Attendance - 68% showed improvement or no change, 32% regression, (2) Punctuality - 66% showed improvement or no change, 34% regression, (3) Attitude - 65% showed improvement or no change, 35% regression, (4) Application - 67% showed improvement or no change, 33% regression, (5) Quality of Work - 70% showed improvement or no change, 30% regression.

There is little growth in these areas on which the participant was evaluated. There was a large number of participants who were rated initially as performing well and remained so. A similar condition existed in the evaluation of the project the preceding year.

Under the circumstances, the findings indicate little change and the suggestion is being made that the project staff re-evaluate the relevancy of this objective.

Matrix of Fall, 1970 and Spring, 1971
Rating of Participants' Attendance on the Job

Rating, Spring, 1971	Rating, Fall, 1970: Excellent	Good	Average	Poor
Poor	2	19	18	20
Average	10	28	22	19
Good	15	39	22	5
Excellent	38	16	9	2

Matrix of Fall, 1970 and Spring, 1971
Rating of Participants' Punctuality on the Job

Rating, Spring, 1971	Rating, Fall, 1970: Excellent	Good	Average	Poor
Poor	4	19	20	11
Average	9	31	30	13
Good	12	51	14	7
Excellent	36	16	10	1

Matrix of Fall, 1970 and Spring, 1971
Rating of Participants' Attitude on the Job

Rating, Spring, 1971	Rating, Fall, 1970: Excellent	Good	Average	Poor
Poor		14	14	8
Average	15	35	19	6
Good	20	36	28	4
Excellent	51	30	4	

Matrix of Fall, 1970 and Spring, 1971
Rating of Participants' Application on the Job

Rating, Spring, 1971 \ Rating, Fall, 1970	Excellent	Good	Average	Poor
Poor		9	17	7
Average	10	40	37	10
Good	19	40	30	1
Excellent	34	26	4	

Matrix of Fall, 1970 and Spring, 1971
Rating of Participants' Quality of Work on the Job

Rating, Spring, 1971	Rating, Fall, 1970: Excellent	Good	Average	Poor
Poor		10	16	3
Average	7	35	43	10
Good	18	50	33	
Excellent	30	23	6	

The 1970-71 Junior High Work Training Program was an effort to provide disadvantaged youth with financially compensated work experiences intended to motivate them to improve in attendance, punctuality, development of sound work habits, and to continue their education for at least one school year beyond their sixteenth birthday. The purpose of the evaluation was to assess the effectiveness of the project in the attainment of its goals.

Participants were approximately 1200 students from junior high schools qualifying under ESEA, Title I. Selection of students for participation in the program was based on criteria intended to identify the most disadvantaged and at the same time to zero in on those most likely to become school dropouts.

Pre- and post enrollment data on the participants, and where available, on control groups also, were obtained and analyzed. Overall, the indications are that the attainments of the behaviors expected of the participants were mixed. There was little or no change in the development of sound work habits, except that in many cases the participant started out at a high level of performance and maintained it throughout the year.

On the other hand, there were observable improvements in school attendance and punctuality as depicted by scattergrams. In addition, a comparison of the pre- and post means and medians for these two behaviors favored the participants over the control group. However, the chi square test applied to the attendance and punctuality data on both the experimentals and the controls indicated no statistically significant differences between the two groups either on the pre- or the post measures. Therefore, the improvement on the part of the enrollees could have been due to chance.

The primary and long range goal aimed at motivating former participants to remain in school for at least one year beyond the compulsory attendance age of sixteen, appears to be meeting with success. Followup studies indicate that 3 out of 4 students who participated in the program for one or more years have continued their formal education for at least one school year beyond age sixteen. The retention rate is particularly noteworthy for the following reasons:

1. Student selection for the program concentrates on those deemed most likely to become school dropouts.
2. Nearly all of the participants are 14 and 15 year-old youths. Most do not become 16 years of age until after leaving junior high school; hence, upon reaching this critical age, the former participants have not been in direct contact with the program or the counselor-coordinators for up to a full school year.
3. The retention rate for the general population of 10th and 11th grade students in ESEA, Title I, senior high schools is approximately 4 out of 5, a rate only slightly better than that for former Junior High Work Training Program participants.

The evidence supports the attainment of the long range goal. In view of this achievement, the limited success with the other stated objectives could probably stand review by the project staff. An alternative to maintaining the present objectives would be modifications defining the extent of expected participant behavioral changes on a short term basis.