The Production Workshop Project was designed to promote the educational rehabilitation of selected ninth-grade students. Programs in block-scheduled academic instruction were integrated with vocational training in a Production Workshop setting. The 1971-72 Project activities served a total of 243 students -- 117 boys and 126 girls. Approximately 68 percent of these participants remained in the project for the entire school year. Project activities integrated changes in both the content and the organization of instruction. A key element was the involvement of students in production-oriented workshops. Work experiences for girls were developed in a combination food-and clothing laboratory. Work experience for boys utilized an industrial arts shop with modifications in equipment and materials. As a motivating element, participants in the project received 50 cents per hour for one hour per day for the work done in the project workshop. The total amount per pupil was $2.50 per week, approximately $45.00 for the semester. Class sizes were reduced with a maximum enrollment of 20 students per project class. In order to provide close supervision and individualized attention, a teacher's aide divided his time between the class of boys and the class of girls in each of the five schools. Academic instruction was integrated in a four-period block.
PRODUCTION WORKSHOP PROJECT

DPPF

1971-72 EVALUATION

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DIVISION OF RESEARCH AND DEVELOPMENT

September, 1972
CLEVELAND PUBLIC SCHOOLS
NINTH GRADE PRODUCTION WORKSHOP

I. INTRODUCTION

A. Needs and Rationale

Among economically disadvantaged youth in secondary schools, a disproportionately high number of students reflect characteristics of the potential dropout. Apathy or hostility toward education accompanies a history of achievement deficits and adjustment problems. The educational survival of these young people depends in part on the rapid development of appropriate school programs.

B. Summary of Operations

The Production Workshop Project was designed to promote the educational rehabilitation of selected ninth-grade students. Programs in block-scheduled academic instruction were integrated with vocational training in a Production Workshop setting.

The 1971-72 project activities served a total of 243 students—117 boys and 126 girls. Approximately seven out of ten (68%) of these participants remained in the project for the entire school year.

C. Historical Background

The project classes were inaugurated in February, 1968 in five Title I target junior high schools. For the next three school years (1968-69 through 1970-71), project operations were continued in four of the five initial schools. In the 1971-72
In both the 1968-69, 1969-70, and 1970-71 school years, participants demonstrated: 1) significant increases in school marks, 2) significant improvement in attendance, and 3) very positive feelings about the Production Workshop project.

D. Objectives

The overall objective of this project is to strengthen the educational program for ninth grade students whose school history shows evidence that they may be potential drop-outs.

Specific objectives to be achieved by this project are:

1. Given a standardized test of reading vocabulary and comprehension, at least 75% of the students will evidence a pre-post gain representing "normal" progress--i.e., a pre-to-post increase in grade equivalent scores corresponding to the duration of pre-to-post instruction.

2. Given a standardized test of arithmetic computation, at least 75% of the students will evidence a pre-post gain representing "normal" progress.

3. Through intensive parent involvement and the students' increased awareness of the fundamentals needed to enter the mainstream of education, participants' attitude toward school will become more positive as measured by:

   a. Participants' attendance rate during the year will be a minimum of 4 per cent above the average attendance rate for all grade 9 students in the Production Workshop schools.
b. The 1971-72 dropout rate among participants will be lower than the rate for the remainder of the grade 9 group in the project schools.

c. Students will evidence greater involvement in extracurricular activities (school year prior to participation vs. year of project participation.)

d. Participants will evidence improved attendance (during the year of participation.)

e. Participants will evidence improved quality in written classwork and homework assignments (first six weeks vs. last six weeks of school year.)

4. Participants will become familiarized with the world of work through:

   - Using assembly-line techniques in workshop
   - Evaluating all workshop projects in terms of monetary value
   - Going on field trips to various industries
   - Listening to speakers from industries on topics such as work habits and job requirements
   - Filling out actual job application forms
   - Examining and discussing income tax forms
   - Role-playing job interviews (or experiencing actual job interviews if possible)

5. Due to constant positive reinforcement of success experiences, participants' self-image will improve significantly as reflected by pre-post responses.
E. **Focus of Evaluation**

The project evaluation sought answers to the following questions, representing operational indices of attainment of the objectives:

1. Did the majority (75%) of students attain a "normal" rate of progress in reading while in the project?

2. Did the majority (75%) of students attain a "normal" rate of progress in mathematics while in the project?

3. Did students attain better school marks while in Production Workshop than they did prior to participation?

4. Did students evidence a higher attendance rate (while in the Production Workshop program) than they did before entering the program?

5. Did Production Workshop students evidence a lower dropout rate than did the other ninth grade students in the project schools?

6. Did students improve the quality of their written classwork and homework assignments (beginning of the year vs. end of the year)?
The DPPF per-pupil cost of the 1971-72 operations was $1,218.* Since the average general-funds expenditure for a junior-high school student was $518 the total annual cost per participant was $1,736.

*Based on average daily membership of 204 students.
II. HIGHLIGHTS OF FINDINGS

A. Did the majority (75%) of students attain a "normal" rate of progress in reading while in the project?

Despite the marked initial deficits in reading skills (mean pre-test scores of 4.4 in Vocabulary and 3.8 in Comprehension), over seven out of ten (71%) of the students demonstrated "normal" progress in Vocabulary during the project, gaining seven or more months in test score during seven months of instruction. Over half (56%) demonstrated "normal" progress in Comprehension skills.

Analysis of pre-post standardized test scores* revealed that both boys and girls made significant gains in vocabulary and comprehension skills. Average changes were approximately four times as great as gains to be expected on the basis of progress rates at pre-testing. These findings indicate that progress rates accelerated markedly during the period of participation.

- Boys' Vocabulary scores increased from a mean of 4.0 (pre) to 5.7 (post); girls’ Vocabulary scores increased from a mean of 4.7 to 5.8.
- Boys' Reading Comprehension scores increased from a mean of 3.5 to a mean of 5.0; girls' scores increased from a mean of 4.0 to a mean of 4.9.

B. Did the majority (75%) of students attain a "normal" rate of progress in mathematics while in the project?

Approximately six out of ten (61%) of the students attained "normal" gains of seven or more months in mathematics scores during seven months of instruction.

* Comprehensive Tests of Basic Skills-- Level 3
Analysis of pre-post standardized-test data revealed that both boys and girls made significant gains in mathematics skills. The mean pre-to-post increase of approximately nine months (in Computation scores) was twice as great as the gain to be expected on the basis of the pre-test mean of 5.6. This outcome reflected a marked acceleration in rate of progress.

Boys' Computation scores increased from a mean of 5.3 (pre) to 6.0 (post); girls' scores increased from a mean of 5.9 to a mean of 6.9.

C. Did students attain better school marks while in Production Workshop than they did prior to participation?

For the total student group, final marks for the Production Workshop year were significantly higher than they had been during the year preceding participation. Both boys and girls demonstrated mean increases in grade-point average corresponding to approximately one letter mark category.

- The boys' mean grade-point average (GPA) rose from .89 (pre) to 1.91 (during participation).
- The girls' mean GPA increased from 1.51 to 2.49.

Participants evidenced greater gains in final marks in English than were obtained in mathematics, with boys' gains exceeding those of girls in both subject areas.

- The average English mark increased from 1.42 for the 1970-71 year to 2.29 for the project year. The gain in mean mathematics marks was from 1.20 (June, 1971) to 1.89 (June, 1972).
D. Did students evidence a higher attendance rate (while in the Production Workshop program) than they did before entering the program?

