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AN EVALUATIVE ANALYSIS OF A JUNIOR HIGH  
SCHOOL WORK-STUDY PROGRAM IN THE  
LANSING, MICHIGAN PUBLIC SCHOOLS

By

Ronald Kenneth Gibbs

A THESIS

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Michigan State University  
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## ABSTRACT

### AN EVALUATIVE ANALYSIS OF A JUNIOR HIGH SCHOOL WORK-STUDY PROGRAM IN THE LANSING, MICHIGAN PUBLIC SCHOOLS

By

Ronald Kenneth Gibbs

Similar to many school districts across the United States, the Lansing Public Schools have been faced with an increasing dropout rate. Recognizing the ineffectiveness of certain aspects of the curriculum toward a segment of the school population, the Lansing School System has implemented various compensatory programs. One such program, the Individualized Work Experience (I.W.E.) program was designed as a preventive dropout program for disadvantaged students. The program provides for (1) the early identification of potential dropouts, (2) a flexible curriculum based upon the work-study concept, and (3) students within the program to meet the requirements for high school graduation.

The purpose of this study was to evaluate whether or not participation in the Junior High I.W.E. program has had a positive effect on students within particular cognitive and affective areas.

### Methodology

The research design was the parallel-group method of analysis. Forty-one I.W.E. students from three Junior High Schools were matched with students in the regular school program on the basis of age, race, sex, grade, I.Q. stanine, grade-point average, and citizenship average.

Each group was measured separately on six dependent variables, those being--attendance, reading and arithmetic achievement, dropout potential, self-concept, and achievement motivation. Comparative results for both groups were statistically treated by means of a two-way analysis of variance for each variable to determine whether the findings reflected the effect for schools, the program, or the interaction of schools and program. Further, a multi-variate analysis of variance was used to treat all six dependent variables as a single dependent variable in order to ascertain overall differences between the two groups.

The null hypothesis was used for the six dependent variables. The hypothesis states: There will be no difference between the experimental and control groups in attendance, achievement in reading and math, dropout potential, self-concept and achievement motivation as a result of student participation in the I.W.E. program.

Participating students, the professional staff, parents, and employers were asked to respond to questionnaires for the purpose of accessing their feelings and attitudes toward the I.W.E. program.

### Results

The null hypothesis was upheld for achievement in reading and math, dropout potential, self-concept, and achievement motivation but was rejected at the .05 level of significance for attendance.

Results of the questionnaires from all groups were highly positive toward the I.W.E. program. Though the measured results of dropout potential, self-concept, and achievement motivation recognized no significant gains for I.W.E. students, the questionnaire results did reflect a positive movement toward lower dropout potential and higher self-concept and achievement motivation for participating I.W.E. students.

### Conclusion

Relating the results of the study to program objectives, it can be concluded that the I.W.E. program (1) seems to increase school attendance, (2) does not significantly increase achievement in reading and arithmetic, (3) seems to give students the opportunity to gain a healthy self-concept, (4) tends to give students positive attitudes about the importance of knowledge as a

means toward life success, (5) helps to give students a stronger desire to stay in school until high school graduation, (6) helps to improve behavior to better get along with others, and (7) provides students with the opportunity to learn more about the job market and the world of work.



## ACKNOWLEDGMENTS

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Special thanks are given to a good friend, Mr. Frank Throop, Principal of Walter French Junior High School, for his total administrative support of this project. I further wish to acknowledge Mr. Russ Maples, Director of Vocational Education, Mr. Vern Chapman, Principal of Otto Junior High School, and Mr. Robert Hecksel, Principal of Gardner Junior High School, for

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## TABLE OF CONTENTS

Chapter	Page
I. THE PROBLEM . . . . .	1
The Challenge to American Education . . . . .	1
Statement of the Problem. . . . .	8
Need for the Study. . . . .	10
Description of the Junior High I.W.E. Program . . . . .	11
The Coordinator's Role . . . . .	11
The Selection Process. . . . .	12
Student Schedule . . . . .	13
Job Placement . . . . .	14
Student Evaluation . . . . .	15
Racial Composition. . . . .	15
Limitations of the Study. . . . .	16
Conclusion . . . . .	16
II. REVIEW OF THE LITERATURE. . . . .	18
Introduction. . . . .	18
Historical Sketch of Work-Related Edu- cation . . . . .	18
Philosophical Justification for Work- Study Programs . . . . .	23
Characteristics of the Potential Dropout . . . . .	28
Evaluation Results of Selected Work-Study Programs . . . . .	34
Conclusion . . . . .	39
III. THE METHOD . . . . .	41
Introduction. . . . .	41
Statement of Hypothesis . . . . .	41
Statement of Procedures . . . . .	42
Attendance . . . . .	47
Achievement . . . . .	47
Dropout Potential . . . . .	49
Self-Esteem . . . . .	50
Achievement Motivation . . . . .	52

Chapter	Page
Student Questionnaire . . . . .	53
Professional Staff Questionnaire . . . . .	54
Parent Questionnaire . . . . .	54
Employer Questionnaire. . . . .	54
Conclusion . . . . .	55
IV. ANALYSIS OF THE DATA . . . . .	56
Introduction . . . . .	56
Attendance . . . . .	57
Achievement in Reading Comprehension and Arithmetic Computation . . . . .	59
Dropout Potential . . . . .	65
Self-Concept . . . . .	67
Achievement Motivation. . . . .	69
Multi-Variate Analysis of Variance. . . . .	75
Student Questionnaire . . . . .	75
Professional Staff Questionnaire . . . . .	79
Parent Questionnaire . . . . .	86
Employer Questionnaire. . . . .	88
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS . . . . .	90
Summary. . . . .	90
The Hypothesis . . . . .	91
Methodology . . . . .	91
Results. . . . .	92
Attendance Variable. . . . .	92
Achievement in Reading Comprehension and Arithmetic Computation . . . . .	92
Dropout Potential . . . . .	93
Self-Concept . . . . .	93
Achievement Motivation. . . . .	94
Student Questionnaire . . . . .	94
Professional Staff Questionnaire . . . . .	96
Parent Questionnaire . . . . .	98
Employer Questionnaire. . . . .	99
Conclusion. . . . .	100
Recommendations . . . . .	103
Recommendation 1. . . . .	103
Recommendation 2. . . . .	103
Recommendation 3. . . . .	103
Recommendation 4. . . . .	104
Recommendation 5. . . . .	104

Chapter	Page
Recommendation 6 . . . . .	105
Recommendation 7 . . . . .	105
Recommendation 8 . . . . .	105
BIBLIOGRAPHY. . . . .	106
APPENDICES	
Appendix	
A. Monthly Data Report . . . . .	115
B. Work Training Agreement. . . . .	116
C. Job Performance Report Card . . . . .	117
D. School Interest Inventory . . . . .	118
E. Self-Esteem Inventory . . . . .	125
F. Michigan State M-Scales. . . . .	128

## LIST OF TABLES

Table	Page
1. Michigan 9-12 Grade Membership, Dropouts and Dropout Rates, 1962-63 Through 1969-70 . . .	5
2. Grades 9-12 Dropout Rates for 1969-70 by Geographical Location. . . . .	6
3. Grades 9-12 Dropout Rates for 1969-70 by Community Type . . . . .	7
4. Matching Data for the I.W.E. and Regular Groups. . . . .	44
5. Reliability Data for the Stanford Achievement Test-Advanced Battery in Paragraph Meaning and Arithmetic Computation . . . . .	48
6. "School Interest Inventory" Test-Retest Reliabilities, Means, and Standard Deviations for Various Groups. . . . .	51
7. Number of Half-Days Absent for Two Semesters for I.W.E. Students and Students from the Regular School Program . . . . .	58
8. Mean Gain in Attendance for I.W.E. Students and Regular Students per Respective Schools . . . . .	59
9. Effect of Schools, Treatment, and Interaction Between Schools and Treatment on the Mean Difference in School Attendance for Both Groups . . . . .	60
10. Stanford Achievement Test--Advanced Battery Pre- and Post-Test Scores by Grade Level for I.W.E. Students and the Matched Sample in Reading Comprehension. . . . .	61

Table	Page
11. Mean Grade Level Gain in Reading Comprehension for the I.W.E. Group and the Regular Group in Respective Schools . . .	62
12. The Effect of School, Treatment, and Interaction Between School and Treatment on the Mean Difference in Reading Comprehension for Both Groups. . . . .	63
13. Stanford Achievement Test--Advanced Battery Pre- and Post-Test Scores by Grade Level for I.W.E. Students and the Matched Sample in Arithmetic Computation . . . .	64
14. Mean Grade Level Gain in Arithmetic Computation for the Experimental and Control Group in Each School . . . . .	65
15. The Effect of School, Treatment, and Interaction of School and Treatment on the Mean Difference in Arithmetic Computation for Both Groups . . . . .	66
16. Dropout Potential Scores for I.W.E. Students and the Matched Group. . . . .	68
17. Mean Dropout Potential Scores for I.W.E. and Regular Students in Each School . . . .	69
18. The Effect of School, Treatment, and Interaction of School and Treatment on the Mean Difference in Dropout Potential Scores for Both Groups . . . . .	70
19. Raw Score Results of Coopersmith's "Self-Esteem Inventory" for I.W.E. Students and the Matched Sample . . . . .	71
20. Mean Self-Esteem Scores for I.W.E. and Regular Students in Each School . . . . .	72
21. The Effect of School, Treatment, and Interaction of School and Treatment on the Mean Difference in Scores on the Self-Esteem Inventory for Both Groups . . . .	73

Table	Page
22. Raw Scores on the Michigan State M-Scales for I.W.E. Students and Students in the Regular Program . . . . .	74
23. Mean Scores from the Michigan State M-Scales for I.W.E. Students and Regular Students in Each School . . . . .	75
24. The Effect of School, Treatment, and Interaction Between School and Treatment on the Mean Difference for Both Groups on Achievement Motivation Scores . . . . .	76
25. P-Ratios for Multi-Variate Analysis of Variance . . . . .	77
26. Student Questionnaire--Frequency and Percentage/Response and Mean and Standard Deviation/Item . . . . .	78
27. Professional Staff Questionnaire for Teachers--Frequency and Percentage/Response, Mean and Standard Deviation/Item. . . . .	81
28. Professional Staff Questionnaire for Counsellors--Frequency and Percentage/Response and Mean and Standard Deviation/Item . . . . .	83
29. Professional Staff Questionnaire for Administrators--Frequency and Percentage/Response and Mean and Standard Deviation/Item . . . . .	84
30. Professional Staff Questionnaire Item-Mean Comparison for Teachers, Counsellors, Administrators . . . . .	85
31. Parent Questionnaire--Frequency and Percentage/Response and Mean and Standard Deviation/Item . . . . .	87
32. Employer Questionnaire--Frequency and Percentage/Response, and Mean and Standard Deviation/Item . . . . .	89



## CHAPTER I

### THE PROBLEM

#### The Challenge to American Education

Never before in history has American society been confronted with so many challenges at one time. Housing inadequacy, apathy toward the institution of education, air, noise, and water pollution, energy shortages, crime and juvenile delinquency, land, air, and sea traffic control, as well as the War, are problems that tend to place great burdens upon this country's decision-making agencies.

Running parallel with these challenges, American society is rapidly being swept into an era of profound change. Adaptation to technological advance, the new morality, and the stress for citizens to become more aware of and involved in societal concerns seems to be the mode of the day. For labor, "The world of work is changing so rapidly that it will take extreme measures to cope with the new problems."<sup>1</sup>

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<sup>1</sup>William B. Levinson, The Spiral Pendulum (Chicago: Rand McNally & Co., 1968), p. 223.

Heraclitus, 2,000 years ago, cited--"there is nothing permanent except change."<sup>2</sup> Philosopher Alfred Whitehead once warned that "Events might outrun man and leave him a panting anachronism."<sup>3</sup>

In terms of the future of American manpower, Alvin Toffler, author of Future Shock, directly confronts the educational establishment when he states:

The technology of tomorrow requires not millions of lightly lettered men, ready to work in unison at endlessly repetitious jobs, it requires not men who take orders in unblinking fashion, aware that the price of bread is mechanical submission to authority, but men who can make critical judgments, who can weave their way through novel environments, who are quick to spot new relationships in the rapidly changing reality.<sup>4</sup>

To Toffler, the prime objective of American education should be to develop the phenomena of individual "cope-ability" which is the competency needed to adapt to continual change.<sup>5</sup>

Increase in technological advance is coupled not only with the increase in new knowledge, but also with the obsolescence of knowledge. In Toffler's view,

The rapid obsolescence of knowledge and the extension of life span make it clear that the skills learned in youth are unlikely to remain

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<sup>2</sup> Ibid., p. 29.

<sup>3</sup> Ibid.

<sup>4</sup> Alvin Toffler, Future Shock (New York: Random House, 1970), pp. 402-03.

<sup>5</sup> Ibid., p. 403.

relevant by the time old age arrives. Super-industrial education must therefore make provision for life-long education on a plug-in/plug-out basis.<sup>6</sup>

Much evidence exists that schooling fails to provide the experiences necessary to inspire and prepare many young people to cope with future change and adjustment. While most citizens would agree that universal opportunity to receive an education should be a prime goal in America

. . . there is little doubt that true opportunity exists only when curricula are sufficiently flexible to provide for each individual the kind of education he needs to become a fully participating and contributing member of society. A dynamic society such as that of the United States changes and flexes with the pace accelerated by technological innovation and growth. With economic, social, demographic, and technological change come resultant changes in the world of work and the need for educators to provide preparatory and continuing educational experiences that fit youth and adults for the world of work.<sup>7</sup>

One need only look at secondary school retention data to realize that schooling in our society provides a disservice to many potentially able young people. The latest data offered by the U.S. Office of Education and based on national fifth grade enrollment in 1961 finds " . . . about 96 percent of the fifth graders in the fall of 1961 reached the ninth grade, 86 percent got as far

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<sup>6</sup>Ibid., p. 407.

<sup>7</sup>Ralph E. Mason and Peter G. Haines, Cooperative Occupational Education (Illinois: The Interstate Printers and Publishers, Inc., 1965), p. 3.

as the eleventh grade, and 76 percent received a high school diploma in 1969."<sup>8</sup> The U.S. Department of Labor reports that "Young people who were school dropouts had greater difficulty in the job market than those with a high school education or more. About one-third of the unemployed 16 to 24 year-olds were school dropouts, but only a fifth of the employed."<sup>9</sup>

Though the percentage of students dropping out of Michigan schools has remained fairly constant during the past ten years (see Table 1),<sup>10</sup> the greater portion of those dropping out is represented by the urban disadvantaged. Data gathered by the Michigan Department of Education confirms that there exists a high correlation between population density and the number of dropouts (see Tables 2 and 3).<sup>11, 12</sup>

In studying the employment-dropout problem in an urban setting, James B. Conant found

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<sup>8</sup>U.S., Department of Health, Education, and Welfare, Office of Education, Digest of Educational Statistics (Washington, D.C.: Government Printing Office, 1970), p. 8.

<sup>9</sup>U.S., Department of Labor, "Employment of High School Graduates and Dropouts," Monthly Labor Review, VCV, No. 5 (May, 1972), 49.

<sup>10</sup>Michigan Department of Education, Public High School Dropouts in Michigan 1968-69 and 1969-70, Statistical Bulletin Number 4007, 1971, p. 7.

<sup>11</sup>Ibid., p. 8.

<sup>12</sup>Ibid., p. 9.

TABLE 1.--Michigan 9-12 grade membership, dropouts and dropout rates, 1962-63 through 1969-70

School Year	9-12 Grade Membership	Dropouts	Dropout Rate
1962-63	446,033	27,808	6.24
1963-64	449,085	29,845	6.64
1964-65	493,960	32,866	6.65
1965-66	501,448	35,210	7.02
1966-67	534,703	35,739	6.68
1967-68	542,507	36,554	6.73
1968-69	561,651	39,217	6.98
1969-70	601,621	40,610	6.75

. . . a total of 59% of the male youth between the age of sixteen and twenty-one were out of school and unemployed. . . . Of the boys who graduated from high school 48% were unemployed in contrast to 63% of the boys who had dropped out of school. In short, two-thirds of the male dropouts did not have jobs and about half of the high school graduates did not have jobs. In such a situation, the pupil may ask why bother to stay in school when graduation for half the boys opens into a dead-end street?<sup>13</sup>

The challenge to America's education enterprise should be clear. This country cannot afford to have over a million youth dropout of school and become the alienated second class citizens of tomorrow. The educational system must become reconstructed so as to provide meaningful relevant educational experience for young people so that all may have the opportunity to become and remain an integral part of our society.<sup>14</sup>

<sup>13</sup>James Bryant Conant, Slums and Suburbs (New York: McGraw-Hill Book Co., Inc., 1961), p. 33.

<sup>14</sup>Daniel Schreiber, "700,000 Dropouts," American Education, IV, No. 6 (U.S., Department of Health, Education and Welfare, Office of Education, June, 1968), 6.

TABLE 2.--Grades 9-12 dropout rates for 1969-70 by geographical location

	Number of Districts Reporting	School Membership	Number of Dropouts	Dropout Rate
City of Detroit	1	86,121	11,583	13.45
Detroit Area <sup>a</sup>	82	194,372	10,608	5.46
Southern Mich- igan <sup>b</sup>	293	258,844	15,869	6.13
Northern Mich- igan <sup>c</sup>	163	62,285	2,550	4.09
Total	523	601,621	40,610	6.75

<sup>a</sup>Includes all school districts within Wayne, Macomb, and Oakland Counties (Detroit Standard Metropolitan Statistical Area) except for the City of Detroit.