Both boys and girls demonstrated improvement in attendance during the project year.

- The boys' attendance increased from a mean of 154.5 days or 85.8% (for the 1970-71 year) to a mean of 159.2 days or 88.4% during the Production Workshop year.

- Girls' attendance rose from a mean of 152.0 days (84.4%) to a mean of 155.4 days (86.3%).

- The average 1971-72 attendance rate of 87.4% for Production Workshop students surpassed the attendance rate of 85.6% established by the total Grade 9 group in the five project schools.

E. Did Production Workshop students evidence a lower dropout rate than did the other ninth grade students in the project schools?

The Production Workshop dropout rate of 4.5% was slightly lower than the school-year rate of 4.7% established by all other Grade 9 students in the five project schools.

F. Did students improve the quality of their written classwork and homework assignment (beginning of the year vs. end of the year)?

The proportion of completed assignments increased in mathematics (from 74% completed to 82% completed), but declined in English (from 75% to 73%). Girls evidenced an increase in the proportion of assignments completed in both English and mathematics. Boys demonstrated a marked improvement in mathematics completion (from 68% to 79%) but had almost as great a decline in English completion (from 75% to 65%).
G. Changes in Student Attitude

Students' pre-post survey responses revealed an increase in positive views of "self as student," negligible change in positive attitudes toward the "social aspects of school", and a decline in positive "perception of teachers".

Boys' pre-post responses reflected a decline in positive attitude for each of the three factors. Girls' responses reflected an increase in positive feelings about each of the three factors.

Both boys and girls expressed the highest level of positive responses for the factor "self as student", and the lowest level for the factor "perception of teachers". This pattern appeared in both pre and post testings.

H. Students' Opinion About Production Workshop

Students' questionnaire responses reflected a favorable opinion about the project. Almost seven out of ten (69%) of the students indicated that they were "learning better this year... than last year," 65% were "glad to be in Production Workshop", and 62% thought that "students who aren't in the Production Workshop class wish that they were".

I. Implications and Recommendations

The data revealed that the 1971-72 project enrollment maintained the stability established in the preceding year. The proportion of full-year participants was 68% during the 1971-72 period as compared to only 35% in 1968-69. This increase in stability, reflecting more intensive efforts in the area of selection of participants, increased the possibility of delivering sustained assistance to students.
The 1971-72 outcomes were consistently positive and surpassed the gains attained in the preceding years of project operation. The most striking improvement appeared in students' progress in reading and mathematics skills as reflected by pre-post test scores. In the two reading areas (Vocabulary and Comprehension), both boys and girls exceeded the norm—i.e., gained more than seven months in test scores over seven months of elapsed instructional time. The previous year's evaluation reported only negligible pre-post changes in reading scores. The need for "more intensive focusing on the reading area" was cited. The 1971-72 outcomes indicate that such focusing has been effective.

The 1971-72 progress pattern assumes greater significance when viewed in the perspective of the students' pre-test performance levels. Mean pre-test scores in reading reflected prior progress at approximately one-half the "normal" rate. Student mean gains in reading during the project represented progress almost double the "normal" rate.

A similar pattern of accelerated progress emerged in the pre-post arithmetic results.

Satisfaction with the marked improvement in students' progress must be tempered by recognition of remaining skills deficits. Despite their striking gains, students' mean scores at post-testing were 5.8 (in Vocabulary), 5.0 (in Comprehension), and 6.5 (in Computation). Initial deficits had been narrowed, but not erased, in the project year. Maintaining the learning
momentum of the Production Workshop experience would appear to require some supportive program for students during their post-project year.

The project appeared to have greater positive impact on boys than it did on girls. Boys' mean gains exceeded those of girls for four of the six indices used (vocabulary and comprehension scores, GPA, and attendance). This outcome repeated the pattern that appeared in the previous year's evaluation.
III. PROJECT DESCRIPTION

A. Procedures

Project operations integrated changes in both the content and the organization of instruction. A key element was the involvement of students in production-oriented workshops.

Work experiences for girls were developed in a combination food-and-clothing laboratory. Work units that were correlated with clothing included health service, home nursing, child care, and service projects for Red Cross. Work experience for boys utilized an industrial arts shop with modifications in equipment and materials.

As a motivating element, participants in the project received 50 cents per hour for one hour per day for the work done in the project workshop. The total amount per pupil was $2.50 per week, approximately $45.00 for the semester.

Class sizes were reduced with a maximum enrollment of twenty students per project class. In order to provide close supervision and individualized attention, a teacher's aide divided his time between the class of boys and the class of girls in each of the five schools.

Academic instruction was integrated in a four-period block. English and social studies were correlated in two consecutive periods. Mathematics consisted of one period of class work plus another of supervised study. Emphasis in English was on communication skills. Experience on how to take orders, how to approach people, and the study of advertising illustrated some of the activities.
B. Participants

In each of the five project junior high schools, one class of boys and one class of girls were organized. The average enrollment per class was 20 students. A total of 117 boys and 126 girls participated, with 165 students (or 68%) remaining in the project for the entire school year. This proportion of full-year participants maintained the proportion established during the previous year (1970-71), and was double the 35% proportion of full-year participants in the first year of operation (1968-69).

The characteristics of the participants define the following profile:

1. The average P.L.R. was 86.1 with the girls' mean of 87.7 slightly exceeding the boys' mean of 84.4.

2. Pupils' performance on standardized achievement tests administered at project entry confirm inadequacies in reading and arithmetic skills. Deficits between pupils' grade placement at testing and means of obtained scores were:

<table>
<thead>
<tr>
<th></th>
<th>Deficits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Vocabulary</td>
<td>4.7 grade equivalents</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>5.3 grade equivalents</td>
</tr>
<tr>
<td>Arithmetic Computation</td>
<td>3.5 grade equivalents</td>
</tr>
</tbody>
</table>

3. For the school year prior to project participation, students had a mean grade-point average of 1.20 or slightly better than a "D". Almost one out of two (46%) of the students had an average of "D" or less.

4. During the school year prior to the project, the average attendance of boys was 154.5 days (86%) and that of the girls was 152.0 days (84%).

* Comprehensive Tests of Basic Skills, Level 3, Form R administered in September, 1971.
IV. ANALYSIS OF FINDINGS

A. Changes in Achievement

The assessment of changes in achievement centered on analyses of the pre-post results of standardized tests of reading and arithmetic. The analyses were designed to answer the following questions:

- Did the majority (75%) of the students attain a "normal" rate of reading progress while in the Production Workshop?
- Did the majority (75%) of the students attain a "normal" rate of arithmetic progress while in the Production Workshop?

Before proceeding with the results of the analysis of findings "statistical significance" should be placed in proper perspective:

A "statistically significant" pre-post difference indicates that a "real" change has occurred--i.e., that post scores are "really" different from the pre scores. However, the statistic does not take into account the time period during which the change occurred. Thus, for example, a gain of four months in test scores could prove to be a "real" pre-post difference regardless of whether the change had occurred over one month or over ten months. A pre-post change--be it gain or loss--that is not significant represents a fluctuation that is within the range to be expected through chance alone.