<sup>b</sup>All counties south of and including Arenac, Bay, Saginaw, Gratiot, Montcalm, Kent, and Muskegon counties except for the Detroit SMSA.

<sup>c</sup>All counties north of and including Oceana, Newaygo, Mecosta, Isabella, Midland, Gladwin, Ogemaw, and Iosco.

TABLE 3.--Grades 9-12 dropout rates for 1969-70 by community type

Community Type	Number of Districts Reporting	School Membership	Number of Dropouts	Dropout Rate
Metropolitan Core <sup>a</sup>	15	156,850	18,845	11.50
City <sup>b</sup>	24	45,031	2,634	5.85
Town <sup>c</sup>	103	86,700	4,522	5.22
Urban Fringe <sup>d</sup>	117	212,524	10,669	5.02
Rural Community <sup>e</sup>	264	100,516	4,740	4.72
Total	523	601,621	40,610	6.75

<sup>a</sup>Metropolitan Core: One or more adjacent cities with a population of 50,000 or more which serve as the economic focal point of their environs.

<sup>b</sup>City: Community of 10,000 to 50,000 that serves as the economic focal point of its environs.

<sup>c</sup>Town: Community of 2,500 to 10,000 that serves as the economic focal point of its environs.

<sup>d</sup>Urban Fringe: A community of any population size that has as its economic focal point a metropolitan core or a city.

<sup>e</sup>Rural Community: A community of less than 2,500.

### Statement of the Problem

Lansing, the capitol of Michigan, is largely an industrial-educational community located near the center of the state. Industrially, Lansing has over 200 industries many of which are parts suppliers to the Lansing Oldsmobile Division of General Motors. Also located within the greater Lansing area is Lansing Community College with a student population of over 10,000 and Michigan State University with a population of over 40,000 students.

The Lansing School District currently has an enrollment of over 33,000 students and a professional staff of over 1,700 who serve as faculties for four high schools, five junior high schools, and fifty elementary schools.

Lansing has not found itself immune to an increasing dropout rate. Data supplied by the Child Accounting Department of the Lansing Public Schools show that 582 secondary school students (grades 7-12) dropped out in the 1967-68 school year. This increased to 839 in 1968-69 and to 858 in 1969-70. Additional data compared the number of students in a given 10th-grade class to the number who matriculated at the end of a three-year period showed the dropout rate to be constant at about 28 per cent for graduating classes from 1965 through 1970. In other words, nearly three out of every ten students



who started the 10th grade did not graduate. Data received for the class of 1971 show a loss of 33 per cent for that group.

Recognizing the need to provide for more flexible methods of educating that might potentially stem this high dropout rate, Lansing has implemented various alternative programs. One such program, the Individualized Work Experience Program, was designed as a means toward reducing the dropout rate by (1) identifying as early as possible the potential dropout, (2) providing a flexible curriculum to allow students to learn and earn at the same time, and (3) allowing students within the program to meet the requirements for high school graduation.

Ultimately, it is hoped that students participating in the program will experience the following behavior changes:

- (1) Increased school attendance;
- (2) Increased achievement levels in math and reading;
- (3) More positive self-concept;
- (4) More positive attitude about the importance of knowledge as a means toward life successes;
- (5) Desire to stay in school until graduation;

- (6) Improved attitudes, work habits, and other behaviors that will better enable students to get along with others in school, on the job, and within society;
- (7) Successful job placement after graduation;
- (8) Gain familiarity with information concerning the labor market.

#### Need for the Study

Although the Junior High I.W.E. Program has been operational for the past ten years, many questions remain unanswered due to little or no prior program evaluation. Evaluation of the program has been limited to a monthly data report that is submitted by each building coordinator to the district's vocational education office (see appendices for data report form).

This study will evaluate the Junior High I.W.E. Program by means of a parallel-group design which will allow analysis of what possible influence the program has had on the following dependent variables: attendance, achievement in reading and math, dropout potential (holding power), self-concept, and achievement motivation. The study will further attempt to assess attitudes held toward the program by surveying I.W.E. students, parents, members of the professional staff, and employers.

Description of the Junior High  
I.W.E. Program

The Individualized Work Experience Program, originally called the Pre-Employment Program, is a preventive-action work-study program designed to increase school-holding power for disadvantaged potential dropouts in the junior and senior high schools in Lansing. The program originated during the 1962-63 school year under the leadership of Mr. Jack Griffin at C. W. Otto Junior High School. In September of 1964, the program was operational in one junior high and two senior high schools. Presently, the I.W.E. Program exists in all nine of Lansing's secondary schools.

As of September, 1969, the high school program was funded under the Educational Amendments of 1968 as part of the Vocational Education Act of 1963. Prior to 1969, the high school program was funded locally as is currently the case for the junior high program, since the Vocational Education Act does not provide funding for junior high work-study programs.

The Coordinator's Role

One Coordinator is assigned to each secondary school and is responsible to the district's Director of Vocational Education and to his respective building principal. The Coordinator's primary responsibilities include:

- (1) Counselling--help to guide students in vocational and personal matters; class scheduling;
- (2) Teaching--small group individualized instruction in basic academic skills and vocationally related areas;
- (3) Resource person--vocationally related learning materials; arranges for speakers and field trips;
- (4) Student screening and selection;
- (5) Job placement--selection of employers;
- (6) Student evaluation of job performance;
- (7) Liaison between school administration, counsellors, teachers, parents, and the employers;
- (8) Understanding of current Federal and State laws in relation to the employment of minors (see appendices for work training agreement).

### The Selection Process

Students selected for the I.W.E. Program are identified as disadvantaged. Disadvantaged students are those who reside in communities or come from families that are characterized as having academic, socio-economic, and/or cultural handicaps that may prevent them from succeeding in the regular school program.

Students identified as socially disadvantaged include those who have been affected by poverty, neglect,

delinquency, cultural, or linguistic isolation from the community at large, but does not include physically or mentally handicapped persons.

The "economically disadvantaged," as interpreted by the State Department of Education in the administration of Title I of the Elementary and Secondary Education Act, includes families on Aid to Dependent Children, welfare, or those who have an income of less than \$2,000 per year.

Academically disadvantaged students are identified as those who are achieving below their grade level, or who are failing in their classwork.

Referrals to the I.W.E. Program usually come from the combined efforts of teachers, counsellors, administrators, students, community agencies, and parents. Such specific criteria as current school achievement, attendance, attitude toward school, home background, academic history, and school behavior, are used in the initial screening process. Final selection is made by the program coordinator. The total number of students enrolled in each building program usually averages between twenty and thirty.

#### Student Schedule

Students are required to attend three class periods in school. Usually, those classes consist of math, language arts, and social studies. Depending upon

student needs, other classes such as art, typing, and woodworking are substituted for any of the above basics. Students may also be scheduled into a work-related class that is taught by the Coordinator. This class is available to those students who are in need of more individual help in regard to job adjustment or in the basic academic skills.

When feasible, student preference for a particular teacher is honored. Students spend roughly one-half of each day (2-5 hours) at work and may be employed either in the morning or afternoon.

#### Sample Student Schedules

Hour 1 - Math	Hour 1 - I.W.E.
2 - Language Arts	2 - I.W.E.
3 - Social Studies	3 - I.W.E.
4 - I.W.E.	4 - Drafting
5 - I.W.E.	5 - Math
6 - I.W.E.	6 - Language Arts

#### Job Placement

Whenever possible, jobs are selected for students on the basis of student interest for a particular job. Of equal importance is the interest shown by the employer to work with students of junior high age.

Jobs that have been made available to I.W.E. students include: store clerking, bagging groceries, locksmithing, custodial work, flower arranging, day-care work with children, dishwashing, waiting on tables,

and short-order cooking. All I.W.E. students are employed in the private business sector and usually earn a wage of \$1.10 to \$2.00 per hour.

### Student Evaluation

Students are given letter grades based upon their academic achievement in regular classes. A student's job is considered an integral and vital part of his learning experience and is, therefore, given a letter grade with full academic credit. Grades for job performance are based upon the employer's evaluation of his student employee in consultation with the program coordinator (see job performance report card in appendices).

### Racial Composition

The Lansing Board of Education supports the concept of desegregation as a prime means toward equal educational opportunity. The I.W.E. Coordinators are committed to maintaining at least a proportionate number of minority youngsters on the program based on the official fourth Friday building count.

The racial composition for the junior high I.W.E. Program (five schools) for the month of May, 1972, was-- Black 10 per cent, Chicano 10 per cent, Indian 2 per cent, and White 78 per cent.

### Limitations of the Study

1. Some of the research instruments used in this study are self-evaluative in nature and require the elicitation of a high degree of personal information. In such cases, the "Hawthorne Effect" could become a factor in relation to student inhibitions and the uncertainty of what the information will be used for.
2. The writer's direct involvement with the I.W.E. Program and his belief that such alternative programs are indeed justifiable and necessary will understandably bring forth some researcher bias. However, it is the writer's feeling that such direct involvement will provide greater insight and depth for the overall analysis of the program and may, in fact, be this study's greatest strength.
3. This study is concerned with only one preventive dropout program, the I.W.E. Program. Care should be taken in overgeneralizing the findings of this study, since some aspects of the program may be unique to the given geographical setting.

### Conclusion

For many academically, socially, and economically alienated students, the traditional instructional approach



to learning is far from meaningful. These students need programs that provide opportunity for practical experiences, short-range goals, and more individual attention. To many disadvantaged students, school is a "prison" that provides too few relevant experiences for the cognitive and affective skill development necessary for life adjustment upon termination of formal education.<sup>15</sup>

The Lansing School District strongly believes that instructional programs should be continually modified and that alternatives should be developed in order to meet the changing educational needs of students. One program that offers the disadvantaged student an alternative to the traditional full-day academic program is the Individualized Work Experience Program. This study will examine the I.W.E. Program in depth as an attempt to ascertain the program's strengths and weaknesses. The study will further offer recommendations, alternatives, and suggestions for future improvement.

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<sup>15</sup>Marvin H. Rull and Richard O. Moore, A Demonstration Training Program for Potential School Dropouts (Edwardsville: Quincy Public School District #172 and Southern Illinois University, ERIC-ED926526, 1968), p. 57.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

During the past two decades, much literature has been written on (1) the dropout problem that continues to plague American schools and (2) on the need to provide work experience opportunities as an integral component of the secondary school curriculum.

This review focuses upon the major concepts of work-study and their relationships to the disadvantaged student by (1) presenting an historical sketch of work-related education, (2) taking a critical look at justifications for work-study programs, (3) identifying some characteristics of potential dropouts, and (4) surveying the results of selected work-study programs.

#### Historical Sketch of Work-Related Education

Primitive and ancient societies perceived work experience as an essential aspect of general education. Work was generally considered the prime ingredient in the preparation of all aspects of living. With the

advent of greater technological specialization and its reduced emphasis on the preservation of life, work became more associated with vocational (training) preparation rather than with overall adjustment to societal culture.<sup>1</sup>

One of the major characteristics of work experience as training for productive or useful tasks was the apprenticeship concept of education. It is believed that one of the first references to apprenticeship appeared in the Babylonian Code of Hammurabi in 2500 B.C. Artisans were encouraged to adopt a boy as a son for the purpose of teaching him a particular job.<sup>2</sup>

The importance of transmitting useful skills to the young as a moral requirement is cited in early Jewish law. Talmud states:

As it is your duty to teach your son the law, teach him [also] a trade. . . . He who does not have his son taught a trade prepares him to be a robber. . . . Disobedience to this ordinance exposes one to just contempt, for thereby the social conditions of all are endangered.<sup>3</sup>

Apprenticeship training was not without class stigma. The great thinkers of Greek and Roman civilizations including Plato, Socrates, and Aristotle, frequently dismissed the need of a well-rounded formal

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<sup>1</sup>Wilson H. Quins and William B. Runge, Work Experience in High School (New York: The Ronald Press, 1951), pp. 21-22.

<sup>2</sup>Ibid., p. 23.

<sup>3</sup>Ibid.

education for the "inferior classes." Instead, vocational learning for the young was considered to be a father's responsibility.<sup>4</sup>

From the middle ages through the Reformation to the 19th century, the apprentice system was nearly the sole means of education for the young of the lower classes. However, amid the growing industrialization of America in the mid-1800's, the apprenticeship concept fell into decline to become replaced by the more utilitarian concept of formal vocational education. Some experts today feel that growing emphasis in work-study programs " . . . indicates a turning back to some of the educationally defensible principles of the apprenticeship system."<sup>5</sup>

Harold Dillon, author of Work Experience in Secondary Education, credits the labor emergency of World War II as providing much stimulus for the development of work-study programs in the United States. In his survey, Dillon explains that work experience as a part of the educational enterprise is not new and cites that many schools, prior to World War II, had experimented with part-time school and work in the areas of distributive trades and diversified occupations. Dillon qualifies work related to these types of programs as primarily

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<sup>4</sup>Ibid.

<sup>5</sup>Ibid., p. 26.

vocational in nature since their main objective tends to focus on specialized training in a given field. In assessing vocational programs, Dillon found that

. . . some principals, teachers, and guidance workers began to consider the values of part-time work, not solely as vocational preparation, but as an educational experience that could be of value to non-vocational as well as vocational students. Some thought of it as a resource for adjustment of individual students, while others saw it as an enrichment of the school's program in line with the interests and needs of many students.<sup>6</sup>

Beginning with the Smith-Hughes Act of 1917, the Federal government has played an increasingly supportive role in the development of secondary school vocational education programs. Additional Federal support for diversified and distributive work experience programs continued with the passage of the George-Deen Act of 1936 and the George-Barden Act of 1946.<sup>7</sup>

It was not until 1963 that the Federal government actively recognized the need for special work programs designed specifically for disadvantaged youth. The Vocational Education Act of 1963 provided reimbursement to schools for employing students part-time so that they could remain in school. The underlying assumption of the act was the existence of a large number of students

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<sup>6</sup>Harold J. Dillon, Work Experience in Secondary Education (New York: National Child Labor Committee, June, 1946), p. 25.

<sup>7</sup>Ibid., pp. 29-39.

from low-income families who could not afford to remain in school unless they were able to earn a modest income.<sup>8</sup>

Work-study programs for the disadvantaged were given further impetus by the passage of the Economic Opportunities Act of 1964. This act aided the establishment of the Job Corps, Neighborhood Youth Corps, Domestic Peace Corps, community action programs, as well as programs to combat poverty in rural areas.<sup>9</sup>

Today, some 1,500 school districts offer some form of work-study program as part of the school curriculum. Describing the latitude of such programs, George Burchill in Work-Study Programs for Alienated Youth comments:

Many [programs] are aimed at providing worthwhile experiences for non-delinquents as well as delinquents. They are offered to young persons at many age levels. For example, at the elementary school level, a systematic plan of regular work for some hundred boys and girls performed at home is guided by Patomac State College educators. Many programs exist on the junior and senior high levels. . . . Some are well known: Detroit's Job Upgrading Program, Philadelphia's Youth Achievement Plan, and Baltimore's program are examples.<sup>10</sup>

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<sup>8</sup> William John Schill, Concurrent Work-Education; Programs in the 50 States (U.S., Department of Health, Education, and Welfare, Office of Education, Project Number 6-2851, ERIC-ED-023886, 1965-66), p. 14.

<sup>9</sup> John Curtis Gowan and George D. Demos, The Disadvantaged and Potential Dropout (Illinois: Charles Thomas Publisher, 1966), p. 379.

<sup>10</sup> George W. Burchill, Work-Study Programs for Alienated Youth (Chicago: Science Research Associates, Inc., 1962), p. 11.

Philosophical Justification for  
Work-Study Programs

The call for a more comprehensive and relevant curriculum to better meet the needs of the young in a growing urban-industrial society presents a great challenge to urban education. The city has become the center of population in America. Data collected by Dr. Herbert Rudman in Urban Education points out that in 1960,

. . . 61.3 percent of the population lived in 189 standard metropolitan areas identified by the United States Bureau of Census. [Furthermore] . . . it has been predicted that as many as 75 percent of the American people will be living in cities of 50,000 or more by 1980 or in communities in close proximity to these cities.<sup>11</sup>

Cities are often typified as refuge for the jobless and the poor living in disease-ridden tenements, and, as centers of crime and violence. Its peoples may be characterized by wide differences in aspirational levels, race, ethnic, socio-economic, religious, educational, and political beliefs. Thus, the inherent need exists to provide the young people of urban America with equal opportunities to gain the knowledge and skills necessary for a useful and productive life.<sup>12</sup>

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<sup>11</sup>Herbert C. Rudman and Richard L. Featherstone, Urban Schooling (Chicago: Harcourt, Brace & World, Inc., 1968), p. 1.

<sup>12</sup>Ibid., p. 2.

The status of the poor as unprepared to participate in and benefit from the economic system is a major concern of James B. Conant. He states:

I am convinced that we are allowing social dynamite to accumulate in our large cities. I am not nearly so concerned about the plight of suburban parents whose offspring are having difficulty finding places in prestige colleges as I am about the plight of parents in slums whose children either drop-out or graduate from school without prospects of either further education or employment. In some slum neighborhoods I have no doubt that over half of the boys between sixteen and twenty-one are out of school and out of work. Leaving aside human tragedies, I submit that a continuation of this situation is a menace to the social and political health of the large cities.<sup>13</sup>

The same concern is shared by a national commission of school superintendents. The commission observes that:

During the next ten years there will be 30 million new workers looking for jobs. Two to three million will have no more than a grade school education. Seven and a half million will be without a high school diploma. Thirty-five percent of those who enter high school will not graduate. Can a free society survive when one-third of its young people have but little hope in sharing in the abundance of the nation?<sup>14</sup>

Lichter, Rapien, and others condemn the fact that though so much emphasis has been placed on the importance of the high school diploma as a minimum educational goal, 40 per cent of all students in the United States fail to

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<sup>13</sup>James Bryant Conant, Slums and Suburbs (New York: McGraw-Hill Book Co., Inc., 1961), p. 2.

<sup>14</sup>William B. Levinson, The Spiral Pendulum (Chicago: Rand McNally & Co., 1968), p. 226.



complete high school.<sup>15</sup> William Levinson vividly portrays the necessity for city residents to possess minimum skills as implied in the following paradox:

. . . in the rural setting even a moron could pitch hay, whereas in the crowded city merely catching the right bus requires a modicum of intelligence and at least functional literacy. The custodian can ruin an expensive floor if he can't read labels. In short, the young city dweller who has only his muscle to sell is an obsolete man.<sup>16</sup>

School curriculums have traditionally been based on the premise--what is good for one student is good for the other--which assumes that student needs are universally the same. This view was categorically deplored by Dr. Earnest Melby in an address delivered at Southern Illinois University. He states:

No other profession operates on such an assumption, not law, not medicine. Medicine distributes help in proportion to need. Giving medicine to a robust healthy man sounds silly, but it may not be much more silly than excessive teacher involvement in the learning process of a child who is readily learning how to learn.<sup>17</sup>

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<sup>15</sup>Solomon O. Lichter, Elsie B. Rapien, Francis M. Seibert, and Morris A. Sklansky, The Drop-Outs (New York: The MacMillan Company, 1968), p. 2.

<sup>16</sup>Levinson, op. cit., pp. 222-23.

<sup>17</sup>Earnest O. Melby, "Needed: A New Concept of Educational Administration," address delivered at Southern Illinois University.

Russell,<sup>18</sup> Levinson,<sup>19</sup> and Green<sup>20</sup> support Melby's position and readily agree that schools need to provide curricular alternatives to meet the wide range of student aspirations, interests, and potential.

During the past decade, there has been a strong tendency among some schools to provide more program alternatives as an attempt to "vitalize" the school curriculum. One such variation is the greater utilization of the environment as a means toward lifting the dichotomy between "real" work experience and classroom instruction.<sup>21</sup> Many educators

. . . have expressed the opinion that the introduction of work experience will give realism to the school curriculum and break the insulation of students from the world of work; that it will provide a form of experience-centered education which is in line with modern educational theory; and that for many students a combination of work and school will do more to produce a well-adjusted individual, able to handle his problems intelligently when he leaves school, than does the present curriculum.<sup>22</sup>

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<sup>18</sup>Kenneth Russell, "Stay in School," American Education, IV, No. 6 (U.S., Department of Health, Education, and Welfare, Office of Education, 1968), 13.

<sup>19</sup>Levinson, op. cit., p. 165.

<sup>20</sup>Bert I. Green, Preventing Student Dropouts (New Jersey: Prentice Hall, 1966), p. 25.

<sup>21</sup>Quins and Runge, op. cit., p. 6.

<sup>22</sup>Dillon, op. cit., p. 22.

Both Norberg<sup>23</sup> and Conant<sup>24</sup> agree that one route toward social maturity and adjustment is through a transitional orientation of the young into real work experiences.

The philosophy that work-related experience is a function in human development is further discussed by Milton Gold. He states: "As work has functioned to develop man's arts, skills, and institutions, so it might well function to develop the individual, his personality, skills, attitudes, and knowledge--if the school would guide the application of intelligence to current work activities."<sup>25</sup>

John Dewey,<sup>26</sup> a strong supporter of experiential education, stressed the importance of work in the development of man's mind and mode of life. However, recognizing the potential vacuum of a strictly work-oriented education, Dewey stressed the importance of history, science,

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<sup>23</sup>Kenneth D. Norberg, American Democracy and Secondary Education (New York: Teachers College, Columbia University, 1944), p. 118.

<sup>24</sup>Conant, op. cit., p. 40.

<sup>25</sup>Milton J. Gold, Working to Learn (New York: Teachers College, Columbia University, 1951), p. 6.

<sup>26</sup>John Dewey, Philosophy and Civilization (New York: Milton, Balch & Company, 1931).

economics, civics, and politics to provide man with a perspective and an awareness of changing societal conditions.<sup>27</sup>

In relation to disadvantaged youngsters, work-study education can be an acceptable method in helping them to achieve a level of satisfactory adjustment during adolescence. School curriculums that allow for the combination of academic preparation with supervised work experience may satisfy individual needs for recognition. Such programs might allow students to develop greater feelings and understandings about their "self" by actively engaging in roles that are meaningful to themselves, to their peers, and to adults. Furthermore,

Identification with work may provide many youngsters with an avenue for recognizing their approaching maturity with its concomitant responsibilities. The maturation process may be enhanced by appropriate personal and educational-vocational preparation.<sup>28</sup>

#### Characteristics of the Potential Dropout

In the volumes of literature concerning dropouts or potential dropouts, the term "disadvantaged" is frequently used. Other commonly used labels for potential dropouts include: culturally deprived youth, alienated

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<sup>27</sup>John Dewey, Democracy in Education (New York: MacMillan Co., 1966), p. 372.

<sup>28</sup>Burchill, op. cit., p. 11.

youth, youth from the culture of poverty, educationally unappreciated, children of adversity, culturally different, youth from the lower socio-economic strata, and lower-class youth.

Some research evidence suggests that one out of three young people in urban society is disadvantaged. Research has further predicted that by 1971 approximately 50 per cent of our urban youngsters will be labeled as "culturally deprived."<sup>29</sup>

In general, potential dropouts may be found in families where day-to-day survival tends to be the mode of life, among minorities, or where the physical environment isolates them from opportunities for education and social experiences.<sup>30</sup>

There are many who blame the school curriculum as the main dropout causal factor. Harold Howe II, former U.S. Commissioner of Education, states the "attempts to coax and persuade potential dropouts to stay in school when the school continues to fail them, accomplish absolutely nothing."<sup>31</sup> Krugman explains the problem

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<sup>29</sup>Gowan and Demos, op. cit., p. 4.

<sup>30</sup>William E. Amos, "Disadvantaged Youth--Recognizing the Problem," in The Disadvantaged and Potential Dropout (Illinois: Charles Thomas, 1966), p. 9.

<sup>31</sup>Kenneth, op. cit., p. 13.

in terms of environmental factors when " . . . during the early school years, the deficits which arise from physical and cultural deprivation tend to have a cumulative effect which he calls a 'cumulative deficit hypothesis.'"<sup>32</sup>

Some educators state the "intelligence" factor as the most probable cause of dropping out of school. In deference to this belief, research by Lichter and Rapien found by comparing graduate and dropout groups, " . . . somewhat more than half of the dropouts have at least average intelligence. This half without question has the mental capacity to master a high school curriculum."<sup>33</sup>

Recognizing that each potential dropout has certain unique characteristics, problems, and personal history, research by Cervantes finds that there are certain descriptive tendencies related to school, family, peers, and the "self" that might cause students to leave school. His findings include the following:

School

1. Two years behind in reading or arithmetic at seventh grade level. Majority of grades are below average.
2. Failure of one or more school years (1st, 2nd, 8th, 9th grades most commonly failed; 85% of dropouts behind one year; 53% two or more years).

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<sup>32</sup>M. Krugman, "The Culturally Deprived Child in School," National Education Association Journal, L (1961), 22-23.

<sup>33</sup>Lichter, Rapien, Seibert, and Sklansky, op. cit., p. 2.

3. Irregular attendance and frequent tardiness. Ill-defined sickness given as reason.
4. Performance consistently below potential.
5. No participation in extra-curricular activities.
6. Frequent change of schools.
7. Behavior problems requiring disciplinary measures.
8. Feeling of "not belonging" (because of size, speech, personality development, nationality, social class, family disgrace, retardation in school, dress, lack of friends among schoolmates or staff, etc.).

#### Family

1. More children than parents can readily control (e.g., only child for divorced and working mother; five or more for non-divorced and working mother of blue- and lower white-collar class).
2. Parents inconsistent in affection and discipline.
3. Unhappy family situation (common acceptance, communication, and pleasurable experiences lacking; family solidarity minimal).
4. Father figure weak or absent.
5. Education of parents at eighth grade level.
6. Few family friends; among these few many problem units (divorce, deserted, delinquents, dropouts).

#### Peers

1. Friends not approved by parents.
2. Friends not school oriented.
3. Friends much older or much younger.

#### Psychological Orientation

1. Resentful of all authority (home, school, police, job, church).
2. Deferred gratification pattern weak.
3. Weak self-image.<sup>34</sup>

Daniel Schrieber lists nine reasons why students tend to drop out of school. Those include: severe reading retardation, excessive failure in school, grade retention, low intelligence, negative family attitudes toward schooling, the organization and size of the

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<sup>34</sup> L. F. Cervantes, The Dropout: Causes and Cures (Michigan: The University of Michigan Press, 1965), pp. 198-99.

school, low self-image, dislike of school, and lack of interest in school.<sup>35</sup>

Reissman,<sup>36</sup> and Rosenthal and Jacobson<sup>37</sup> believe firmly that teachers' expectations of pupil performance can act as a "self-fulfilling prophecy." In other words, if teachers actually assume that particular students are underachievers, students may learn to function as underachievers.

The development of "self-concept" as another factor in categorizing the potential dropout has been cited by a number of studies. Hunt indicates " . . . that the impoverished environment in which the deprived student finds himself does not allow him to develop an adequate conceptual frame of reference, which might be considered as a contributing factor to his dropping out of school."<sup>38</sup> Bert Green in Preventing Student Dropouts condemns the overly academic orientation of schools as

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<sup>35</sup>Daniel Schrieber, "The School Dropout, Fugitive From Failure," N.A.S.S.P. Bulletin, XLVI (May, 1962), 274.

<sup>36</sup>Frank Reissman, Helping the Disadvantaged to Learn More Easily (New Jersey: Prentice Hall, Inc., 1967), p. 12.

<sup>37</sup>R. Rosenthal and L. Jacobson, "Teachers' Expectancies: Determinants of Pupils I.Q. Gains," Psychological Reports, XIX (1966), 116-18.

<sup>38</sup>J. M. Hunt, Intelligence and Experience (New York: The Ronald Press, 1961), p. 34.



preventing the emergence of positive self-concepts among disadvantaged youth. Green feels that "for some students, the school serves to help them develop a poor self-concept, which is more damaging to the student and to society than being unable to perform academic tasks."<sup>39</sup>

The findings of a two-year study at the University of Michigan cited the importance of teacher self-esteem as a relating factor to the self-esteem of students. "The results were the same for both years; teachers who scored high in self-esteem tended to have groups of pupils who scored as high as well."<sup>40</sup>

A number of studies suggests that the most important influence upon student self-concept, achievement, and general success in school rests with the family. The Coleman Report found that the influence of family background on the school achievement variable remained consistent over the students years in school.<sup>41</sup> Citing further evidence of family influence, C. M. Allen found that " . . . children often fail to exceed their parents'

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<sup>39</sup>Greene, op. cit., p. 8.

<sup>40</sup>Robert Allen Blume, "How Child Sees Himself May Relate to How Teacher Sees Himself," Michigan Education Journal, XLVI, No. 9 (November, 1968), 9.

<sup>41</sup>James S. Coleman, Equality of Educational Opportunity (Washington, D.C.: Government Printing Office, 1966), p. 325.

scholastic achievement and that students from the same family tend to dropout of school at about the same age or grade level as did their parents."<sup>42</sup>

William E. Amos provides further insight upon family influence. He comments:

Various studies have shown that the parents of the "disadvantaged," . . . , may place a high value on education for their children, though they themselves are largely undereducated. Yet, in spite of this respect for education per se, a majority of these parents cannot or do not give their children adequate support and encouragement either to attend school regularly or to study at home.<sup>43</sup>

Recognizing that many parents of disadvantaged youngsters are immobilized by poverty and saturated with their own personal problems, Gowan and Demos stress that effort be made to aid the parent as well as the child in an attempt to gain a more positive parental influence.<sup>44</sup>

#### Evaluation Results of Selected Work-Study Programs

As mentioned earlier in this review, over 1,500 school districts include some form of work-study program as part of their curriculum. Some of these programs are designed primarily for disadvantaged students, while others are offered to any interested student for the

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<sup>42</sup>C. M. Allen, Combating the Dropout Problem (Chicago: Science Research Associates, 1956), p. 39.

<sup>43</sup>Amos, op. cit., p. 10.

<sup>44</sup>Gowan and Demos, op. cit., p. 4.

purpose of expanding educational experiences to the world of work. Though many individual school programs have certain unique characteristics, most would be able to define work-study programs as those programs that release students part-time to participate in paid employment under the supervision of school personnel. Students usually attend school for one-half the day and are employed in the community the other half. Generally, with few exceptions, full academic credit is given for student work experience.<sup>45</sup>

Though much of the literature related to work-study programs is descriptive rather than evaluative in nature, this review will survey the findings of selected programs for the disadvantaged that have been evaluated.

A study by the National Child Labor Committee of work-study programs involving ten school districts found considerable improvement in achievement that was supposedly due to increased individual and group counseling. Students were asked whether they would leave school if they were not in the work program. Eleven per cent of students who were sixteen or very near to that age said "yes," and 60 per cent of those under sixteen years of age answered "yes." Of the 2,000 students surveyed in the study, 80 per cent responded with

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<sup>45</sup>Dillon, op. cit., p. 9.

favorable reactions. Some of the program advantages included: (1) learned good work habits and the importance of responsibility, (2) gained a sense of security and independence, (3) made good contacts with people, and (4) gave more reality to the school curriculum. Twenty per cent of the students responded with negative feedback which included: (1) accelerated loss of interest in school, (2) lack of time for homework, and (3) too little time for social activities. Forty-one school principals were interviewed in the same study. The majority believed that work experience was desirable because (1) it is a valuable resource for student adjustment, (2) it encourages many students to remain in school, (3) it provides experiences that could not be provided in the classroom, and (4) it aids in the general improvement of student morale. The majority of parents surveyed felt that work-study had little or no harmful effect on student achievement, health, involvement in school activities, and attitudes. Many parents observed changes for the better.<sup>46</sup>

Improved retention and better school attendance were the results of evaluating the School To Employment Program in New York City.<sup>47</sup> Another work-study program,

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<sup>46</sup>Ibid., pp. 17-20.

<sup>47</sup>Charles Savitzky, "STEP, Program for Potential Dropouts," in The Disadvantaged and the Potential Dropout (Illinois: Charles Thomas Publisher, 1966), p. 490.

located in eight of New York City's high schools, designed to keep 15- and 16-year-old boys interested in classroom work and out of gang activity reported that "few students remained truant after enrolling in the course, and many participate for the first time in school functions."<sup>48</sup>

A program in Detroit provides work experiences for 14- and 15-year-old junior high youth for the purposes of (1) encouraging them to remain in school after the age of 16, (2) improving school attendance and scholastic achievement, (3) providing opportunity for growth through direct work experience, (4) providing income for personal needs, and (5) developing improved work habits. Evaluation of the program found no change in overall absenteeism, tardiness, grades, or citizenship marks. However, case studies of individual students did reflect some progress in academic behavior, attitudes toward school, and in social demeanor.<sup>49</sup>

In 1970, the California State Department of Education funded its third successive summer work-study program in eight urban school districts. A total of

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<sup>48</sup>William E. Amos and Marilyn A. Southwell, "Drop-outs: What Can Be Done," in The Disadvantaged and the Potential Dropout (Illinois: Charles Thomas Publisher, 1966), p. 450.

<sup>49</sup>Detroit Public Schools, Evaluation of the In-School Youth Work-Training Project for Fourteen and Fifteen Year Old Youth, Department of Research and Development, ERIC-ED-026501, 1968.

1,163 "disadvantaged" students ranging in age from 15-18 participated in the program. The instructional part of the program included courses in the basic skills as well as orientation to work-related activities. The overall evaluation of the program from students to district administrators was highly favorable. It was recommended that the work-study concept be made a regular part of the curriculums in participating school districts. The most frequent student criticism toward the program was directed to the seeming irrelevance of classroom activities to their work experience.<sup>50</sup>

The High School Redirection Project for potential dropouts in New York City provided a program of work-study. One hundred eighty-six boys and girls ages 16 and older participated in the eighteen-week project. The results of a student questionnaire found participant attitude toward the program to be positive. The reasons for students favoring the program included more attention given, treated as adults, teachers cared, and learned more through direct job experience.<sup>51</sup>

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<sup>50</sup> George Ebey, Mary Aubil, and Norman Robinson, An Evaluation of 1970 Summer Work-Study Programs (San Mateo, Calif.: U.R.S. Research Co., ERIC-ED 047095, 1970), p. 6.

<sup>51</sup> Bernard Flicker, A School and Work Program in an Adult Manpower Setting for Potential Dropouts Needing Educational Redirection (New York: New York City Board of Education, September, 1969, ERIC-ED-036579).