The significance-of-change statistic does not take into account the relation of gain scores to rate of progress at the point of pre-testing. A student who attains a grade-equivalent score of 7.0 when he or she has an actual grade placement of 7.0 is considered to be "at norm." This hypothetical student would be expected to show "normal" progress of approximately one month in test score for each month of
instructional time. However, a student whose pre-test performance is only half the "normal"--e.g., a score of 4.5 at an actual grade placement of 9.0--would be expected to gain at approximately half the "normal" rate. Realistic interpretation of gain scores must include recognition of below-normal initial achievement of students.

1. Overview of Pre-Post Achievement Testing

The Comprehensive Tests of Basic Skills Level 3 Form R was administered to all Production Workshop students in late September, 1971. Form Q of the same test was administered in early May, 1972. The elapsed time between pre and post testings was seven months, or .7 grade-equivalent units. Analysis focused on the Vocabulary and Comprehension subtests in reading, and on the Computations subtest in Mathematics.

Both pre and post data were obtained for a total of 105 students--48 boys and 57 girls--representing approximately 64% of the full-year participants.

In order to compare students' actual score-changes with score-changes to be "expected" on the basis of pre-test rates, an expected gain-score was computed for each student. E.g., a pupil with an actual grade placement of 9.0 who attained a grade-equivalent score of 4.5 had progressed at a rate below "normal." For such a student, an expected gain over seven months of instruction could be approximated as $4.5/9.0 \times 7 \text{ months} = 3.5 \text{ months}$ of gain, rather than the "normal" seven months. Differences between actual and expected changes were analyzed.
a. Reading Results*

Over seven months of instruction, both boys and girls evidenced significant gains in both Vocabulary and Reading Comprehension scores. In Vocabulary (Appendix B), the boys' mean score increased from a "pre" of 4.0 to a "post" of 5.7. This average gain of 1.7 grade-equivalent units was more than double the expected "normal" gain of .7 and was approximately five times the boys' expected mean gain of .3 based on pre-test progress levels. Four out of five (80.0%) of the boys demonstrated gains of seven or more months in test scores during the seven months of instruction--i.e., made progress equal to or greater than the "normal".

Girls' Vocabulary scores increased from a "pre" mean of 4.7 to a "post" mean of 5.8. The average gain of 1.1 grade-equivalent units was almost double the expected "normal" increase of .7 and was approximately three times as great as the girls' expected gain of approximately four months (.34). Almost two out of three (64%) of the girls had gains equal to or greater than the seven months (.7) that corresponded to "normal" progress.

For the total group, Vocabulary mean scores rose from 4.4 to 5.8. The mean gain of 1.4 was double the "normal" expected progress and four times as great as the .34 gain to be expected on the basis of the pre-

* Appendix B
test mean of 4.4. Over seven out of ten (71%) of the total student group had gains equal to or greater than the .7 representing "normal" progress.

In Reading Comprehension (Appendix B), the boys' mean gain of 1.5 (from 3.5 to 5.0) was double the expected "normal" gain of .7 and was five times the gain of .3 to be expected on the basis of the boys' pre-test mean of 3.5. Almost six out of ten (55%) of the boys equaled or exceeded "normal" progress.

The girls' mean gain in Comprehension scores was 1.0 (from 4.0 to 5.0). This increase exceeded the expected "normal" gain of .7 and was three times as great as the gain of .3 to be expected on the basis of the girls' pre-test mean of 4.0. Almost six out of ten (57%) of the girls had gains equal to or greater than the "normal".

For boys and girls combined, Comprehension scores rose from 3.8 to 4.0, an increase almost double the "normal", and four times as great as the expected gain of .3 based on the pre-test level. Almost six out of ten (56%) of the students made gains equal to or greater than the "normal".

b. Arithmetic Computation Results

Both boys and girls demonstrated significant gains in Computation skills (Appendix C). The boys' mean gain of .8 (from 5.2 to 6.0) equaled "normal" progress and was double the expected gain of .4 based
on the boys' pre-test level. Almost six out of ten (56%) of the boys had gains equal to or greater than "normal" expectations.

The girls' mean gain of .9 was greater than expected "normal" gain of .7 and was twice as great as the increase to be expected on the basis of the girls' pre-test performance. Almost two out of three (65%) of the girls equaled or surpassed "normal" progress.

For boys and girls combined, the pre-post gain of .9 (from 5.6 to 6.5) exceeded the "normal" expected gain and was double the expected gain based on the pre-test mean of 6.5. Over six out of ten (61%) of the students had gains equal to or greater than the "normal".

c. Changes in School Marks

For each student, a grade-point average (GPA) was computed on the basis of final marks in four subjects: English, mathematics, social studies, and industrial arts/home economics. Assessment of changes in GPA focused on a comparison between the 1970-71 GPA ("pre") and the 1971-72 GPA ("post").

The analysis of pre-post GPA data (Appendix D) revealed that the mean GPA had increased by approximately one letter-mark category. Both boys and girls demonstrated mean gains that were statistically significant.

The boys' mean GPA rose from .89 (or "almost a D") to 1.91 ("almost a C"). During the pre-project year, only 4% of the boys had a GPA above 2.0 or "C". During
the year of project participation, this proportion increased to 47%.

The girls' mean GPA increased from 1.51 to 2.49. The proportion of girls with averages above "C" rose from 18% (pre) to 70% (post).

d. Patterns of Final Marks in English and Mathematics

Analysis of grade-point averages was extended to compare the distribution of English marks for the "pre"-year (1970-71) with marks for the year ended June, 1972. A similar comparison was made between the patterns of mathematics marks.

The proportion of boys with a final mark of "F" in English dropped from 42% (June, 1971) to 9% (June, 1972). Conversely, the proportion of boys receiving marks of "A" or "B" rose from 4% to 40%. Among girls, the proportion of "F" marks in English declined from 11% to 9%, while the proportion of "A" and "B" marks increased from 27% to 55%. For the total group, the mean mark rose from 1.42 to 2.29, an increase of almost one letter-mark category.

The patterns of final marks in mathematics reflected similar shifts. The proportion of boys with "F" marks dropped from 42% to 27%, while the proportion of "A" and "B" marks rose from 2% to 31%. The proportion of "F" marks for girls declined from 11% to 7% while marks of "A" and "B" increased from 16% to 39%. For the total group, the mean math mark increased from 1.20 to 1.89.
Chart 1

Patterns of Grade Point Averages:
School Years Ended June 1971 vs. June 1972

Boys and Girls Combined (N=89)

<table>
<thead>
<tr>
<th>% of Students</th>
<th>D or Below</th>
<th>Above C</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 1971</td>
<td>13</td>
<td>34</td>
</tr>
<tr>
<td>June 1972</td>
<td>2</td>
<td>40</td>
</tr>
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</table>

Mean GPA: Pre vs. Post

<table>
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<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>45</td>
<td>.89</td>
<td>1.91</td>
<td>+1.02</td>
</tr>
<tr>
<td>Girls</td>
<td>44</td>
<td>1.51</td>
<td>2.49</td>
<td>+.98</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>1.20</td>
<td>2.19</td>
<td>+.99</td>
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</table>
Chart 2
Distribution of Final Marks
June 1971 vs. June 1972
Boys and Girls Combined (N=89)

**English Marks**

<table>
<thead>
<tr>
<th>Grade</th>
<th>June 1971</th>
<th>Mean</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>27</td>
<td>1.42</td>
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<tr>
<td>B</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>2</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Grade</th>
<th>June 1972</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>32</td>
<td>2.29</td>
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<tr>
<td>B</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>12</td>
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</tbody>
</table>

**Mathematics Marks**

<table>
<thead>
<tr>
<th>Grade</th>
<th>June 1971</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
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<td>A</td>
<td>27</td>
<td>1.20</td>
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<tr>
<td>B</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade</th>
<th>June 1972</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>31</td>
<td>1.89</td>
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<tr>
<td>B</td>
<td>30</td>
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</tr>
<tr>
<td>C</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>
Findings related to school marks indicate that:

1. For both boys and girls, school marks during project participation were significantly higher than they had been prior to project involvement. On the average the GPA gain corresponded to an increase of approximately one letter mark.