Marcia K. Freedman provides an excellent perspective on research designs and their findings in relation to work-study programs for the disadvantaged. She observes:

Current designs for evaluating special work-study programs tend to rely on gross criterion variables, such as rate of dropout, incidence of delinquency, changes in academic performance, and various subjective ratings of behavior change. In most cases, since the work experience is the radical departure, there is a tendency to assume that all observed change flows from it. It may be, however, that change is related to increased guidance services, a different set of curriculum materials, or an improved attitude on the part of the staff toward low achieving students. It may even reflect simply the "Hawthorne" effect--mere attention paid to an out-group may induce change unrelated to any specific program element, including work experience. Research designs, therefore, need to be improved in order to gain clues as to "differential effects."<sup>52</sup>

### Conclusion

The need for curricular change should be apparent. The challenge to the school must include the early identification of students who may least likely be successful. The school curriculum should be revised, if not reconstructed to provide these students the opportunity to benefit from and aspire to whatever opportunities the educational system and the future may offer.

This review concerns only one of many feasible alternative approaches that could be implemented. The

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<sup>52</sup>M. K. Freedman, "Part Time Work Experience and Potential Early School Leavers," American Journal of Orthopsychiatry, XXXIII (1963), 514.

work-study concept, though a viable alternative, is far from being a universal panacea for the potential dropout.

The need for special counselling, higher teacher aspirations toward the underachiever, opportunity for parent reeducation and adjustment, and a curriculum that best reflects the real-life environment, are prime requisites for the successful implementation of school programs for the disadvantaged.

If some students learn best by "doing," perhaps work experience coupled with "quality" classroom instruction can make a significant contribution to the learning process.



## CHAPTER III

### THE METHOD

#### Introduction

The evaluation of the I.W.E. program essentially consists of two parts:

1. To determine whether there is a measured change in behavior as a result of student experience in the I.W.E. program. Variables to be measured include: attendance, achievement in reading comprehension and arithmetic computation, dropout potential, self-esteem, and achievement motivation.
2. To ascertain the general opinions, attitudes, and beliefs held toward the program by means of questionnaires given to I.W.E. students, their parents and employers, and to the professional staff.

#### Statement of Hypothesis

The null hypothesis is used in the evaluation of the I.W.E. program. This hypothesis assumes that there will be no significant relationship between the tested

dependent variables--attendance, achievement, dropout potential, self-esteem, and achievement motivation--and the independent variable, student participation in the I.W.E. program.

### Statement of Procedures

The method used in the evaluation of the I.W.E. program is the parallel-group design. The student population for this study was drawn from three of Lansing's Junior High Schools--C. W. Otto (population 1,700), Harry E. Gardner (population 1,400), and Walter French (population 1,200). The I.W.E. group (experimental) consists of those students who have been in the program for one semester or more. The regular group (control) consists of students who meet the entrance criteria for I.W.E. enrollment, but who remained within the regular school curriculum.

Each I.W.E. student was matched with a student in the regular school program within his respective school. Students were matched on the basis of age, sex, race, grade, I.Q. stanine from the Differential Aptitude Test, grade-point average, and citizenship average. The socio-economic status factor was accounted for by matching students as closely as possible to similar neighborhoods.

A total of eighty-two students participated in this study with twenty-six boys and fifteen girls

comprising each group. All matching data were obtained from student cumulative records--CA-39's (see Table 4 for matching data).

In analyzing the matching data, the following descriptive comparison is made:

1. Sex: All students were matched identically.
2. Age: Twenty-five pairs were matched identically, while sixteen pairs were matched within one year or less.
3. Grade: All pairs were matched identically.
4. Race: All pairs were matched identically.
5. I.Q. Stanine: All pairs were matched identically.
6. Grade Point Average: All pairs were matched within a G.P.A. of .63 on the four-point scale (A-4, B-3, C-2, D-1, E-0).
7. Citizenship: Nineteen pairs matched identically, while twenty-two pairs matched within one point of a five-point citizenship (behavior) scale.  
(1 - outstanding qualities of citizenship,  
2 - average citizenship, 3 - below average  
citizenship, 4 - poor citizenship, 5 - extremely  
poor citizenship.)

TABLE 4.--Matching data for the I.W.E. and regular groups

Student Number	Sex	Age	Grade	Race	I.Q. Stanine	G.P.A.	Citizen-ship
1A <sup>a</sup>	F	16	9	B	3	1.76	3
1B <sup>b</sup>	F	15	9	B	3	1.72	3
2A	F	14	9	W	3	2.04	2
2B	F	14	9	W	3	2.25	3
3A	M	14	9	W	5	2.50	4
3B	M	14	9	W	5	2.65	4
4A	M	15	9	W	1	1.54	3
4B	M	15	9	W	1	1.25	4
5A	F	15	9	W	3	1.22	3
5B	F	14	9	W	3	1.54	2
6A	M	15	9	B	1	1.54	4
6B	M	14	9	B	1	1.78	4
7A	M	15	9	B	1	1.09	4
7B	M	14	9	B	1	1.15	4
8A	M	15	9	W	8	2.25	3
8B	M	15	9	W	8	1.75	3
9A	F	16	9	B	2	1.52	3
9B	F	16	9	B	2	1.56	3
10A	M	16	9	W	2	1.30	4
10B	M	15	9	W	2	1.27	3
11A	F	14	9	W	4	2.04	2
11B	F	15	9	W	4	2.48	3
12A	M	15	9	W	3	1.34	4
12B	M	15	9	W	3	1.47	4
13A	F	15	9	W	3	0.97	4
13B	F	15	9	W	3	0.77	3
14A	M	15	9	W	2	1.16	4
14B	M	14	9	W	2	1.16	3
15A	M	15	9	W	3	0.22	5
15B	M	15	9	W	3	0.80	4

TABLE 4.--Continued.

Student Number	Sex	Age	Grade	Race	I.Q. Stanine	G.P.A.	Citizen-ship
16A	F	15	9	W	3	2.12	2
16B	F	15	9	W	3	2.24	2
17A	F	14	9	W	4	1.46	3
17B	F	14	9	W	4	1.36	3
18A	F	15	9	W	4	2.37	2
18B	F	14	9	W	4	2.41	3
19A	M	15	9	M	2	1.58	2
19B	M	15	9	M	2	1.25	3
20A	F	14	9	B	5	1.45	4
20B	F	14	9	B	5	2.08	3
21A	M	14	9	W	5	1.50	3
21B	M	14	9	W	5	1.28	4
22A	M	16	9	W	3	1.47	3
22B	M	15	9	W	3	1.30	2
23A	M	16	9	W	5	1.24	3
23B	M	15	9	W	5	1.58	3
24A	F	14	9	W	7	2.99	2
24B	F	14	9	W	7	2.99	2
25A	M	15	9	W	2	1.30	3
25B	M	15	9	W	2	1.58	2
26A	F	14	8	W	4	1.09	3
26B	F	14	8	W	4	1.66	2
27A	M	15	9	W	4	1.08	4
27B	M	14	9	W	4	1.20	3
28A	M	15	9	W	4	0.85	4
28B	M	15	9	W	4	0.50	4
29A	M	14	8	W	3	0.74	3
29B	M	14	8	W	3	1.10	3
30A	M	15	9	W	5	1.62	3
30B	M	15	9	W	5	1.77	3

TABLE 4.--Continued.

Student Number	Sex	Age	Grade	Race	I.Q. Stanine	G.P.A.	Citizen-ship
31A	M	15	9	W	2	1.13	3
31B	M	15	9	W	2	1.23	3
32A	M	15	9	W	4	1.21	3
32B	M	15	9	W	4	1.40	3
33A	M	15	9	W	5	1.63	4
33B	M	14	9	W	5	1.59	3
34A	F	15	9	W	2	2.03	4
34B	F	15	9	W	2	2.04	3
35A	M	14	9	W	3	0.63	4
35B	M	15	9	W	3	0.72	4
36A	M	14	9	W	4	1.04	3
36B	M	15	9	W	4	1.13	4
37A	M	15	9	W	3	2.25	2
37B	M	15	9	W	3	2.04	3
38A	M	14	9	W	5	2.41	2
38B	M	15	9	W	5	2.36	2
39A	M	14	9	W	2	1.47	4
39B	M	15	9	W	2	1.52	4
40A	F	16	9	W	2	1.62	4
40B	F	16	9	W	2	1.75	3
41A	F	15	9	W	4	1.04	4
41B	F	15	9	W	4	1.00	3

<sup>a</sup>denotes I.W.E. student.

<sup>b</sup>denotes regular student.

### Attendance

The attendance variable is used to determine the possible effect of enrollment in the I.W.E. program upon increased school attendance. Attendance variation is determined for both groups by comparing student absenteeism one semester prior to I.W.E. students enrollment in the program, to the following semester with I.W.E. students participating in the program. In the statistical treatment, attendance is used as a dependent measure with a two-way analysis of variance.

### Achievement

In the past, the Lansing schools have administered the Stanford Achievement Test to students in grades six and eight. This year, the test was administered to all students in grades one through twelve. A comparison of achievement level variation by grade placement was made for the experimental and control groups to determine whether I.W.E. experience may have had some impact on increased achievement in reading comprehension and arithmetic skills.

Sixth and eighth grade scores administered in January, 1971, were used as pre-test data, while the results of the S.A.T. administered in May, 1972, were used as post-test scores.

Only the paragraph meaning and arithmetic computation parts of the S.A.T. advanced battery were used in the determination of significant achievement differences between the two groups.

The reliability data (see Table 5) for the advanced battery are reportedly based "on a sample of 1,000 cases from each grade, 7.6, 8.6, 9.6, drawn randomly from 76 school systems testing in all grades 1-9 in national standardization."<sup>1</sup>

TABLE 5.--Reliability data for the Stanford Achievement Test-Advanced Battery in paragraph meaning and arithmetic computation

	$I_1$	KR 20	Standard Error
<u>Grade 7</u>			
Paragraph Meaning	.93	.93	5.0
Arithmetic Computation	.87	.87	7.0
<u>Grade 8</u>			
Paragraph Meaning	.93	.93	8.0
Arithmetic Computation	.90	.90	8.0
<u>Grade 9</u>			
Paragraph Meaning	.94	.93	9.0
Arithmetic Computation	.92	.91	9.0

This table includes odd-even split-half reliability coefficients, Kudar-Richardson reliability coefficients, and standard errors of measurement in terms of grade scores for the S.A.T. Advanced Battery.

<sup>1</sup>Truman L. Kelley, Richard Madden, Eric F. Gardner, and Herbert C. Rudman, Stanford Achievement Test--Directions for Administering (New York: Harcourt, Brace and World, Inc., 1964), p. 24.



In the statistical analysis, the paragraph meaning and arithmetic computation scores will be used as dependent measures with a two-way analysis of variance.

### Dropout Potential

The "School Interest Inventory" developed by Dr. William C. Cottle is an instrument that can be used for early detection of potential school dropouts. In reference to its use, Cottle states that " . . . , scores from this test, supplemented by information about grades, attendance, and other factors, will serve to identify most potential dropouts so that a counselor can work with them one or two years before they reach the legal age for dropping out of school."<sup>2</sup>

This tool was used to determine what effect participation in the I.W.E. Program might have on the dropout potential of students by comparing the scores of both groups and analyzing the results. The statistical treatment will utilize dropout potential as a dependent measure with a two-way analysis of variance.

The 150-item self-report inventory was validated during a two-year period which included follow-up studies with 25,000 students in grades seven, eight, and nine.<sup>3</sup>

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<sup>2</sup>William C. Cottle, Examiners Manual for the School Interest Inventory (Boston: Houghton Mifflin Company, 1966), p. 11.

<sup>3</sup>Ibid.

In relation to the instruments reliability (see Table 6) the examiners manual reports that "studies with several hundred students in grades seven through nine indicate that the inventory yields similar scores when administered twice to the same persons."<sup>4</sup> Cottle further reports that results obtained from test-retest reliability data show that "most of the reliabilities are in the .80's and are appropriate for a test to be used in individual counselling."<sup>5</sup>

### Self-Esteem

The "Self-Esteem Inventory" developed by Dr. Stanley Coopersmith was used to determine whether students in the I.W.E. Program have higher self-esteem as a result of their program experience than do students in the regular program.

The Inventory consists of fifty items concerned with student attitudes related to peers, parents, school, and personal interests.

. . . the Inventory was initially administered to two 5th- and 6th-grade classes, of both boys and girls. The scores ranged from 40 to 100, with a mean of 82.3 and S.D. of 11.6. The mean score for the 44 boys was 81.3, S.D. of 12.2; the mean score of the 43 girls was 83.3, S.D. of 16.7. The difference between the mean scores for boys and girls was not significant ( $F = .80$ ;  $p < .50$ ). The form

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<sup>4</sup>Ibid., p. 17.

<sup>5</sup>Ibid.

TABLE 6.--"School Interest Inventory" test-retest reliabilities, means, and standard deviations for various groups<sup>a</sup>

Type of School	Type of Examinee	Number	Correlation	Mean	Standard Deviation	SE <sub>Meas.</sub> <sup>b</sup>
Public	7th grade males	105	.92	21.84	9.03	2.53
Public	8th grade males	82	.78	24.46	10.70	5.03
Public	9th grade males	78	.87	22.55	8.69	3.13
Public	7th grade females	109	.82	15.17	6.98	2.86
Public	8th grade females	94	.86	17.81	8.17	3.02
Public	9th grade females	66	.92	19.01	7.80	2.18
Private	8th & 9th grade males	130	.78	14.68	6.49	3.05
Private	8th & 9th grade females	78	.92	11.88	6.20	1.74
All males, 7th through 9th		395	.85	20.17	9.47	3.69
All females, 7th through 9th		347	.88	15.88	7.76	2.72

<sup>a</sup>Data for these studies were gathered with the assistance of Mr. John McGowan, East Junior High School, Brockton, Massachusetts; Sister Anne Marie, S.U.S.C., Rose Hawthorne School, Concord, Massachusetts; and Rev. John R. Vigneau, S. J., of Xavier High School, Concord, Mass.

<sup>b</sup>Calculated by the formula  $SE_{Meas.} = SD \cdot \sqrt{1-r_{tt}}$ .

of the distribution was skewed in the direction of high-esteem. Five weeks later the Inventory was administered to one of the 5th grade classes. With a sample of thirty 5th grade children, test-retest reliability after a five week interval was .88.<sup>6</sup>

The Inventory was later administered to 1,748 students attending schools in central Connecticut. These students were reportedly more diverse in regard to ability, interest, and social background than were students in the initial study. Coopersmith found that the "Test-Retest reliability after a three year interval with a sample of 56 children from the population was .70."<sup>7</sup> Coopersmith's contention that "the individual arrives at a general appraisal of his worth, which remains relatively stable and enduring over a period of several years"<sup>8</sup> is supported by the above data.

Self-Esteem will be used statistically as a dependent measure with a two-way analysis of variance.

#### Achievement Motivation

The Michigan State M-Scales was used to measure what possible effect the I.W.E. Program has had on the achievement motivation of its students compared to the regular students. Four functional measures--Generalized Situational Choice Inventory, Preferred Job Characteristics Scale, Word Rating List, and the Human Trait

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<sup>6</sup>Stanley Coopersmith, Antecedents of Self-Esteem (San Francisco: Freeman Co., 1968), p. 10.

<sup>7</sup>Ibid.

<sup>8</sup>Ibid., p. 5.

Inventory--are combined to make up the M-Scales instrument. The instrument, form b-v2, contains 257 items for females and 203 for males. The author, Dr. William W. Farquhar, comments on the instrument's reliability. "On a random sample of 240 students from the original 4,200, reliability estimates based on Hoyt's analysis of variance technique were estimated to be .94 for males and .93 for females for the total score."<sup>9</sup>

In its statistical treatment, achievement motivation was used as a dependent measure with a two-way analysis of variance.

#### Student Questionnaire

A twenty-item weighted response questionnaire was developed to ascertain student opinions and feelings about their participation in the I.W.E. Program. The questionnaire was given to all I.W.E. students who had been enrolled in the program for two or more months. The reliability of this instrument was tested by Hoyt's analysis of variance formula. The opportunity for written comments and suggestions was provided in the questionnaire.

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<sup>9</sup>William W. Farquhar, Motivation Factors Related to Academic Achievement (East Lansing, Mich.: Office of Research and Publications, Cooperative Research Project #846, January, 1963), pp. 96-98.

### Professional Staff Questionnaire

For the purpose of assessing professional staff attitudes and opinions toward the I.W.E. Program, a ten-item weighted questionnaire was developed for teachers, counselors, and administrators. A random sampling of approximately twenty teachers were surveyed in each of the junior high schools. All counselors and administrators in the three buildings were given the questionnaire. The opportunity for written comments and suggestions was provided. The reliability of this instrument was tested by Hoyt's analysis of variance formula.

### Parent Questionnaire

In an effort to assess how parents of I.W.E. students feel about the program, a ten-item weighted questionnaire was developed. Questionnaires were mailed with an enclosed self-addressed envelope to those parents whose offspring participated in the I.W.E. Program for one semester or more. Opportunity for written comments and suggestions was provided. The reliability of this questionnaire was measured by Hoyt's analysis of variance formula.

### Employer Questionnaire

A twelve-item weighted questionnaire was developed to allow all current employers of I.W.E.

students an opportunity to assess the program. The questionnaire invited written comments and suggestions. The reliability of the instrument was measured by Hoyt's analysis of variance formula.

### Conclusion

In an effort to assess the effectiveness of the I.W.E. Program, two matched groups of students, tested separately, were compared on the basis of attendance, achievement, self-concept, dropout potential, and achievement motivation. Statistical significance for each variable was measured by use of a two-way analysis of variance. In addition, questionnaires were developed for I.W.E. students, parents, employers, and the professional staff for the purpose of assessing their feelings and attitudes toward the program. Reliability for the questionnaires was tested by Hoyt's analysis of variance formula.

## CHAPTER IV

### ANALYSIS OF THE DATA

#### Introduction

The purpose of this chapter is to report resulting data (1) from the measured dependent variables that include attendance, achievement in reading comprehension and arithmetic computation, dropout potential, self-concept, and achievement motivation and (2) from questionnaire responses of students, teachers, counsellors, administrators, parents, and employers, in order to ascertain what positive effects the Individualized Work Experience program has had on participating students compared with students in the regular school program.

The results for each dependent variable is reported separately. The mean gain per respective variable is reported for both the I.W.E. group and the regular group for each school as well as the total mean gain for the I.W.E. group ( $M_{\text{experimental}} - M_{\text{control}}$ ).

Statistical treatment for each variable provides a two-way analysis of variance to determine whether the measured results reflect school differences, program differences, or the interaction of school and program.



The multi-variate analysis of variance is presented to show whether there are significant overall differences between the two groups by combining the results of the six dependent variables into a single unit of dependent variables.

### Attendance

Attendance was used as a dependent variable to determine what effect participation in the I.W.E. program would have on increased school attendance. For both groups, each student's attendance for second semester--8th grade was compared to attendance in the first semester--9th grade. I.W.E. students were enrolled in the first semester of the 9th grade. The raw attendance data for both groups are reported in Table 7.

The mean gain in attendance for both groups in each of the three schools was computed and is presented in Table 8.

The least squares estimate between the means for I.W.E. and the control group on gain in attendance (Mean Experimental--Mean Control) is 13.53 half days which is significant at the .05 level. The results of a two-way analysis of variance find that the effect for schools and the interaction between school and program are not significant factors in the attendance gain for I.W.E. students. Therefore, the null hypothesis which states

TABLE 7.--Number of half-days absent for two semesters for I.W.E. students and students from the regular school program

I.W.E. Group			Regular Group		
Student Number	Pre <sup>a</sup>	Post <sup>b</sup>	Student Number	Pre	Post
1	6	4	1	22	26
2	96	20	2	2	4
3	14	22	3	6	14
4	41	14	4	22	34
5	43	22	5	10	8
6	56	16	6	10	10
7	6	4	7	16	18
8	37	14	8	26	38
9	34	16	9	0	2
10	24	12	10	12	20
11	0	0	11	4	8
12	26	18	12	24	12
13	37	14	13	98	16
14	56	2	14	14	2
15	129	40	15	19	40
16	25	8	16	14	9
17	16	20	17	54	63
18	58	70	18	6	2
19	4	0	19	19	26
20	6	10	20	44	37
21	42	17	21	33	10
22	12	12	22	6	16
23	4	2	23	13	17
24	6	8	24	9	16
25	68	69	25	14	22
26	48	26	26	30	30
27	48	18	27	62	15
28	24	4	28	52	22
29	94	14	29	2	24
30	24	6	30	14	8
31	22	8	31	12	22
32	18	8	32	6	2
33	18	4	33	16	20
34	10	10	34	6	0
35	78	30	35	0	0
36	23	14	36	55	56
37	13	20	37	6	6
38	10	4	38	14	0
39	20	18	39	36	14
40	48	20	40	8	2
41	16	16	41	28	10

<sup>a</sup>1/2 days absent semester before I.W.E. enrollment.

TABLE 8.--Mean gain in attendance for I.W.E. students and regular students per respective schools

	I.W.E.	Regular
School A	25.80	2.20
School B	6.41	3.41
School C	16.71	4.92

that there will be no difference in school attendance for I.W.E. students as a result of their program participation is rejected (Table 9).

Achievement in Reading Comprehension  
and Arithmetic Computation

The pre-test and post-test method was used to measure the possible effect of the I.W.E. program on student gains in reading comprehension and arithmetic computation. Students in both groups were administered the Stanford Achievement Test Advanced Battery in January, 1971 (pre-test) and were again administered the test in May, 1972 (post-test).

It is noted that matched pairs numbered 13, 26, 27, 34, and 40 were not used in the achievement analysis due to the unavailability of scores in student records.

Table 10 presents the pre- and post-test scores for both groups in reading comprehension.

The mean gain in reading comprehension for both groups in each of the three schools is reported in Table 11.

TABLE 9.--Effect of schools, treatment, and interaction between schools and treatment on the mean difference in school attendance for both groups

Sources	d.f.	Mean Square	F	P Less Than	Significance
School	2	556.84	1.27	.286	Greater than .05 Not Significant
Treatment	1	3756.40	8.58	.0045	Less than .05 Significant
Interaction-- School and Treatment	2	723.56	1.65	.1984	Greater than .05 Not Significant
Error (subjects nested within schools and treatment)	76	437.79			

TABLE 10.--Stanford Achievement Test--Advanced Battery pre- and post-test scores by grade level for I.W.E. students and the matched sample in Reading Comprehension

I.W.E. Group			Regular Group		
Student Number	Pre-Test	Post-Test	Student Number	Pre-Test	Post-Test
1	5.8	5.6	1	5.6	6.2
2	7.6	7.9	2	5.2	5.6
3	10.2	10.2	3	8.4	8.6
4	8.6	5.8	4	4.8	4.8
5	5.0	6.4	5	5.4	6.2
6	6.2	8.2	6	5.0	5.0
7	4.4	4.8	7	5.4	5.2
8	11.0	12.6	8	7.2	11.0
9	4.0	4.0	9	5.8	5.8
10	5.2	4.8	10	7.4	5.0
11	5.4	7.2	11	6.2	5.6
12	4.2	5.2	12	5.0	4.6
13	-	-	13	-	4.8
14	5.2	5.2	14	4.2	7.4
15	4.2	5.0	15	4.0	4.4
16	5.8	6.4	16	5.6	6.4
17	6.6	5.6	17	5.0	5.0
18	7.0	6.4	18	6.2	7.8
19	4.6	6.4	19	5.4	5.4
20	6.8	7.4	20	7.0	7.4
21	7.7	10.0	21	5.0	4.6
22	6.4	6.4	22	4.0	4.0
23	5.2	7.8	23	4.2	3.5
24	10.5	11.3	24	10.4	10.2
25	4.0	4.0	25	4.6	4.4
26	-	6.2	26	-	4.4
27	-	-	27	-	4.8
28	3.6	4.0	28	3.5	5.2
29	4.0	4.6	29	4.6	3.5
30	6.0	4.6	30	6.8	8.2
31	4.6	5.0	31	5.4	5.2
32	5.4	6.5	32	3.2	5.4
33	3.5	4.8	33	4.2	6.0
34	-	-	34	3.8	5.2
35	4.4	4.6	35	2.9	3.5
36	5.2	5.6	36	4.6	4.8
37	5.2	5.0	37	5.0	6.0
38	5.6	6.0	38	7.6	10.5
39	5.0	5.0	39	5.2	5.8
40	-	-	40	3.2	5.4
41	4.6	6.4	41	4.8	5.0

TABLE 11.--Mean grade level gain in reading comprehension for the I.W.E. group and the regular group in respective schools

	I.W.E.	Regular
School A	0.393	0.386
School B	0.591	0.108
School C	0.371	0.964

The least squares estimate between the means for I.W.E. and the control group on the gain in reading score is  $-0.05$  which is not significant at the  $.05$  level. The statistical results of a two-way analysis of variance finds the effect for schools and the interaction of school and program not significant factors influencing the measured results of this dependent variable. The null hypothesis which states that there will be no difference in reading comprehension as a result of student participation in the I.W.E. program is upheld (Table 12).

The pre- and post-test scores in arithmetic computation for the experimental and control groups are reported in Table 13.

The mean gain in arithmetic comprehension for both groups in each school is reported in Table 14.

The least squares estimate between the means for the I.W.E. and control group on the gain in arithmetic computation is  $-0.12$  which is not significant on the  $.05$  level. Statistical treatment by a two-way

TABLE 12.--The effect of school, treatment, and interaction between school and treatment on the mean difference in reading comprehension for both groups

Sources	d.f.	Mean Square	F	P Less Than	Significance
School	2	0.81	0.68	0.50	Greater than .05 Not Significant
Treatment	1	0.07	0.05	0.80	Greater than .05 Not Significant
Interaction-- School and Treatment	2	1.89	1.58	0.21	Greater than .05 Not Significant
Error (subjects nested within schools and treat- ment	76	1.19			

TABLE 13.--Stanford Achievement Test--Advanced Battery pre- and post-test scores by grade level for I.W.E. students and the matched sample in Arithmetic Computation

I.W.E. Group			Regular Group		
Student Number	Pre-Test	Post-Test	Student Number	Pre-Test	Post-Test
1	5.2	5.6	1	4.5	6.6
2	6.4	6.4	2	6.2	6.8
3	5.4	6.8	3	8.0	8.4
4	3.2	4.5	4	4.8	5.1
5	4.8	4.5	5	5.6	6.0
6	5.4	5.4	6	5.4	4.5
7	3.6	5.8	7	4.8	4.8
8	7.6	6.8	8	8.0	8.0
9	4.2	3.6	9	7.2	4.8
10	3.4	6.2	10	5.1	6.6
11	5.4	6.8	11	6.4	10.0
12	7.6	7.6	12	5.1	5.1
13	-	-	13	-	6.2
14	4.2	5.6	14	4.5	6.0
15	3.2	4.8	15	5.1	5.4
16	5.8	6.2	16	6.4	7.2
17	8.2	5.8	17	5.4	4.5
18	6.6	5.1	18	7.6	8.0
19	4.2	5.8	19	4.8	5.1
20	6.0	6.0	20	6.2	8.6
21	7.2	6.4	21	6.8	6.8
22	4.8	4.8	22	5.8	4.5
23	5.1	6.0	23	5.1	4.5
24	6.6	10.4	24	7.8	10.4
25	5.1	5.1	25	4.2	2.6
26	-	6.2	26	-	4.5
27	-	-	27	-	4.2
28	5.6	5.1	28	3.9	6.0
29	5.1	5.8	29	3.4	3.6
30	6.0	6.2	30	4.8	6.6
31	4.8	6.2	31	4.8	4.2
32	3.6	4.5	32	3.6	5.6
33	6.2	5.8	33	7.2	8.6
34	-	-	34	4.5	3.6
35	5.1	2.6	35	4.2	4.2
36	5.8	3.6	36	3.6	4.8
37	5.8	6.4	37	5.6	5.1
38	4.2	6.6	38	7.6	8.6
39	3.9	4.5	39	5.4	4.2
40	-	-	40	5.6	5.6
41	5.1	5.1	41	4.2	5.8



TABLE 14.--Mean grade level gain in arithmetic computation for the experimental and control group in each school

	I.W.E.	Regular
School A	0.720	0.493
School B	0.166	0.233
School C	0.085	0.642

analysis of variance finds the effect for schools and the interaction between school and program to be not significant in influencing the measured results of arithmetic achievement. The null hypothesis that there will be no significant gain in arithmetic computation as a result of student participation in the I.W.E. program is upheld (Table 15).

#### Dropout Potential

Dropout potential is measured as a dependent variable to determine whether participation in the I.W.E. program tends to reduce the possibility of students dropping out of school. The Cottle School Interest Inventory was used as the instrument of measure. According to Cottle,

For a typical school, the counselees might be those students scoring 30 or above on the dropout scale. The "cutting score" (the point above which scores might be considered indicative of a potential

TABLE 15.--The effect of school, treatment, and interaction of school and treatment on the mean difference in arithmetic computation for both groups.

Sources	d.f.	Mean Square	F	P Less Than	Significance
School	2	1.13	.71	.49	Greater than .05 Not Significant
Treatment	1	.32	.20	.65	Greater than .05 Not Significant
Interaction School and Treatment	2	1.12	.70	.49	Greater than .05 Not Significant
Error (subjects nested within schools and treatment)	76	1.59			

dropout) will vary among schools, but until a given school's most appropriate cutting score is determined, a score of 30 or above can be considered strongly indicative of need for counseling.<sup>1</sup>

The experimental and control groups were administered the Inventory separately. Raw scores are provided in Table 16.

The mean dropout potential scores for both groups in their respective schools is presented in Table 17.

The least squares estimate between the means for I.W.E. and the control group on dropout potential scores ( $M_{\text{experimental}} - M_{\text{Control}}$ ) is +3.53 which is not significant at the .05 level. The results of a two-way analysis of variance finds the effect for schools and the interaction of school and program to be insignificant factors influencing the measured results of this dependent variable. The null hypothesis that participation in the I.W.E. program provides no significant difference in dropout potential for participating students is upheld (Table 18).

#### Self-Concept

Coopersmith's "Self Esteem Inventory" was used to measure what effect the I.W.E. program has had on the self-concept of students. Both groups were administered the instrument separately. The raw score results are presented in Table 19.

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<sup>1</sup>William C. Cottle, School Interest Inventory (Boston: Houghton Mifflin Company, 1966), p. 9.

TABLE 16.--Dropout potential scores for I.W.E. students and the matched group

I.W.E. Group			Regular Group		
Student Number	Dropout Potential Scores		Student Number	Dropout Potential Scores	
1	27		1	26	
2	27		2	35	
3	39		3	17	
4	36		4	37	
5	26		5	19	
6	25		6	27	
7	39		7	41	
8	44		8	50	
9	36		9	33	
10	52		10	37	
11	29		11	26	
12	31		12	58	
13	44		13	54	
14	29		14	31	
15	37		15	47	
16	37		16	27	
17	41		17	34	
18	39		18	28	
19	29		19	41	
20	38		20	28	
21	21		21	17	
22	33		22	44	
23	37		23	43	
24	37		24	19	
25	54		25	68	
26	34		26	59	
27	39		27	17	
28	44		28	37	
29	39		29	39	
30	48		30	32	
31	39		31	26	
32	43		32	39	
33	43		33	33	
34	43		34	23	
35	51		35	22	
36	40		36	59	
37	24		37	17	
38	16		38	11	
39	36		39	56	
40	34		40	32	
41	29		41	31	

TABLE 17.--Mean dropout potential scores for I.W.E. and regular students in each school

	I.W.E.	Regular
School A	34.73	35.86
School B	38.66	31.16
School C	37.78	32.64

The mean "self-esteem" scores for the experimental and control groups in each of their respective schools is reported in Table 20.

The least squares estimate between the means for I.W.E. and the control group in self-esteem scores ( $M_{\text{experimental}} - M_{\text{Control}}$ ) is -2.73 which was not significant at the .05 level. The results of a two-way analysis of variance (Table 21) finds the effect for schools and the interaction between school and program to be not significant in influencing the measured results of self-concept. The null hypothesis that participation in the I.W.E. program would not significantly effect student self-concept is upheld.

#### Achievement Motivation

The Michigan State M-Scales was administered to both groups separately to determine whether participation in the I.W.E. program has had an effect on achievement motivation. It is noted that matched

TABLE 18.--The effect of school, treatment, and interaction of school and treatment on the mean difference in dropout potential scores for both groups

Sources	d.f.	Mean Square	F	P Less Than	Significance
School	2	1.04	.0091	.99	Greater than .05 Not Significant
Treatment	1	256.40	2.24	.13	Greater than .05 Not Significant
Interaction-- School and Treatment	2	137.93	1.20	.30	Greater than .05 Not Significant
Error (subjects nested within schools and treat- ment	76	114.45			

TABLE 19.--Raw score results of Coopersmith's "Self-Esteem Inventory" for I.W.E. students and the matched sample

I.W.E. Group		Regular Group	
Student Number	Self-Esteem Scores	Student Number	Self-Esteem Scores
1	48	1	78
2	68	2	40
3	64	3	70
4	66	4	64
5	38	5	58
6	70	6	72
7	66	7	54
8	74	8	48
9	64	9	60
10	58	10	60
11	34	11	46
12	58	12	40
13	50	13	52
14	64	14	40
15	66	15	64
16	42	16	72
17	68	17	60
18	60	18	40
19	80	19	64
20	46	20	42
21	84	21	70
22	42	22	60
23	80	23	68
24	40	24	64
25	68	25	72
26	26	26	54
27	44	27	94
28	50	28	58
29	52	29	48
30	50	30	84
31	46	31	40
32	46	32	46
33	66	33	82
34	54	34	70
35	48	35	80
36	60	36	32
37	56	37	78
38	90	38	84
39	72	39	38
40	54	40	74
41	62	41	66

TABLE 20.--Mean self-esteem scores for I.W.E. and regular students in each school

	I.W.E.	Regular
School A	59.20	56.40
School B	56.66	63.33
School C	57.57	62.85

student 19B failed to complete the instrument, therefore, pair 19 was not included in this analysis. Raw scores for the experimental and control groups are recorded in Table 22.

The mean scores for achievement motivation for both the experimental and control groups in each school are presented in Table 23.

The least squares estimate between the means for the I.W.E. and control group on achievement motivation scores (Mean Experimental-Mean Control) is 1.63 which is not significant at the .05 level. Further, results of a two-way analysis of variance (Table 24) finds the effect for schools and the interaction between school and program to be insignificant in influencing the measured results of achievement motivation. Therefore, the null hypothesis which states that student participation in the I.W.E. program will have no effect on achievement motivation is upheld.



TABLE 21.--The effect of school, treatment, and interaction of school and treatment on the mean difference in scores on the Self-Esteem Inventory for both groups.