2. For both boys and girls, gains in English marks were greater than gains in mathematics marks.

3. Boys' gains in GPA, English marks and mathematics marks exceeded those of the girls.

2. Students' Completion of Assignments

As stated in its objectives, the Production Workshop project was to effect "improved quality in written classwork and homework assignments" of the student participants. Assessment of this objective was based on teacher reports of the number of assignments given and completed satisfactorily in English and in mathematics. Data (for a sample of students) were collected for two-week periods in November and in May.

Results (Appendix E) revealed that the proportion of completed assignments increased in mathematics (from 74% completed to 82% completed) but declined in English (from 75% to 73%).

Girls evidenced an increased in the proportion of completed assignments in English (from 76% to 79%) and in mathematics (from 78% to 84%). Boys demonstrated a marked
improvement in mathematics completion (from 68% to 79%) but had almost as great a decline in English completion (from 75% to 65%).

3. Changes in Attendance

Assessment of changes in student attendance focused on a comparison between the 1970-71 attendance ("pre") and 1971-72 attendance ("post"). Data revealed that although both boys and girls evidenced improved attendance during project participation, the gains did not attain statistical significance. Boys' attendance increased from a mean of 154.5 days (during the pre-project year) to 159.2 days (during the year of project participation). Corresponding attendance rates were 86% (pre) vs. 88% (post). Girls' attendance increased from a pre-mean of 152.0 days (84%) to 155.4 days (86%). For the total group, the change in mean attendance was from 153.3 days or 85% (pre) to 157.4 days or 87% (post).

Data further revealed that six out of ten (60%) of the students demonstrated better attendance during their Production Workshop year than they had during the previous year. Boys evidenced a higher proportion of students with improved attendance than did the girls (64% improved among boys vs. 56% improved among girls).
During the 1971-72 school year, the Production Workshop average attendance rate was 87.4% as compared to a rate of 85.6% for the total Grade 9 student body in the project schools.

4. Dropout Rate

The Production Workshop participants evidenced a school-year dropout rate of 4.5%. This rate was slightly below the 4.7% rate established by the remainder of the Grade 9 student body in the project schools. The dropout rate was computed using the following general formula:

\[
\frac{\text{Number of Dropouts}}{\text{School-year Accountability}} = \text{Dropout Rate}
\]

"Accountability" refers to the number of pupils for whom the school has remained responsible during a specified period. The "accountability" figure corresponds to the sum of the June at-date enrollment plus the number of dropouts during the year. (Students who transferred or withdrew to other schools or school systems are deleted from the dropout computation.) "Dropout" refers to any student who terminates regular schooling, prior to graduation, for any reason other than death.

Dropout data for the Production Workshop and for the remainder of the Grade 9 student population in Production Workshop schools are summarized in Table I.
### TABLE I

Comparison of Dropout Data:
Production Workshop Project vs.
Remainder of Grade 9 Population in Project Schools

<table>
<thead>
<tr>
<th></th>
<th>Dropouts</th>
<th>Accountability</th>
<th>Dropout Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Workshop</td>
<td>9</td>
<td>200</td>
<td>4.5%</td>
</tr>
<tr>
<td>Remainder of Grade 9 Student Population</td>
<td>88</td>
<td>1,866</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

5. Changes in Student Attitude*

The Survey of Pupil Opinion was administered in all Production Workshop classes in October, 1971 and May, 1972. The Survey instrument consisted of thirty items, with six of the items serving as "buffer" questions and the remaining twenty-four items tapping three factors or dimensions of student attitude. Seven items reflected the factor of "social participation in school". Nine items represented the factor of "perception of teachers". The remaining eight items related to a student's perception of "self-as-student".

Pre and post data were obtained for 95 students—42 boys and 53 girls. Analysis of the attitude data for the total group revealed that only negligible changes occurred in students' attitudes toward the three factors. The proportion of students with positive views about the "social aspects of school" rose slightly from 38% (pre) to 39% (post). The second factor ("perception of teachers") had the lowest level of positive response on the pre-test (35%) and showed a

* Appendix G
pre-post decline to 32%. The third factor, "self-as-student", drew the greatest positive response (60%) on the pre-test and had a further increase to 63% on the post (Appendix G).

For each of the three factors, the mean pre-test score of the boys was higher than that of the girls. However, boys' post-test scores reflected a decline in positive attitude for each of the three factors, while girls' scores reflected an increase for each factor.

The proportion of boys' responses indicating positive attitude declined from 41% to 39% for "social aspects of school", from 40% to 32% for "perception of teachers", and from 66% to 61% for "self as student". The proportion of girls' responses expressing positive feelings increased from 35% to 40% for "social aspects of school", from 30% to 33% for "perception of teachers", and from 55% to 65% for "self as student".

Among both boys and girls, the highest level of positive feeling attached to the factor "self as student". The factor "perception of teachers" elicited the lowest level of positive response. These patterns appeared in both the pre and post survey data.

6. Students' Opinions about Production Workshop*

A total of 95 students--42 boys and 53 girls--completed a ten-item questionnaire designed to tap opinions about the project. The questionnaire was administered in May, 1972.

Based on the survey responses, students seemed "glad to be in the program": 65% expressed affirmative positions vs. only 15% holding a negative view. Approximately

* Appendix I
seven out of ten (69%) of the respondents thought that they were "learning better this year than...last year". Almost two out of three of the students felt that "students who aren't in the Production Workshop class wish that they were" (62% agreed vs. only 9% who disagreed). Over seven out of ten (72%) of the students indicated that "Production Workshop teachers are doing a good job". Students' generally favorable perception of Production Workshop was further reflected by their willingness to "be in the same kind of program next year": almost half (49%) approved vs. 23% rejecting the idea. In addition the majority of the respondents felt that the program should be retained: 58% rejected the suggestion of dropping the program vs. only 15% who agreed with the suggestion.

Boys' and girls' responses reflected similar patterns of feeling about project participation. A difference of opinion did emerge, however, in response to the premise that "students learn better if the class is either all boys or all girls." Girls evidenced greater agreement with this statement (35% agreed) than did boys (only 23% agreed).

7. Opinions of Teachers*

Questionnaire data were obtained from seventeen Production Workshop teachers, representing approximately 81% of the project's instructional staff. The respondents represented an average of 2.5 years of service in Production Workshop, and 8.6 years of total teaching experience. Eleven of the respondents (or 65%) considered project scheduling to be sat-

* Appendix J
satisfactory. Modifications suggested by the remaining teachers included eliminating block scheduling (except in industrial arts and home economics), grouping boys and girls together for instruction in academic subjects, and providing opportunities for an elective subject (typing, public speaking, etc.)