Sources	d.f.	Mean Square	F	P Less Than	Significance
School	2	51.29	.23	.79	Greater than .05 Not Significant
Treatment	1	152.97	.69	.40	Greater than .05 Not Significant
Interaction-- School and Treatment	2	184.03	.83	.43	Greater than .05 Not Significant
Error (subjects nested within schools and treat- ment)	76	220.26			

TABLE 22.--Raw scores on the Michigan State M-Scales for I.W.E. students and students in the regular program

I.W.E. Group		Regular Group	
Student Number	M-Scales Scores	Student Number	M-Scales Scores
1	159	1	112
2	120	2	101
3	112	3	118
4	101	4	115
5	113	5	112
6	113	6	98
7	111	7	101
8	116	8	108
9	150	9	137
10	105	10	88
11	114	11	103
12	88	12	106
13	119	13	102
14	124	14	98
15	94	15	92
16	108	16	154
17	111	17	121
18	123	18	101
19	106	19	-
20	92	20	143
21	114	21	95
22	98	22	114
23	96	23	97
24	148	24	127
25	96	25	106
26	119	26	125
27	94	27	108
28	87	28	99
29	99	29	103
30	91	30	111
31	69	31	94
32	97	32	92
33	91	33	83
34	127	34	131
35	100	35	126
36	94	36	84
37	90	37	109
38	121	38	120
39	104	39	99
40	123	40	136
41	122	41	123

TABLE 23.--Mean scores from the Michigan State M-Scales for I.W.E. students and regular students in each school

	I.W.E.	Regular
School A	115.93	106.06
School B	108.75	107.58
School C	101.07	107.85

#### Multi-Variate Analysis of Variance

A multi-variate analysis of variance was used to determine what overall effect schools, program, and interaction between school and program had on the dependent variables as a single unit of dependent variables. Table 25 reports no significant overall difference between the experimental and control groups at the .05 level of significance.

#### Student Questionnaire

A weighted student questionnaire was given to all I.W.E. students who were enrolled in the program for at least two months or more. A total of fifty-three students responded. The purpose of the questionnaire was to ascertain student attitudes and opinions about their program participation in respect to work experience, classroom experience, sense of "self," future outlook, and their general perception of the program.

TABLE 24.--The effect of school, treatment, and interaction between school and treatment on the mean difference for both groups on Achievement Motivation Scores

Sources	d.f.	Mean Square	F	P Less Than	Significance
School	2	310.19	.70	.49	Greater than .05 Not Significant
Treatment	1	54.74	.12	.72	Greater than .05 Not Significant
Interaction-- School and Treatment	2	502.93	1.14	.32	Greater than .05 Not Significant
Error (students nested within schools and treatment)	76	437.65			

TABLE 25.--P-Ratios for multi-variate analysis of variance

Sources	Multi-variate d.f.	Multivariate Mean Square	Multivariate F Value	P Less Than
School	12	142	.5969	.8421
Treatment	6	71	1.7786	.1159
Interaction-- School and Treatment	12	142	1.0308	.4241

The measured reliability of the student questionnaire was obtained from Hoyt's analysis of variance formula. The reliability of the instrument was .8278 with a standard error of 4.1430. Table 26 provides the resulting data which includes the frequency and percentage of each response and the mean and standard deviation of each item.

Students were encouraged to write comments in regard to their program participation. The following represent samples of written responses.

I really think that I.W.E. is a great program.

I feel that the I.W.E. program is really great, if it wasn't for this program I surely wouldn't make it through school. Knowing that when I go to school I'll only have three hours [classtime], I feel much better. I still don't make it to school very often, but I've learned many other things from my job.

I think it has helped me a great deal. Because now I can look forward to something different. When you first start your job your supervisor can really help you get started for jobs in the future and especially when you have a supervisor like Mrs. Bennett."

TABLE 26.--Student questionnaire--Frequency and percentage/response and mean and standard deviation/item

Statement	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	M	S.D.
	1	2	3	4	5		
1. The I.W.E. program has helped me to get along with other people.	0 .00	1 1.89	7 13.21	23 43.40	22 41.51	4.25	.76
2. The I.W.E. program is definitely helping to prepare me for future job experiences.	1 1.89	2 3.77	7 13.21	20 37.74	23 43.40	4.17	.94
3. My experiences on the I.W.E. program have given me greater confidence in myself.	1 1.89	2 3.77	11 20.75	26 49.06	13 24.53	3.91	.88
4. I seem to get more individual attention since being enrolled in the I.W.E. program.	3 5.66	11 20.75	15 28.30	19 35.85	5 9.43	3.23	1.07
5. I feel that I am learning as much on the job as I would learn in the classroom.	2 3.77	6 11.32	6 11.32	15.00 28.30	24 45.28	4.00	1.18
6. Earning money has helped me to learn how to manage it.	1 1.89	2 3.77	8 15.09	20 37.74	22 41.51	4.13	.94
7. Success on the job has helped me to strive for better grades in the classroom.	3 5.66	9 16.98	14 26.42	16 30.19	11 20.75	3.43	1.17
8. I feel more like going to school when I have a job than when I didn't have a job.	5 9.43	9 16.98	10 18.87	15 26.42	14	3.45	1.31
9. As a result of my work experience, I have a greater desire to finish high school.	4 7.55	3 5.66	8 15.09	19 35.85	19 35.85	3.87	1.19
10. I will probably continue my education after high school graduation.	9 16.98	7 13.21	17 32.08	10 18.87	10 18.87	3.09	1.33
11. I would like to participate in the I.W.E. program in high school next year.	1 1.89	3 5.66	6 11.32	14 26.42	29 54.72	4.26	1.00
12. I really enjoy my present job.	0 .00	7 13.21	12 22.64	15 28.30	19 35.85	3.87	1.06
13. My job supervisor (my boss) is very helpful whenever I have a problem on the job.	0 .00	8 15.09	8 15.09	23 43.40	14 26.42	3.81	1.00
14. I feel that my I.W.E. Coordinator has personally helped me.	0 .00	3 5.66	2 3.77	23 43.40	25 47.17	4.32	.80
15. My job experience is helping me to better understand the world of work.	2 3.77	2 3.77	9 16.98	25 47.17	15 28.30	3.92	.98
16. I now tend to think more about my future than when I didn't have a job.	2 3.77	3 5.66	8 15.09	24 45.28	16 30.19	3.92	1.02
17. I am taking my classwork more seriously since being on the I.W.E. program.	5 9.43	5 9.43	15 28.30	19 35.85	9 16.98	3.42	1.17
18. The I.W.E. program has helped me to see the benefits of getting a good education.	3 5.66	4 7.55	8 15.09	26 49.06	12 22.64	3.75	1.07
19. I feel that all students, not just a few, could benefit from the I.W.E. program.	2 3.77	7 13.21	9 16.98	18 33.96	17 32.08	3.77	1.15
20. I feel that my school behavior has improved since being on the I.W.E. program.	1 1.89	4 7.55	9 16.98	26 49.06	13 24.53	3.87	.94

It's an all right thing.

Some people like myself hate school but I.W.E. work has helped me and I'm sure it will help others.

I like the program better than school.

I feel that all students should have the opportunity to work. I think it might help them.

### Professional Staff Questionnaire

A ten-item weighted questionnaire was given (1) to a random sample of twenty teachers in each of the three schools, and (2) to all counsellors and administrators in each school, for the purpose of accessing staff attitudes toward the I.W.E. program, and toward the concept of work-study as an alternative to the traditional curriculum. All counsellors and administrators and 91.6 per cent of the teachers returned the questionnaire. The instruments reliability for each group was measured by Hoyt's analysis of variance formula. The reliability results follow: teachers, .5475; standard error, 2.76; counsellors, .4814; standard error, 2.66; administrators, -.9707; standard error, 2.50.

The low reliability of the instrument for all groups might in part be due to the following reasons:

1. The sample of counsellors and administrators was simply too small to gain an accurate measure of reliability.

2. Since the same statements were used for each group, role variation could have been significant in interpreting the items differently.
3. The respondents may be likely to interpret the items in reference to their own educational philosophies.
4. Due to the end-of-the-year time limitation, a prior reliability check on the instrument was not possible.

The results of the questionnaire are presented in Tables 27, 28, and 29 with written comments from each group following the respective tables.

A sampling of teacher comments follows:

I think the program should be opened to all students (who have a genuine interest) who need to have a chance to meet the field of work and who need a change from a regulated school day. It's an excellent program as I view it now.

The I.W.E. program is one of the few worthwhile programs I have encountered on the secondary level.

I don't know very much about the program--but the kids whom I have had gone on it--have become much better students.

I wish we had some way of handling the student who gets fired from his job and then has to come back to school as a failure and cope with an entire day's schedule again.

I tend to view the I.W.E. program negatively because: (1) Too many students are hanging around the school grounds creating a disturbance instead of being at work; and (2) I feel that a potential dropout needs to experience a sense of worth and



TABLE 27.--Professional staff questionnaire for teachers--Frequency and percentage/response, mean and standard deviation/item

Statement	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	M	S.D.
	1	2	3	4	5		
1. I am familiar with the purposes of the I.W.E. program.	3 5.45	3 5.45	10 18.18	35 63.64	4 7.27	3.62	.91
2. The I.W.E. curriculum seems to be geared to meet the needs of the I.W.E. students.	2 3.64	3 5.45	23 41.82	23 41.82	4 7.27	3.44	.86
3. The I.W.E. program is an excellent program for disadvantaged students.	2 3.64	10 18.18	10 18.18	23 41.82	10 18.18	3.53	1.10
4. I might be interested in working as an I.W.E. coordinator in the future.	12 21.82	12 21.82	16 29.09	8 14.55	7 12.73	2.75	1.31
5. Most of the I.W.E. students that I know have shown improved behavior since placement	1 1.82	9 16.36	24 43.64	16 29.09	5 9.09	3.27	.91
6. I feel that students learn best by doing.	0 .00	0 .00	1 1.82	24 43.64	30 54.55	4.53	.54
7. For some students, the work-study concept provides a justifiable alternative from the more traditional full-day academic program.	0 .00	0 .00	4 7.27	24 43.64	27 49.09	4.42	.63
8. The I.W.E. program should be open to all students rather than just for the disadvantaged.	1 1.82	5 9.09	15 27.27	20 36.36	14 25.45	3.75	1.00
9. The I.W.E. program seems to increase school holding power for potential dropouts.	2 3.64	3 5.45	16 29.09	25 45.45	9 16.36	3.65	.95
10. I need to know more about the I.W.E. program in order to adequately evaluate it.	5 9.09	9 16.36	6 10.91	22 40.00	13 23.64	3.53	1.27

accomplishment. If a half day of work provides this personal sense of self--such a program should be very highly coordinated and supervised. This type of student needs more direction and attention--not more free time.

Please write a descriptive paper regarding the program.

There isn't enough communication to the entire staff regarding the objectives, scope, evaluation, etc. of programs such as these. Like a distant neighbor, we know they exist but are not familiar with them.

I do not feel that the I.W.E. program should be used to keep the dropouts in school. It should be used to help some of the good kids that are trying to get an education. There should be a few more requirements for the program such as a certain grade average, a willingness to work and learn.

Are you sure that the I.W.E. program is reaching the disadvantaged? I see some students working on I.W.E. that I would not consider disadvantaged.

#### Written comments by Counsellors:

. . . I feel there is a need to do something to coordinate the enormous task to getting jobs.

The work experience is very good. I think a more comprehensive training program to teach work skills, social habits and relating to people would help these kids keep the jobs they get.

I feel there needs to be closer control on those on I.W.E. as far as their attendance and regular classes are concerned.

For students needing help who are work oriented, this is a way for them to finish school. Would like to see them placed in more meaningful employment.

I feel there is justification, in some cases, for the culturally disadvantaged student to be on the I.W.E. program . . . those who find it extremely difficult to adjust to a disciplined structure of academics. However, for those who can get along in school and who appear to be learning, remaining in a full-time school program seems best to me.

TABLE 28.--Professional staff questionnaire for counsellors--Frequency and percentage/response and mean and standard deviation/  
item

Statement	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	M	S.D.
	1	2	3	4	5		
1. I am familiar with the purposes of the I.W.E. program.	0 .00	0 .00	1 4.76	12 57.14	8 38.10	4.33	.58
2. The I.W.E. curriculum seems to be geared to meet the needs of the I.W.E. students.	0 .00	1 4.76	5 23.81	13 61.90	2 9.52	3.76	.70
3. The I.W.E. program is an excellent program for disadvantaged students.	0 .00	2 9.52	4 19.05	8 38.10	7 33.33	3.95	.97
4. I might be interested in working as an I.W.E. coordinator in the future.	7 33.33	2 9.52	7 33.33	2 9.52	3 14.29	2.62	1.43
5. Most of the I.W.E. students that I know have shown improved behavior since placement in the program.	0 .00	3 14.29	8 38.10	7 33.33	3 14.29	3.48	.93
6. I feel that students learn best by doing.	0 .00	0 .00	1 4.76	11 52.38	9 42.86	4.38	.59
7. For some students, the work-study concept provides a justifiable alternative from the more traditional full-day academic program.	0 .00	0 .00	0 .00	9 42.86	12 57.14	4.57	.51
8. The I.W.E. program should be open to all students rather than just for the disadvantaged.	2 9.52	3 14.29	4 19.05	7 33.33	5 23.81	3.48	1.29
9. The I.W.E. program seems to increase school holding power for potential dropouts.	0 .00	0 .00	6 28.57	10 47.62	5 23.81	3.95	.74
10. I need to know more about the I.W.E. program in order to adequately evaluate it.	2 9.52	9 42.86	3 14.29	7 33.33	0 .00	2.71	1.06

TABLE 29.--Professional staff questionnaire for administrators--Frequency and percentage/response and mean and standard deviation/  
item

Statement	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	M	S.D.
	1	2	3	4	5		
1. I am familiar with the purposes of the I.W.E. program.	0 .00	0 .00	0 .00	2 16.67	10 83.33	4.83	.39
2. The I.W.E. curriculum seems to be geared to meet the needs of the I.W.E. students.	0 .00	0 .00	0 .00	9 75.	3 25.	4.25	.45
3. The I.W.E. program is an excellent program for disadvantaged students.	0 .00	1 8.33	1 8.33	6 50.	4 33.33	4.08	.90
4. I might be interested in working as an I.W.E. coordinator in the future.	5 41.67	5 41.67	2 16.67	0 .00	0 .00	1.75	.75
5. Most of the I.W.E. students that I know have shown improved behavior since placement in the program.	0 .00	2 16.67	2 16.67	6 50.	2 16.67	3.67	.98
6. I feel that students learn best by doing.	0 .00	0 .00	0 .00	9 75.	3 25.	4.25	.45
7. For some students, the work-study concept provides a justifiable alternative from the more traditional full-day academic program.	0 .00	0 .00	0 .00	2 16.67	10 83.33	4.83	.39
8. The I.W.E. program should be open to all students rather than just for the disadvantaged.	2 16.67	1 8.33	2 16.67	4 33.33	3 25.	3.42	1.44
9. The I.W.E. program seems to increase school holding power for potential dropouts.	0 .00	0 .00	1 8.33	8 66.67	3 25.	4.17	.58
10. I need to know more about the I.W.E. program in order to adequately evaluate it.	2 16.67	7 58.33	0 .00	3 25.	0 .00	2.33	1.07

The following are written comments by Administrators:

Ninth grade students should be screened thoroughly before placement. This is a last resort program to keep the student in school.

We have to initiate some changes next year to fully realize the advantages of the program.

I would like to see more students participate--not just potential dropouts. I would also like to see schools do more in the area of letting students do volunteer work during school hours for credit.

The program will reflect the dedication and competency of the Coordinator--I suggest specific training for those who are interested. Assisting with N.Y.C. might be a possibility. Public relations seems to be the name of the game.

Table 30 provides an item-mean comparison among teachers, counsellors, and administrators on the professional staff questionnaire.

TABLE 30.--Professional staff questionnaire item-mean comparison for teachers, counsellors, administrators

Item Number	Teacher Mean	Counsellor Mean	Administrator Mean
1	3.62	4.33	4.83
2	3.44	3.76	4.25
3	3.53	3.95	4.08
4	2.75	2.62	1.75
5	3.27	3.48	3.67
6	4.53	4.38	4.25
7	4.42	4.57	4.83
8	3.75	3.48	3.42
9	3.65	3.95	4.17
10	3.53	2.71	2.33

### Parent Questionnaire

Parents of I.W.E. students who participated in this study were sent a ten-item weighted questionnaire for the purpose of ascertaining their feelings about the program. Of the forty-one questionnaires sent, twenty-three or 57.2 per cent were returned. The reliability of the instrument as measured by Hoyt's analysis of variance formula was .8890 with a standard error of 2.26. Table 31 reports the results of the parent questionnaire.

A sampling of written parent comments follows:

The work program has helped my boy as he hasn't been in trouble this year. Last year he was in and out of Probate Court. He now has a responsibility and seems to enjoy it. His time is made to good use instead of trouble. He also has his own money which has helped.

He will go to school now as he knows this is one of the only ways he can work. Before it was a constant fight to get him there. Not all people are for Book education only.

I believe they learn a lot about responsibilities in this program. A few times he felt as if he would rather not go to work but because of his sense of obligation and responsibility he went anyway. I think this is good. Too many people lose this quality. I would like to see more boys and girls be able to get into this program.

I do not feel a child should be allowed to continue this program at the beginning of their studies slipping. Their studies should come first and parents should be notified when their work shows a decline not when it is too late to do anything about it.

I really appreciate the school for helping our child find this job and placing him in this program.

So many times programs are set up to help the troubled child or one disinterested in school and the child already trying to do good goes unnoticed. So I say thank you for helping a good one continue.

TABLE 31.--Parent questionnaire--Frequency and percentage/response and mean and standard deviation/item

Statement	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	M	S.D.
	1	2	3	4	5		
1. I feel that my child has benefited from the I.W.E. (work-study) program.	1 4.35	0 .00	2 8.70	6 26.09	14 60.87	4.39	.99
2. I feel that the I.W.E. program has helped to prepare my child for future employment.	0 .00	0 .00	1 4.35	9 39.13	13 56.52	4.52	.59
3. I feel that my child's attitude toward his family has improved since his enrollment in the I.W.E. program.	1 4.35	0 .00	4 17.39	11 47.83	7 30.43	4.00	.95
4. I feel that my child has learned as much or more through his work experience than if he or she were in class for the full day.	1 4.35	0 .00	5 21.74	6 26.09	11 47.83	4.13	1.06
5. I feel that my child's attitude toward school has improved since being on the I.W.E. program.	2 8.70	0 .00	5 21.74	8 34.78	8 34.78	3.87	1.18
6. My child seems to be more concerned about his or her future plans since being on the I.W.E. program.	0 .00	1 4.35	3 13.04	11 47.83	8 34.78	4.13	.81
7. The purpose of the I.W.E. program was explained to me before my child was placed on the program.	2 8.70	3 13.04	1 4.35	16 69.57	1 4.35	3.48	1.08
8. I feel that there has been adequate communication between the home and the school in regard to my child's participation in the program.	2 8.70	4 17.39	1 4.35	12 52.17	4 17.39	3.52	1.24
9. As a result of his work experience, my child seems to have more self-confidence.	0 .00	1 4.35	2 8.70	7 30.43	13 56.52	4.39	.84
10. I feel that there is a need for schools to develop additional special programs to meet the individual needs of students.	1 4.35	2 8.70	3 13.04	5 21.74	12 52.17	4.09	1.20

### Employer Questionnaire

Each Coordinator submitted the names of current employers of I.W.E. students. Of the twenty-seven employers listed, twenty-three returned the questionnaire for a percentage return of 85.1 per cent. The twelve-item weighted questionnaire shows a reliability of .8392 and a standard error of 3.95 according to Hoyt's analysis of variance formula. The questionnaire results are presented in Table 32.

The following are written comments from employers:

Presently I am satisfied with the I.W.E. program. In the past we have had a couple "bad experiences" but these things happen. This past year we have had three fine young men work for us. I feel we have helped them and in turn they have helped us greatly.

Many students cannot make it in Junior High and High School. These are the ones that should be put on jobs, preferably semi-skilled where they can receive training and experience to make them self-supporting so they will not become another welfare recipient.

I have been very pleased with this program--the students have been helpful in adding dimension to our program in terms of age, background, and attitudes as well as providing services to us.

Your Coordinator has been an especially pleasant and helpful person to work with--aware of the needs of both his students and our program.



TABLE 32.--Employer questionnaire--Frequency and percentage/response, and mean and standard deviation/item.

Statement	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	M	S.D.
	1	2	3	4	5		
1. The purposes of the I.W.E. program have been fully explained to me.	3 13.04	1 4.35	2 8.70	13 56.52	4 17.39	3.61	1.23
2. I feel that there is close cooperation between the school and the employer.	1 4.35	2 8.70	0 .00	11 47.83	9 39.13	4.09	1.08
3. The I.W.E. program is an excellent program for disadvantaged students.	0 .00	1 4.35	6 26.09	4 13.39	12 52.17	4.17	.98
4. I feel that most Junior High students are able to adequately handle their job responsibilities.	0 .00	3 13.04	3 13.04	13 56.52	4 17.39	3.78	.90
5. I feel that the I.W.E. program is as much a benefit to me as to the student.	0 .00	2 8.70	0 .00	11 47.83	10 43.48	4.26	.86
6. I feel that early work experience at the Junior High level can be as valuable to students as is classroom instruction.	0 .00	0 .00	0 .00	10 43.48	13 56.52	4.57	.51
7. I tend to spend more time supervising Junior High students than High School students.	3 13.04	9 39.13	2 8.70	8 34.78	1 4.35	2.78	1.20
8. I feel that work experience helps students learn to get along with others.	0 .00	0 .00	0 .00	12 52.17	11 47.83	4.48	.51
9. I feel that the I.W.E. program is worthwhile in attempting to prepare students for the world of work.	0 .00	0 .00	0 .00	10 43.48	13 56.52	4.57	.51
10. I feel that students learn best by doing.	0 .00	0 .00	1 4.35	12 52.17	10 43.48	4.39	.58
11. I have had a very good relationship with most of the I.W.E. students employed at my business.	0 .00	0 .00	0 .00	16 69.57	7 30.43	4.30	.47
12. I feel that I have been able to personally help the students that I've employed.	0 .00	0 .00	2 8.70	14 60.87	7 30.43	4.22	.60

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The Lansing Public School System, faced with an increasing dropout rate, recognized the need for a preventive program that would increase school-holding power for disadvantaged students. The Individualized Work Experience Program characterized by the work-study concept was implemented during the 1962-63 school year as a possible means toward preventing potential dropouts from leaving school before high school graduation.

The purpose of this study was to determine whether or not student participation in the I.W.E. program would effect student behavior in a more positive direction. The program assumes that by offering students work experience coupled with more intense counselling in vocational and academic areas, students could be better motivated to adjust to their school program, their "selves," and to the community at large.

Six dependent variables were measured to see whether participation in the I.W.E. program has had any significant effect on student behavior. These variables included attendance, reading and arithmetic achievement, dropout potential, self-concept, and achievement motivation.

Questionnaires were developed to access attitudes and opinions toward the I.W.E. program from participating students, the professional staff, parents, and employers.

### The Hypothesis

The null hypothesis was used in the evaluation of the I.W.E. program. This hypothesis assumes that there will be no significant difference in student behavior as a result of their participation in the program.

### Methodology

The parallel group method was used as the experimental design of this study. Forty-one I.W.E. students were matched with students in the regular school program on the basis of age, sex, grade, race, I.Q. stanine, grade-point average, and citizenship average.

Each group was measured separately on the six dependent variables. Statistical comparison of the two

groups was made by a two-way analysis of variance which analyzed the results in terms of effect for schools, program, and interaction between school and program.

## Results

### Attendance Variable

Participation in the I.W.E. program resulted in a mean attendance increase of 13.53 half days. The probability of the null hypothesis being upheld was less than .05, therefore, the hypothesis was rejected.

Thirty out of forty-one or 72 per cent of the students in the experimental group improved their attendance after enrollment in the I.W.E. program. The opportunity to work seems to provide an additional incentive for increased school attendance.

### Achievement in Reading Comprehension and Arithmetic Computation

Students in the experimental and control groups were administered the Stanford Achievement Test-Advanced Battery in January, 1971, and again in May, 1972. The former scores were used as pre-test data while the later were used as post-test scores. The gain in reading score was -0.05 grade level while the gain in math measured -0.12 grade level. The probability of the null hypothesis being upheld was greater than .05 level of

significance. The null hypothesis was therefore accepted. Participation in the I.W.E. had no significant measured effect on achievement in reading and arithmetic.

### Dropout Potential

Both groups were administered the Cottle "School Interest Inventory" to determine whether or not I.W.E. participation would decrease the potential for students to drop out of school. The resulting mean scores found that I.W.E. students had a slightly higher (+3.53) dropout potential score, but statistically, the increase was not significant at the .05 level. The null hypothesis was, therefore, upheld. According to the measured results, the I.W.E. program does not seem to significantly lower the dropout potential of students.

### Self-Concept

Coopersmith's "Self-Esteem Inventory" was administered to the experimental and control groups to assess whether participation in the I.W.E. program significantly improved the self-concept of students. The mean gain for the I.W.E. group was -2.73 which meant that I.W.E. students had a slightly lower self-esteem score than did the matched sample. Statistically, however, the difference between the two groups was not significant at the .05 level. Therefore, student participation in the

I.W.E. program does not significantly increase or decrease self-concept. The null hypothesis was accepted.

#### Achievement Motivation

The experimental and control groups were administered the Michigan State M-Scales for the purpose of ascertaining whether participation in I.W.E. tended to increase student achievement motivation. The least square estimate between the means for both groups was 1.63 (Mean experimental--Mean control). This very slight increase in achievement motivation for I.W.E. students was not significant at the .05 level. Therefore, achievement motivation does not seem to be enhanced by student participation in the I.W.E. program and the null hypothesis was accepted.

For the purpose of analyzing all of the above dependent variables as a single package, a multi-variate analysis of variance statistical treatment found no significant difference at the .05 level between the control and experimental groups.

#### Student Questionnaire

A ten-item weighted questionnaire was given to I.W.E. students who had participated in the program for two or more months for the purpose of accessing their

feelings about I.W.E. A summary analysis of selected questionnaire items follows:

- (1) 84.91 per cent of the respondents felt that the program has helped them to get along with other people;
- (2) 73.59 per cent felt greater self-confidence as a result of program participation;
- (3) 54.72 per cent felt that they were more likely to attend school as a result of their having a job;
- (4) 71.70 per cent seemed to have a greater desire to finish high school as a result of their work experience;
- (5) 90.57 per cent felt that their Coordinator has personally helped them;
- (6) 75.47 per cent seemed to have a greater understanding of the world of work;
- (7) 52.73 per cent seemed to be taking their class-work more seriously;
- (8) 71.70 per cent felt that the program has helped them to see the benefits of getting a good education;
- (9) 73.59 per cent felt that their school behavior has improved since being on the program.

Professional Staff Questionnaire

Teachers, Counsellors, and Administrators were asked to respond to a ten-item weighted questionnaire for the purpose of accessing their attitudes and feelings about the I.W.E. program as well as toward the work-study concept in general. A summary analysis of selected questionnaire items follows for each group.

Teachers

- (1) 70.94 per cent felt that they were familiar with the purpose of I.W.E.;
- (2) 60 per cent felt that I.W.E. is an excellent program for disadvantaged students;
- (3) 38.18 per cent felt that the I.W.E. program improved student behavior while 43.64 per cent were uncertain about this aspect;
- (4) 92.73 per cent believed that the work-study concept provided a justifiable alternative program;
- (5) 61.81 per cent felt that the program increased school-holding power for potential dropouts;
- (6) 63.64 per cent felt that they should know more about the program in order to adequately evaluate it.



Counsellors

- (1) 95.24 per cent felt that they were familiar with the purposes of the program;
- (2) 71.43 per cent felt that I.W.E. is an excellent program for disadvantaged students;
- (3) 47.62 per cent believed that I.W.E. students improved their behavior as a result of their participation while 38.10 per cent were uncertain;
- (4) 100 per cent felt that work-study provided a justifiable alternative to the traditional program;
- (5) 71.43 per cent felt that the program increased school-holding power;
- (6) 33.33 per cent needed to know more about the program in order to adequately evaluate it.

Administrators

- (1) 100 per cent were familiar with the purpose of the program;
- (2) 83.33 per cent felt that I.W.E. is an excellent program for disadvantaged students;
- (3) 66.67 per cent felt that student behavior improved as a result of the program;

- (4) 100 per cent felt that the work-study concept provided a justifiable alternative program;
- (5) 91.67 per cent believed that the program increases school-holding power for potential dropouts;
- (6) 25 per cent of the administrators responding said that they needed to know more about the program in order to adequately evaluate it.

#### Parent Questionnaire

Parents were asked to respond to a ten-item weighted questionnaire for the purpose of accessing their attitude and feelings about their child's participation in the I.W.E. program. A summary analysis of selected questionnaire items follows:

- (1) 86.96 per cent felt their child had benefited from the program;
- (2) 95.65 per cent felt the program was preparing their child for future employment;
- (3) 69.56 per cent believed their child's attitude toward school had improved since being on the I.W.E. program;
- (4) 73.92 per cent said the purposes of I.W.E. were explained to them before their child was enrolled;
- (5) 69.56 per cent felt that adequate communication existed between the school and home while 26.09 per cent disagreed;

- (6) 86.95 per cent believed that their child had increased self-confidence as a result of work experience;
- (7) 79.91 per cent felt a need for additional special programs to better meet the individual interests and needs of students.

#### Employer Questionnaire

A twelve-item weighted questionnaire was developed for employers for the purpose of accessing their feelings about the I.W.E. program. A summary analysis of selected questionnaire items follows:

- (1) 73.91 per cent were familiar with the purposes of the I.W.E. program;
- (2) 86.96 per cent felt close cooperation existed between the employer and the school;
- (3) 73.91 per cent believed Junior High students are able to adequately handle the responsibilities of a job;
- (4) 91.31 per cent felt the program was as much a benefit to them as to the student;
- (5) 100 per cent felt work experience helps students to get along with others;
- (6) 90.30 per cent believed they have personally been able to help students employed by them.

### Conclusion

The result of a multi-variate analysis of variance shows no significant difference between students in the I.W.E. and regular group on the six measured dependent variables. When the two-way analysis of variance was used for each dependent variable, only the attendance variable represented a significant increase for I.W.E. students. Therefore, participation in the I.W.E. program had no significant measured effect on (1) gains in reading and arithmetic achievement, (2) lowering the dropout potential of students, (3) increasing student self-concept, and (4) increasing the achievement motivation of students.

The attitudinal questionnaires given to students, the professional staff, parents, and employers reflected highly positive feelings toward the I.W.E. program. Though the measured results indicated no gain in lowered dropout potential, self-concept and achievement motivation, there is reason to believe, from the results of the questionnaire, that the program does provide a positive influence toward enhancing the opportunity for gain in these areas.

As stated in the first chapter, eight general program objectives focus on desired behavior changes that hopefully will result from student participation in the I.W.E. program. A summary analysis describing whether the objectives of the program have been met follows:

Objective 1--Increased School Attendance.--I.W.E.  
students measured a mean increase of 13.53 half days--  
objective met.

Objective 2--Increased Achievement Levels in  
Math and Reading.--I.W.E. students did not significantly  
increase their achievement in reading or math--objective  
not met.

Objective 3--Gain a More Positive Self-Concept.--  
Though there appeared to be no measured increase in self-  
concept as a result of participation in the I.W.E. pro-  
gram, 73.59 per cent of the I.W.E. students felt that  
they had gained greater self-confidence as a result of  
their work experience. There is reason to believe that  
the I.W.E. program does aid some students in the develop-  
ment of a more positive self-concept.

Objective 4--More Positive Attitude About the  
Importance of Knowledge as a Means Toward Life Successes.--  
71.70 per cent of the students felt that the program had  
helped them to understand the benefits of a good edu-  
cation and 52.73 per cent seemed to be taking their  
classwork more seriously as a result of their work  
experience.

Though the I.W.E. group did not measure signifi-  
cant attitudinal change on the achievement motivation and

dropout potential instruments, results from the student questionnaire do indicate movement in a positive direction toward meeting this objective.

Objective 5--Desire to Stay in School Until Graduation.--The I.W.E. group did not measure lower dropout potential compared with the control group, yet the findings of the student questionnaire indicate that nearly three-fourths of the I.W.E. students have a greater desire to finish high school as a result of their work experience. The program seems to be moving in a positive direction toward meeting this objective.

Objective 6--Improved Attitudes, Work Habits, and Other Behavior That Will Enable Students to Get Along with Others in School, on the Job and Within Society.--84.91 per cent of the students felt that their experience on the program had helped them to get along with others and 73.59 per cent felt that their school behavior has improved since being on the I.W.E. program. This objective seems to have been met.

Objective 7--Successful Job Placement After Graduation.--This objective cannot be measured at this time but should be included in a later follow-up study.

Objective 8--Gain Familiarity with Information Concerning the Job Market.--75.47 per cent of responding students felt they had gained a greater understanding of the world of work. This objective seems to have been met.

### Recommendations

#### Recommendation 1

As mentioned earlier in the study, little or no evaluation of the Junior High I.W.E. program has existed in its ten-year history. If it can be assumed that the feelings and attitudes of participating students, their parents and employers are important in the overall assessment of the program, a continuous process of in-depth evaluation is necessary in order to determine whether the objectives of the I.W.E. program are being met.

#### Recommendation 2

Each individual school program should initiate a school-community forum of students, professional staff, parents and employers for the purpose of periodically reviewing, and if deemed necessary, redefining the overall objectives of the program.

#### Recommendation 3

Feedback gained from the teacher-professional staff questionnaire implies a need for more adequate communication between the I.W.E. program and faculty in

regard to the purposes of the program. It is recommended that an oral and/or written description of the program be presented to the faculty at the beginning of each school year.

#### Recommendation 4

Since there was no significant increase in achievement for either group over the past year and a half, greater stress must be placed on reading and arithmetic skills in each school. Curriculum steering committees in both academic areas should survey available high interest resource materials that may be of greater relevance to underachieving disadvantaged students. Perhaps reading and math centers staffed with specialists and community volunteers could provide students with more individualized help in these areas.

#### Recommendation 5

A substantial amount of the Coordinator's time is used searching the community for potential employers. In many cases, efforts are duplicated particularly when two or more Coordinators, on the same day, seek jobs unsuccessfully from the same employer. It is recommended that a centralized job clearing center be implemented for the prime purpose of increasing Coordinator-Student contact time.



Recommendation 6

The I.W.E. program is characterized as a preventive dropout program. As of this time, no effort has been initiated to monitor whether or not there is program impact on the retention of participating students. It is therefore recommended that an accounting be made on a yearly basis to ascertain comparative dropout rates between I.W.E. students and students in the regular school program.