Seven of the respondents (41%) felt that the method of selecting project students was satisfactory. Changes in student selection suggested by the remaining teachers centered on greater involvement of both students and teachers in the project-placement decision, and on exclusion of "problem cases"—i.e., "chronic cutters and disciplinary problems".

Sixteen of the seventeen teachers (94%) considered instructional materials and supplies to be appropriate to the learning levels of the students; fourteen out of seventeen (82%) considered such materials adequate in quantity.

The allocation of teacher-aide time was rated as "very good" by 65% of the teachers, and as "adequate" by an additional 29%. Teacher-aides' ability to do assigned work was viewed as "very good" by 65% of the teachers and as "adequate" by an additional 29%. Teacher-aides' willingness to do assigned work was rated "very good" by 76% of the teachers with the remaining 24% of the teachers viewing it as "adequate".

Five out of ten (50%) of the teachers stated that membership in the project increased students' sense of "status" in the school. Approximately three out of ten (33%)
felt that project membership lowered students' sense of "status", and the remaining 16% viewed participation as not affecting students' status.

As the "single factor contributing most to project effectiveness", teachers identified:

- relevance of learning activities... "not just academic exercises"
- greater individualized instruction because of reduced class size
- services of the teacher aide
- cohesion and sense of belonging that develop among students in a project class
- incentives for regular attendance

As the "single factor most detrimental to project effectiveness", teachers reported:

- concentration of low achievers in one class
- grouping boys and girls in separate classes (making them "different" from the rest of the student body)
- inadequate teamwork among teachers

Teachers submitted the following recommendations for project modification:

- grouping boys and girls in the same classes
- greater availability of instructional materials and equipment
- increased provision of guidance services
- offering prospective participants more information about the project, and the option of not participating or of "contracting" to participate.
8. **Opinions of Teacher Assistants**

Questionnaire data were obtained from seven teacher assistants serving the Production Workshop classes. The teacher assistants reported that the greatest amount of their time had been devoted to "helping pupils on an individual basis", and "conferring with parents via home visits". The least amount of time was devoted to "conferring with parents via school visits".

The teacher assistants reported that they completed telephone contacts with the parents of 99 students (or 41% of the total served), visited homes of 106 students (44% of the participants), and had school conferences with the parents of 19 students (8% of the participants). Two or more visits were made to the homes of 44 students (18% of the participants).

The teacher assistants recommended that assistants receive additional training and/or information in the areas of child psychology and counseling, and that more intensive efforts be focused on parent involvement.

9. **Opinions of Parents**

To collect parents' opinions about the Production workshop project, a short questionnaire (Appendix L) was sent to parents of a random sample of 41 students. Despite efforts to encourage parent response (provision of stamped, self-addressed envelope for return mailing... anonymity of respondent,) the rate of return was disappointing. Only six completed questionnaires--15% of the total--were returned. Although the six re-

* Appendix K
** Appendix L
spondents expressed consistently positive views about the project, the sample was judged too small to warrant detailed analysis of the questionnaire data.

V. IMPLICATIONS AND RECOMMENDATIONS

The data revealed that the 1971-72 project enrollment maintained the stability established in the preceding year. The proportion of full-year participants was 68% during the 1971-72 period as compared to only 35% in 1968-69. This increase in stability, reflecting more intensive efforts in the area of selection of participants, increased the possibility of delivering sustained assistance to students.

The 1971-72 outcomes were consistently positive and surpassed the gains attained in the preceding years of project operation. The most striking improvement appeared in students' progress in reading and mathematics skills as reflected by pre-post test scores. In the two reading areas (Vocabulary and Comprehension), both boys and girls exceeded the norm—i.e., gained more than seven months in test scores over seven months of elapsed instructional time. The previous year's evaluation reported only negligible pre-post changes in reading scores. The need for "more intensive focusing on the reading area" was cited. The 1971-72 outcomes indicate that such focusing has been effective.

The 1971-72 progress pattern assumes greater significance when viewed in the perspective of the students' pre-test performance levels. Mean pre-test scores in reading reflected prior progress at
approximately one-half the "normal" rate. Student mean gains in reading during the project represented progress almost double the "normal" rate.

A similar pattern of accelerated progress emerged in the pre-post arithmetic results.

Satisfaction with the marked improvement in students' progress must be tempered by recognition of remaining skills deficits. Despite their striking gains, students' mean scores at post-testing were 5.8 (in Vocabulary), 5.0 (in Comprehension), and 6.5 (in Computation). Initial deficits had been narrowed, but not erased, in the project year. Maintaining the learning momentum of the Production Workshop experience would appear to require some supportive program for students during their post-project year.

The project appeared to have greater positive impact on boys than it did on girls. Boys' mean gains exceeded those of girls for four of the six indices used (vocabulary and comprehension scores, GPA, and attendance). This outcome repeated the pattern that appeared in the previous year's evaluation.
### APPENDIX A

#### SUMMARY OF ENROLLMENT DATA

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>BOYS</th>
<th>GIRLS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDISON</td>
<td>27</td>
<td>27</td>
<td>54</td>
</tr>
<tr>
<td>KENNARD</td>
<td>25</td>
<td>28</td>
<td>53</td>
</tr>
<tr>
<td>PATRICK HENRY</td>
<td>24</td>
<td>30</td>
<td>54</td>
</tr>
<tr>
<td>RAWLINGS</td>
<td>21</td>
<td>20</td>
<td>41</td>
</tr>
<tr>
<td>WILLSON</td>
<td>20</td>
<td>21</td>
<td>41</td>
</tr>
<tr>
<td>TOTAL</td>
<td>117</td>
<td>116</td>
<td>243</td>
</tr>
</tbody>
</table>

#### MOBILITY OF ENROLLMENT

<table>
<thead>
<tr>
<th>Status</th>
<th>Number</th>
<th>% of Total Served (N=243)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remained Full Year</td>
<td>165</td>
<td>68%</td>
</tr>
<tr>
<td>Moved to Regular Program or Another School</td>
<td>41</td>
<td>17%</td>
</tr>
<tr>
<td>Dropped Out of School</td>
<td>9</td>
<td>4%**</td>
</tr>
<tr>
<td>Status Uncertain</td>
<td>1</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

**This figure should not be interpreted as the drop out rate. The standard formula for computing dropout rate is:**

\[
\text{Number of Dropouts} = \frac{\text{Number of Dropouts}}{\text{June At-Date Enrollment + Dropouts}}
\]

Based on this formula, the Production Workshop dropout rate was 4.0%.
APPENDIX B

Changes in Reading Scores*

Pre - Post Elapsed Time: 7 Months

### Vocabulary

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>PLR</th>
<th>Pre</th>
<th>Post</th>
<th>Actual Gain</th>
<th>Expected Gain</th>
<th>% Attaining Norm Progress</th>
<th>Signif.: Pre vs. Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>40</td>
<td>84.4</td>
<td>4.04</td>
<td>5.73</td>
<td>+1.69</td>
<td>.31</td>
<td>80.0%</td>
<td>t = 5.71**</td>
</tr>
<tr>
<td>Girls</td>
<td>56</td>
<td>87.7</td>
<td>4.70</td>
<td>5.84</td>
<td>+1.14</td>
<td>.36</td>
<td>64.3%</td>
<td>t = 6.83**</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>86.1</td>
<td>4.42</td>
<td>5.79</td>
<td>+1.37</td>
<td>.34</td>
<td>70.8%</td>
<td>t = 8.63**</td>
</tr>
</tbody>
</table>

** p < .01

### Comprehension

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>PLR</th>
<th>Pre</th>
<th>Post</th>
<th>Actual Gain</th>
<th>Expected Gain</th>
<th>% Attaining Norm Progress</th>
<th>Signif.: Pre vs. Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>40</td>
<td>84.4</td>
<td>3.47</td>
<td>4.98</td>
<td>+1.51</td>
<td>.27</td>
<td>55.0%</td>
<td>t = 5.66**</td>
</tr>
<tr>
<td>Girls</td>
<td>56</td>
<td>87.7</td>
<td>4.02</td>
<td>4.95</td>
<td>+.93</td>
<td>.31</td>
<td>57.1%</td>
<td>t = 4.67**</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>86.1</td>
<td>3.79</td>
<td>4.96</td>
<td>+1.17</td>
<td>.29</td>
<td>56.2%</td>
<td>t = 5.60**</td>
</tr>
</tbody>
</table>

** p < .01

* Based on Comprehensive Tests of Basic Skills—Vocabulary and Comprehension subtests. Level 3 - Form R was administered as pre-test. Level 3 - Form Q was administered as post-test.
### APPENDIX C

**Changes in Arithmetic Scores**

Table: Changes in Arithmetic Scores

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>PLR</th>
<th>Pre</th>
<th>Post</th>
<th>Actual Gain</th>
<th>Expected Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boys</strong></td>
<td>48</td>
<td>84.4</td>
<td>5.26</td>
<td>6.04</td>
<td>.78</td>
<td>.40</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td>57</td>
<td>87.7</td>
<td>5.96</td>
<td>6.88</td>
<td>.92</td>
<td>.46</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>105</td>
<td>86.1</td>
<td>5.64</td>
<td>6.50</td>
<td>.86</td>
<td>.43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Gain</th>
<th>Norm</th>
<th>Signif</th>
<th>t</th>
<th>Sigif:</th>
<th>Pre vs. Post</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boys</strong></td>
<td>56.3%</td>
<td>64.9%</td>
<td>61.0%</td>
<td><strong>.01</strong></td>
<td>5.94**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Comprehensive Tests of Basic Skills - Computation subtest.

Level 3 - Form R was administered as pre-test; Level 3 - Form Q was administered as post-test.
APPENDIX D

Comparison of Grade-Point Average
Before and During Project Participation

<table>
<thead>
<tr>
<th></th>
<th>Pre-Project: 1970-71 School Year</th>
<th>Project Period: 1971-72 School Year</th>
<th>Change</th>
<th>Significance: Post vs. Pre</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boys (N=45)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>.89</td>
<td>1.91</td>
<td>+1.02</td>
<td>t = 8.00**</td>
</tr>
<tr>
<td>S.D.</td>
<td>.71</td>
<td>.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Girls (N=44)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.51</td>
<td>2.49</td>
<td>+ .98</td>
<td>t = 8.37**</td>
</tr>
<tr>
<td>S.D.</td>
<td>.79</td>
<td>.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total (N=89)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.20</td>
<td>2.19</td>
<td>+ .99</td>
<td>t = 11.61**</td>
</tr>
<tr>
<td>S.D.</td>
<td>.81</td>
<td>.96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01
APPENDIX E

Proportion of Assignments Completed
November vs. May

### English Assignments

<table>
<thead>
<tr>
<th>Student Group</th>
<th>November</th>
<th>May</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{x} ) Assign. Given</td>
<td>( \bar{x} ) Assign. Completed</td>
</tr>
<tr>
<td></td>
<td>( \bar{x} ) Assign. Given</td>
<td>( \bar{x} ) Assign. Completed</td>
</tr>
<tr>
<td>Boys</td>
<td>10.5</td>
<td>7.9</td>
</tr>
<tr>
<td></td>
<td>9.6</td>
<td>6.2</td>
</tr>
<tr>
<td>Girls</td>
<td>9.1</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>9.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Total</td>
<td>9.7</td>
<td>7.3</td>
</tr>
<tr>
<td></td>
<td>9.5</td>
<td>6.9</td>
</tr>
</tbody>
</table>

### Mathematics Assignments

<table>
<thead>
<tr>
<th>Student Group</th>
<th>November</th>
<th>May</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{x} ) Assign. Given</td>
<td>( \bar{x} ) Assign. Completed</td>
</tr>
<tr>
<td></td>
<td>( \bar{x} ) Assign. Given</td>
<td>( \bar{x} ) Assign. Completed</td>
</tr>
<tr>
<td>Boys</td>
<td>8.8</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>8.9</td>
<td>7.0</td>
</tr>
<tr>
<td>Girls</td>
<td>6.7</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>9.6</td>
<td>8.1</td>
</tr>
<tr>
<td>Total</td>
<td>7.6</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td>9.3</td>
<td>7.6</td>
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</tbody>
</table>
APPENDIX F

Comparison of Attendance
Before and During Project Participation

<table>
<thead>
<tr>
<th></th>
<th>Pre-Project: 1970-71 School Year</th>
<th>Project Period 1971-72 School Year</th>
<th>Change</th>
<th>Significance: Post vs. Pre</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boys (N=45)</strong></td>
<td>Mean 154.49</td>
<td>Mean 159.24</td>
<td>+4.75</td>
<td>t = 1.14 (n.s.)</td>
</tr>
<tr>
<td></td>
<td>S.D. 20.97</td>
<td>S.D. 22.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Girls (N=43)</strong></td>
<td>Mean 152.00</td>
<td>Mean 155.42</td>
<td>+3.42</td>
<td>t = .72 (n.s.)</td>
</tr>
<tr>
<td></td>
<td>S.D. 25.63</td>
<td>S.D. 23.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total (N=88)</strong></td>
<td>Mean 153.27</td>
<td>Mean 157.38</td>
<td>+4.11</td>
<td>t = 1.31 (n.s.)</td>
</tr>
<tr>
<td></td>
<td>S.D. 23.26</td>
<td>S.D. 23.07</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For Year Ended June 1972:

<table>
<thead>
<tr>
<th>Attendance Rate</th>
<th>Total grade 9 in project schools:</th>
<th>Production Workshop (Full-year participants):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85.6%</td>
<td>87.4%</td>
</tr>
</tbody>
</table>
APPENDIX G

PRODUCTION WORKSHOP PROJECT

Survey of Pupil Opinion
Proportion of Positive Responses
Pre vs. Post

<table>
<thead>
<tr>
<th>Factor</th>
<th>No. of Items</th>
<th>Boys (N=42)</th>
<th></th>
<th></th>
<th>Girls (N=53)</th>
<th></th>
<th></th>
<th>Total (N=95)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre Post</td>
<td>Pre Post</td>
<td>Pre Post</td>
<td>Pre Post</td>
<td></td>
<td></td>
<td>Pre Post</td>
<td></td>
</tr>
<tr>
<td>Social aspects of school</td>
<td>7</td>
<td>41% 39%</td>
<td>35% 40%</td>
<td>36% 39%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception of teachers</td>
<td>9</td>
<td>40% 32%</td>
<td>30% 33%</td>
<td>35% 32%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self as student</td>
<td>8</td>
<td>66% 61%</td>
<td>55% 65%</td>
<td>60% 63%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>24</td>
<td>49% 44%</td>
<td>40% 46%</td>
<td>44% 44%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX H

Ion.. B-1

Bureau of Educational Research
Cleveland Public Schools
February, 1967

STUDY OF PUPIL OPINION

Here are some statements about school. Read each statement carefully
and then mark the space on your answer sheet that shows how you feel about the
statement. There are no right answers. Your true opinion, whatever it is, is
the right answer.

Mark only one answer for each statement. Do not skip any questions.
Be sure that the marker on the answer sheet matches the question number
when your mark your answer. There is no time limit. You will be given as much
time as you need to answer all the questions. Then you finish one page, go
on to the next page.

There are five answer spaces for each question. The answer spaces
are lettered from A to E like this: A B C D E.

Use this key to mark your answers:

A-Always B-Most of C-Sometimes D-Hardly E-Never Ever

1. Chances are good that I'll succeed in school.
2. I like to read.
3. Teachers are fair.
4. School is a waste of time.
5. My parents look at my report card.
6. I think school is fun.
7. The school rules make sense.
8. I have a good time in school.
9. Students in this school are friendly.
10. I watch the clock during class.
Use this key to mark your answers:

A-Always    B-Most of    C-Sometimes    D-Hardly    E-Never
the Time    Ever

11. I think I'm doing better in school this year than I did last year.
12. I do my assignments on time.
13. Teachers expect too much of students.
15. My teachers understand me.
16. School is boring.
17. I take my schoolwork seriously.
18. Teachers give me the help I need in school.
19. My teachers play favorites.
20. I like my teachers.
21. My teachers pick on me too much.
22. My teachers can take a joke.
23. I look forward to my classes.
24. Teachers are too strict.
25. My parents like my school.
26. I get along well with my teachers.
27. I wish I could quit school.
28. I come to school on time.
29. I get along well with other students.
30. Teachers are friendly.
## APPENDIX I

### SUMMARY OF PUPIL OPINION

**PRODUCTION WORKSHOP 1971-72**

**BOYS AND GIRLS COMBINED (N=95)**

<table>
<thead>
<tr>
<th>Statement</th>
<th>A-Strongly Agree</th>
<th>B-Somewhat Agree</th>
<th>C-Not Sure</th>
<th>D-Somewhat Disagree</th>
<th>E-Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I'm learning better this year than I did last year.</td>
<td>45%</td>
<td>24%</td>
<td>23%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>2. I could have done just as well in regular classes as I have done in Production Workshop classes.</td>
<td>30%</td>
<td>22%</td>
<td>33%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>3. Students learn better if the class is either all boys or all girls.</td>
<td>21%</td>
<td>9%</td>
<td>31%</td>
<td>13%</td>
<td>26%</td>
</tr>
<tr>
<td>4. I'm getting into more trouble in school this year than I did last year.</td>
<td>13%</td>
<td>14%</td>
<td>6%</td>
<td>20%</td>
<td>46%</td>
</tr>
<tr>
<td>5. I'm glad I'm in the Production Workshop Program.</td>
<td>42%</td>
<td>23%</td>
<td>20%</td>
<td>11%</td>
<td>4%</td>
</tr>
<tr>
<td>6. I'd like to be in the same kind of program next year.</td>
<td>32%</td>
<td>17%</td>
<td>28%</td>
<td>8%</td>
<td>15%</td>
</tr>
<tr>
<td>7. I think the Production Workshop program should be dropped.</td>
<td>7%</td>
<td>8%</td>
<td>28%</td>
<td>8%</td>
<td>50%</td>
</tr>
<tr>
<td>8. My parents are glad I'm in the Production Workshop Program.</td>
<td>37%</td>
<td>29%</td>
<td>29%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>9. Students who aren't in the Production Workshop program wish that they were in it.</td>
<td>39%</td>
<td>23%</td>
<td>29%</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>10. The teachers in my Production Workshop classes are doing a good job.</td>
<td>43%</td>
<td>29%</td>
<td>15%</td>
<td>12%</td>
<td>1%</td>
</tr>
</tbody>
</table>
SURVEY OF INSTRUCTIONAL STAFF
PRODUCTION WORKSHOP PROJECT
(N=17)

1. Years of Service in Production Workshop Project (including present year).

2.47 Year(s)

Years of teaching experience _5.62_ year(s).

2. The scheduling of project classes:

Is satisfactory as is YES _65%_ NO _35%

Should be modified in the following way: a) Eliminate block periods (except in Shop) and especially for English and social studies; b) schedule extra time for shop; c) let students know what the class is all about; each student to decide whether or not he/she will be in the class; d) schedule occasional in 7th, 8th, 9th. e) Change English class from two classes with two different teachers to one required class with a teacher; f) combine supervised study period for both sections so that typing may be taken.

Attitudes of Students

3. For the majority of students in Production Workshop class, membership in the project seems to:

- 50% Increase participants' sense of "status" in the school
- 17% Not affect participants' sense of "status" in the school
- 33% Lower participants' sense of "status" in the school

COSTENTS: Initial negative feelings changed to positive as course progressed. Girls in special class initiate negative feelings; b) Girls expected were positively; others negatively; c) students should be given choice of participating or not; I can't want to be in; d) students with feeling of direct responsibility and exhibit an air of importance.

Selection of Students

4. The selection of students for the project:

Is satisfactory as is: YES _41%_ NO _59%

Should be modified in the following way: a) Don't place problem children;

- 43 -
5. Instructional materials and supplies in your subject area (textbooks, work materials, etc.) are:

<table>
<thead>
<tr>
<th>Appropriate to learning levels of students</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate in quantity</td>
<td>94%</td>
<td>6%</td>
</tr>
</tbody>
</table>

COMMENTS: a) personal and project managers very cooperative and helpful; b) Tech. Guide to new class is very good for this class, also need for Home Recipe for book; c) some of the supplies were ordered last year, but never arrived or are useless (papers, etc.); d) General Tech. books are oriented; e) lack of visual aids and supplementary materials for individual classes and classes; f) Inadequate amount of materials for English and Social Studies; g) need for more reading materials for students with a lower reading level.

6. Teacher Aide

<table>
<thead>
<tr>
<th>Time allocated to Production Workshop</th>
<th>Very Good</th>
<th>Adequate</th>
<th>Inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to do assigned work</td>
<td>65%</td>
<td>29%</td>
<td>6%</td>
</tr>
<tr>
<td>Willingness to do assigned work</td>
<td>70%</td>
<td>25%</td>
<td>5%</td>
</tr>
</tbody>
</table>

7. In your opinion, what single feature of the project has contributed most to project effectiveness (in terms of improving pupils' learning and adjustment)?

   a) tasks and activities are relevant (not only academic exercises);
   b) students put their attitude into the project effective;
   c) block academic classes;
   d) increased tie that teacher can gain with students (individual attention and concern, sense of belonging);
   e) class size and the help of the teacher assistant;
   f) lack of order and discipline;
   g) incentive in study and community participation;
   h) lack of communication between team members.

8. In your opinion, what single factor has been most detrimental (or contributed least) to pupils' learning and adjustment?

   a) incompetent teachers and principals who assign these teachers;
   b) disciplinary factors;
   c) pupils attitude towards the program;
   d) too many low achievers in one class;
   e) lack of ordered supplies;
   f) classes are too large;
   g) lack of adequate materials needed to low achievers;
   h) separation of boys and girls;
   i) indifference, insensitivity. and discourages of supporting teachers;
   j) lack of communication between team members.

9. Would you recommend that the Production Workshop project be:

   6% Discontinued at the end of this semester
   29% Be continued next year in its present form
   65% Be continued next year but with the following changes: a) include more areas of homemaking; b) classes in Prod. Work should be in the A.M. rather than P.M.; c) should have study guide for curriculums; d) get supplies at the beginning of the year; e) separate classes, one teacher for Social Sciences, one teacher for Science, etc.; f) may have one period of English in a class, then allowing class to irregular classes in English, etc.; g) don't separate boys from girls; h) increased guidance and counseling; i) institution of team leaders; j) follow program goals.
SURVEY OF TEACHER ASSISTANTS
TITLE 1 AND DPPF PROJECT CLASSES

SCHOOL ____________________________

Project which you serve:

___ Transition
___ Production Workshop
___ Learning Laboratory

Number of semesters (including the present semester) that you have served as a teacher assistant in this Project:

___ 1/2 One Semester
___ 4/2 Two Semesters
___ 1/2 Three Semesters
___ 2/0 More than Three Semesters

In a typical week, do your assignments include duties that do not serve the students in the project you checked above?

___ 0% Yes  ___ 100% No

If "yes":

Nature of duties _______________________________________________________

Average number of periods per week ___________________________________

Transition, Production Workshop, Learning Laboratory
YOUR RESPONSIBILITIES IN THIS PROJECT

Below are listed various activities of teacher assistants.

1) In the column headed "Not Applicable", mark an X for any activity not usually included in your duties.

2) In the column headed "Most", check the two activities you perform that take up the greatest amount of your time.

3) In the column headed "Least", check the two activities you perform that take up the least amount of your time.

(N=7)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not Applicable</th>
<th>Most</th>
<th>Least</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical assistance (marking papers, duplicating materials, etc.)</td>
<td></td>
<td>57%</td>
<td>29%</td>
</tr>
<tr>
<td>Helping pupil on an individual basis</td>
<td></td>
<td>71%</td>
<td></td>
</tr>
<tr>
<td>Working with pupils in small groups</td>
<td>14%</td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td>Supervising class (during study sessions, lunch period, etc.)</td>
<td>21%</td>
<td>14%</td>
<td>29%</td>
</tr>
<tr>
<td>Confering with parents via telephone</td>
<td></td>
<td>71%</td>
<td>14%</td>
</tr>
<tr>
<td>Confering with parents via home visits</td>
<td>14%</td>
<td>43%</td>
<td>14%</td>
</tr>
<tr>
<td>Confering with parents via school visits</td>
<td></td>
<td>29%</td>
<td>71%</td>
</tr>
<tr>
<td>Confering with teachers of pupils in project</td>
<td></td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td>14%</td>
</tr>
</tbody>
</table>

(FOR TRANSITION ASSISTANTS ONLY)

To what extent have the services of the social worker been of help to you?

- [ ] Extremely Helpful
- [ ] Very Helpful
- [ ] Of Some Help
- [ ] Of Little Help
Please indicate the number of students in the project classes whose parents have been involved in the following types of conferences with you during the current school year:

<table>
<thead>
<tr>
<th>Type of Contact</th>
<th>Parents of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone</td>
<td>41% students</td>
</tr>
<tr>
<td>Visit to student's home</td>
<td>44% students</td>
</tr>
<tr>
<td>Conference in the school</td>
<td>83% students</td>
</tr>
<tr>
<td>Other (specify)</td>
<td>2% students</td>
</tr>
</tbody>
</table>

Number of homes you have visited more than once 18%

What additional training and/or information would be of service to you in your work as a teacher assistant in this project?

- Training in Child Psychology, and Counseling of pupils.
- Lack of classroom discipline
- Need for correlation of rules of teacher and teacher's aide
- Getting parents involved with the program

What changes would you recommend to improve this project?

- More needed current materials
- More potential involvement
- Special Reading and Math Programs
- Give homework
- Discipline
Please indicate the number of students in the project classes whose parents have been involved in the following types of conferences with you during the current school year:

<table>
<thead>
<tr>
<th>Type of Contact</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Telephone</td>
<td>41% students</td>
</tr>
<tr>
<td>Visit to student's home</td>
<td>44% students</td>
</tr>
<tr>
<td>Conference in the school</td>
<td>6% students</td>
</tr>
<tr>
<td>Other (specify)</td>
<td>2% students</td>
</tr>
</tbody>
</table>

Number of homes you have visited more than once: 18%

What types of additional training and/or instruction would be of service to you in your work as a teacher assistant in this project?

- Training in Child Psychology, and Counseling of pupils

What has been the greatest problem you have encountered in your duties as a teacher assistant?

- Lack of classroom discipline
- Need for correlation of tests of teacher and teacher's aide
- Getting parents involved with the program

What changes would you recommend to improve this project?

- More needed current materials
- More potential involvement
- Special reading and math programs
- Give homework
- Discipline
1. Has your child talked to you about (his/her) school program this year?
   ___ Yes  ___ No

2. How does your child seem to feel about (his/her) school program this year:
   ___ Seems very satisfied
   ___ Seems more or less satisfied
   ___ Doesn't like it
   ___ (Don't know -- hasn't said much about it)

3. Comparing this year to last year, does your child seem to:
   ___ Be more interested in school this year
   ___ Be less interested
   ___ Have about the same interest

4. Comparing this year to last year, do you think your child:
   ___ Spends more time on homework this year than last year
   ___ Spends less time on homework
   ___ Spends about the same amount of time on homework

5. As far as you can tell, do you think your child:
   ___ Is doing better in school this year than last year
   ___ Isn't doing as well this year
   ___ Is doing about the same this year as last year
6. Do you think the school is:

   _____ Doing an excellent job in educating your child
   _____ Doing a good job in educating your child
   _____ Doing a fair job in educating your child
   _____ Doing a poor job in educating your child

7. What do you see as the most important reason why your child might not do as well in school as he or she is able?

8. Did you know that your child was in the Learning Laboratory Program in school this year?

   _____ Yes   _____ No

   a. If "yes", did you receive information about the program via:

      _____ Printed information (letter, bulletin, etc.)
      _____ Telephone conversation with someone from school
      _____ Visit to the school
      _____ Visit to your home by someone from school
      _____ What your child has told you
      _____ Other (please specify)

   b. Do you feel:

      _____ The program is a good thing
      _____ The program may be a good thing but not sure
      _____ The program is not a good thing

Why did you answer as you did -- i.e., why do you feel the program "is a good thing" -- or "may be a good thing" or "is not a good thing"?
c. How do you feel about the teacher's visit to your home? 
   I think it's a very good idea because ____________________________
   ____________________________
   ____________________________
   It's a pretty good idea but I'd like it better if ______
   ____________________________
   ____________________________
   I don't approve of it because, ____________________________
   ____________________________
   ____________________________

   d. Have you been invited to visit your child's class? ___ Yes ___ No
      Have you been invited to take part in any activities related to your
      child's class? ___ Yes ___ No

Please use the remaining space for any further comments you'd like to offer.