Recommendation 7

The Junior High I.W.E. Coordinators should implement regularly scheduled group meetings for the purpose of sharing respective ideas, problems, and concerns, as a means toward improving the overall work-study program.

Recommendation 8

In some cases, limitations in student program scheduling allows I.W.E. students to be concentrated within particular academic classes. There is research evidence that suggests that such concentration of under-achievers is detrimental since underachieving peers may tend to reinforce each other's attitudes not to achieve. Therefore, care should be taken not to purposely isolate and alienate these students from classes representing the full range of academic achievement.

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## **APPENDICES**

## **APPENDIX A**

### **MONTHLY DATA REPORT**

# APPENDIX A

## Monthly Report for Part-Time Trainees . . . LANSING SCHOOL DISTRICT

- ☐ B. E.  
☐ D. E.  
☐ T. & I.  
☐ N. Y. C.  
☐ I. W. E.

\_\_\_\_\_ SCHOOL \_\_\_\_\_

Month ..... 19..... Reported by ..... Coordinator

### ENROLLMENT SUMMARY:

	MALE	FEMALE	TOTAL
1. Number enrolled at end of previous month ( <i>Item 3 previous report</i> ) .....	.....	.....	.....
2. Number enrolled during the month .....	.....	.....	.....
3. Total cumulative enrollment for year (1 + 2) .....	.....	.....	.....
4. Number terminated to end of previous month ( <i>Item 6 previous report</i> ) .....	.....	.....	.....
5. Number terminated during month .....	.....	.....	.....
6. Total terminated for year to date (4 + 5) .....	.....	.....	.....
7. Active enrollment at end of month (3 - 6) .....	.....	.....	.....

### COORDINATION SUMMARY:

	IN PERSON	BY TEL.	TOTAL
1. Number of calls on employers .....	.....	.....	.....
2. Number of calls at homes .....	.....	.....	.....
3. Number placed in full-time jobs .....	.....	.....	.....
4. Number placed in part-time jobs .....	.....	.....	.....

### USE SPACE BELOW FOR—

Names of Trainees Added or Dropped — Case Studies of Special Interest — Information of Interest to Others on the Staff

MEXICAN AMERICAN				BLACK AMERICAN				ANGLO AMERICAN				OTHER	FRESHMAN		SOPHOMORE		JUNIOR		SENIOR	
Fr	So	Jr	Sr	Fr	So	Jr	Sr	Fr	So	Jr	Sr		Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.
													White							
													Black							
													Mex.							
													Other							

VERB

White—Principal's Office

Green—Director's Office

Pink—Coordinator's Copy

**APPENDIX B**

**WORK TRAINING AGREEMENT**

## APPENDIX B

- ☐ Voc. Ed. Program
- ☐ I.W.B. (Individualized Work Experience)
- ☐ State Mich. Program
- ☐ N.Y.C. Program

No. \_\_\_\_\_

**Occupational Training Agreement**  
**LANSING SCHOOL DISTRICT**

School \_\_\_\_\_ In Cooperation with \_\_\_\_\_ Trainee \_\_\_\_\_ HR. \_\_\_\_\_

Employer \_\_\_\_\_ Street \_\_\_\_\_

Supervisor \_\_\_\_\_ City \_\_\_\_\_ Phone \_\_\_\_\_ Zip \_\_\_\_\_

Street \_\_\_\_\_ S.S. No. \_\_\_\_\_

City \_\_\_\_\_ Phone \_\_\_\_\_ Grade \_\_\_\_\_ Age \_\_\_\_\_ Sex: M F

Job Title \_\_\_\_\_ Date Of Birth \_\_\_\_\_

Hours Work Per Day \_\_\_\_\_ Rate Of Pay \_\_\_\_\_ Deviation: YES NO

Workman's Compensation: Yes \_\_\_ No \_\_\_ Date Employment Begins \_\_\_\_\_

Total Legal Working Hours Per Week \_\_\_\_\_ Expected Completion Date \_\_\_\_\_

[illegible]

**Some Responsibilities of Program Participants:**

1. Trainee will abide by the regulations and policies of his employer and the school.
2. The employer assumes the responsibility of providing the trainee with the broadest occupational experience in keeping with the job activities listed above.
3. The coordinator will arrange for in-school related instruction, consultation and advisory service to parties concerned with this training program.
4. The employment of this trainee shall conform to all federal, state, local laws and regulations, including workman's compensation and non-discrimination acts at any applicable or employee because of race, color or national origin.
5. The employer shall contact the coordinator before the trainee is removed from his job, and notify the coordinator of any violations committed by the trainee.

**Signature of Persons Approving this Learner Program:**

Student \_\_\_\_\_ Date \_\_\_\_\_

Parent \_\_\_\_\_ Date \_\_\_\_\_

Employer \_\_\_\_\_ Date \_\_\_\_\_

School Official \_\_\_\_\_ Date \_\_\_\_\_

White - *Office Copy*      Yellow - *Employer's Copy*  
Pink - *School Copy*      Blue - *Teacher's Copy*



**APPENDIX C**

**JOB PERFORMANCE REPORT CARD**

## APPENDIX C

### *Employer's Report* LANSING SCHOOL DISTRICT

PRE-EMPLOYMENT PROGRAM

\_\_\_\_\_, 19\_\_ -- 19\_\_  
SCHOOL \_\_\_\_\_

Student's Name \_\_\_\_\_  
LAST FIRST MIDDLE

Place of Employment \_\_\_\_\_

Job \_\_\_\_\_  
Title \_\_\_\_\_ Supervisor \_\_\_\_\_

2nd SEMESTER		FIRST MARKING PERIOD					SECOND MARKING PERIOD					THIRD MARKING PERIOD				
<i>Grade Only Those Items Pertaining to Student's Work</i>		Excellent	Good	Average	Fair	Poor	Excellent	Good	Average	Fair	Poor	Excellent	Good	Average	Fair	Poor
JOB PERFORMANCE	Quality of Work															
	Speed and/or Accuracy															
	Care of Equipment															
	Self-Discipline															
	Knowledge															
	Judgement															
PERSONAL ATTRIBUTES	Businesslike															
	Cooperativeness															
	Follows Directions															
	Honesty															
	Promptness															
	Attendance															
	Acceptance of Criticism															
	Initiative															
	Appearance															
	Physical Alertness															
RECOMMENDED GRADE (Circle one)		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E

*Return to*

COMMENTS: 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

**APPENDIX D**

**SCHOOL INTEREST INVENTORY**

## APPENDIX D

### SCHOOL INTEREST INVENTORY

#### DIRECTIONS FOR ANSWERING THE INVENTORY ITEMS

The questions in this inventory are constructed to find out how you feel about school. Your responses will aid us in making your school experience more valuable for you. There are no right or wrong answers to these questions. Your total score is more important than your answer to any one item. Although there is no time limit, try to work as rapidly as possible. Use the true-false spaces printed in this booklet to indicate your response to each of the questions. Any black, soft-lead pencil may be used to mark your responses. If an item is true for you, or true for you most of the time, circle the T as in item A below. If an item is false for you, or false for you most of the time, circle the F as in item B below.

A. ☒ T F      B. T ☒ F

- |  |   |   |
|--|---|---|
| 1. It would be more fun to be a famous singer than to be president of a manufacturing concern. | T | F |
| 2. In order to succeed in a job today, you must have a good education.                         | T | F |
| 3. I would rather take mechanical drawing or physics than music, art, or dramatics.            | T | F |
| 4. I have more than one older brother or sister.   | T | F |
| 5. I take part in at least one school activity.  | T | F |
| 6. It would be more fun to go to an art gallery than to a showing of new cars.                 | T | F |
| 7. No one in our family spends much time reading magazines or books.                           | T | F |
| 8. My brothers or sisters do better in school than I do.                                       | T | F |
| 9. It would be more fun to operate machinery than to entertain others.                         | T | F |
| 10. I have many friends.   | T | F |
| 11. I have spent more time with my mother than with my father.                                 | T | F |
| 12. I would rather have a job than go to school.   | T | F |

- |     |   |   |   |
|-----|---|---|---|
| 13. | Except for my parents, most of my family will be college graduates.             | T | F |
| 14. | I would rather raise horses or dogs than raise flowers or vegetables.           | T | F |
| 15. | I feel lonely a good deal of the time.  | T | F |
| 16. | To get a job like my father's, I will have to finish high school.               | T | F |
| 17. | I would rather go to a musical concert than go on a Scout hike.                 | T | F |
| 18. | I have never failed to move with my class to the next grade.                    | T | F |
| 19. | I feel well most of the time.   | T | F |
| 20. | When watching television I would rather look at the fights than a serious play. | T | F |
| 21. | Most of the houses in our neighborhood cost more than \$12,000.                 | T | F |
| 22. | I would like to get married right now.  | T | F |
| 23. | I would prefer to know modern languages than to know mathematics.               | T | F |
| 24. | School is fun.  | T | F |
| 25. | I would be happier in school if I could buy better clothes.                     | T | F |
| 26. | I would rather go to an athletic contest than to a play.                        | T | F |
| 27. | I wish I were not sick so often.  | T | F |
| 28. | I like mystery or crime movies.   | T | F |
| 29. | It would be more interesting to be a social worker than to be a toolmaker.      | T | F |
| 30. | My parents are active in community affairs.                                     | T | F |
| 31. | My father earned more than \$3,000 last year.                                   | T | F |
| 32. | I would rather be a carpenter than a florist.                                   | T | F |
| 33. | My mother does a lot of church work.  | T | F |
| 34. | When I am old enough, I am going to quit school.                                | T | F |
| 35. | I would choose to be an interior decorator rather than a building contractor.   | T | F |
| 36. | There is at least one bedroom for every two people in our family.               | T | F |
| 37. | Even though I do my best, my grades are always below average.                   | T | F |

- |     |  |   |   |
|-----|--|---|---|
| 38. | It would not bother me to have to cut up animals or insects.                               | T | F |
| 39. | I have been sent to the school principal's office frequently for causing trouble in class. | T | F |
| 40. | I do not like the subjects I have to take in school.                                       | T | F |
| 41. | It would be more fun to be a librarian than to be an army officer.                         | T | F |
| 42. | I like to take part in sports.   | T | F |
| 43. | I am not doing well in school, but I do better outside school than most of my classmates.  | T | F |
| 44. | The things my father does would be more fun for me to do than the things my mother does.   | T | F |
| 45. | The teachers in our school do not seem to understand me.                                   | T | F |
| 46. | If I were paid to go to school, I would be absent less often.                              | T | F |
| 47. | I like love scenes on television.  | T | F |
| 48. | Our family has lots of fun together.   | T | F |
| 49. | My father changes jobs frequently.   | T | F |
| 50. | My mother did not complete eighth grade.   | T | F |
| 51. | I am not doing very well in school this year.  | T | F |
| 52. | I am not at ease with others.  | T | F |
| 53. | Emotional scenes in a movie or on television make me cry.                                  | T | F |
| 54. | Everyone in our family goes his own way.   | T | F |
| 55. | I am confident of my ability in school.  | T | F |
| 56. | Men have had more influence on the things I want to do than have women.                    | T | F |
| 57. | I never have trouble with my complexion.   | T | F |
| 58. | Most people do not understand me.  | T | F |
| 59. | I do not like to get my hands dirty or greasy.   | T | F |
| 60. | My father wants me to complete high school.  | T | F |
| 61. | I skip school at least once a month.   | T | F |
| 62. | I would rather hunt and fish than go to parties.   | T | F |

- |     |   |   |   |
|-----|---|---|---|
| 63. | My father did not complete high school.   | T | F |
| 64. | I feel my father favors other members of my family over me.                         | T | F |
| 65. | I like people who are neat and clean.   | T | F |
| 66. | Our family moves approximately once a year.   | T | F |
| 67. | I would rather quit than fail in school.  | T | F |
| 68. | I would rather take shop or home economics than art or music.                       | T | F |
| 69. | I think I am awkward when I take part in sports.                                    | T | F |
| 70. | My mother likes soap operas on radio or television.                                 | T | F |
| 71. | It would be more fun to be in politics than to make things in a shop or laboratory. | T | F |
| 72. | I like school.  | T | F |
| 73. | I drive a car to school.  | T | F |
| 74. | I would rather be in a physical education class than in other classes.              | T | F |
| 75. | I have been absent from school more than twenty days in the last year.              | T | F |
| 76. | My mother completed high school.  | T | F |
| 77. | I would rather write stories than repair machines.                                  | T | F |
| 78. | I wish I had more friends than I do.  | T | F |
| 79. | I have never been suspended from school.  | T | F |
| 80. | It is more fun to take part in sports than to study history.                        | T | F |
| 81. | I like to skip school.  | T | F |
| 82. | My parents do not belong to many organizations or clubs.                            | T | F |
| 83. | I would rather help people improve themselves than work alone in research.          | T | F |
| 84. | My father works with his hands.   | T | F |
| 85. | I am usually happy.   | T | F |
| 86. | It is more fun to work with your hands than to study a book.                        | T | F |
| 87. | I will have to help support younger members of my family while they go to school.   | T | F |

- |      |   |   |   |
|------|---|---|---|
| 88.  | I am one of the oldest in my homeroom.  | T | F |
| 89.  | I would rather write and work with ideas than work in a laboratory or shop.                             | T | F |
| 90.  | I would rather stay home than go to school.   | T | F |
| 91.  | My father likes to read.  | T | F |
| 92.  | I would rather do math than English.  | T | F |
| 93.  | Most of my friends are older than I.  | T | F |
| 94.  | Counting my parents and me, there are more than five people in our family.                              | T | F |
| 95.  | I would rather work in an office than do outdoor work.  | T | F |
| 96.  | Our family does very little together that is fun.   | T | F |
| 97.  | None of my family is interested in college work.  | T | F |
| 98.  | It would be more interesting to be an engineer or a nurse than a business man or a teacher.             | T | F |
| 99.  | I have had to repeat at least one grade.  | T | F |
| 100. | I want to go to work and earn my own money.   | T | F |
| 101. | I would like a job in which I would be working with people rather than machines.                        | T | F |
| 102. | My parents usually go to church every week.   | T | F |
| 103. | I have been sent out of class frequently for causing trouble.   | T | F |
| 104. | I would rather work in science or mechanics than in business.   | T | F |
| 105. | I have more than two brothers or sisters.   | T | F |
| 106. | The teachers give others better marks for work that is no better than mine.                             | T | F |
| 107. | I would rather work with mechanical things than read.   | T | F |
| 108. | When I am absent from school I make up my assignments.  | T | F |
| 109. | Our family subscribes to at least five magazines.   | T | F |
| 110. | It would be more fun to build mechanical models or work with them than to collect stamps or autographs. | T | F |



111.	I would rather be in school than working full time.	T	F
112.	Most of our family does not like to read.	T	F
113.	I would rather take social studies than science.	T	F
114.	My father works at a desk most of the time.	T	F
115.	I am not going to get married until I finish school.	T	F
116.	It is hard traveling to and from school because we live so far away.	T	F
117.	I would rather do things with my father than with my mother.	T	F
118.	I seldom skip school.	T	F
119.	My father usually takes his lunch to work with him.	T	F
120.	I would rather be in a science club than in a school play.	T	F
121.	Guests frequently come to our house for meals or to stay for the night.	T	F
122.	I would never want to be expelled from school.	T	F
123.	I would rather write poems than be a chemist.	T	F
124.	My parents are not very active in church work.	T	F
125.	Most of my brothers and sisters did not finish high school.	T	F
126.	I am not "going steady."	T	F
127.	I am seldom moody or blue.	T	F
128.	I am sick a lot.	T	F
129.	The teachers in our school are too busy.	T	F
130.	I would rather be taking school subjects other than the ones I am now taking.	T	F
131.	I prefer things I can do by myself.	T	F
132.	Most of the people in my homeroom have better clothes than I do.	T	F
133.	I would rather get married than finish school.	T	F
134.	I have never skipped school.	T	F

- |      |  |   |   |
|------|--|---|---|
| 135. | We rent our home.  | T | F |
| 136. | I get at least average grades in school.                                 | T | F |
| 137. | My father has to wear a suit to work.                                    | T | F |
| 138. | I am older than most of the people in my class.                          | T | F |
| 139. | It is hard for me to talk to people my own age.                          | T | F |
| 140. | My mother encourages me to do well in school.                            | T | F |
| 141. | I have more friends of the opposite sex than of my own sex.              | T | F |
| 142. | What I learn in school will help very much in earning a living.          | T | F |
| 143. | I think people my own age are silly.                                     | T | F |
| 144. | I am afraid that I will not be promoted this year.                       | T | F |
| 145. | My father did not complete eighth grade.                                 | T | F |
| 146. | The boys and girls in my homeroom like me.                               | T | F |
| 147. | I would do anything rather than stay at home.                            | T | F |
| 148. | I can talk to grownups more easily than to people my own age.            | T | F |
| 149. | If I take a job like my father's, I will not need a high school diploma. | T | F |
| 150. | It would be more fun to invent a machine than to sell it to people.      | T | F |

**APPENDIX E**

**SELF-ESTEEM INVENTORY**

## APPENDIX E

### SELF-ESTEEM INVENTORY

Please mark each statement in the following way:

If the statement describes how you usually feel, put a check ( ) in the column, "Like Me."

If the statement does not describe how you usually feel, put a check ( ) in the column "Unlike Me."

There are no right or wrong answers.

	Like Me	Unlike Me
1. I spend a lot of time daydreaming.	_____	_____
2. I'm pretty sure of myself.	_____	_____
3. I often wish I were someone else.	_____	_____
4. I'm easy to like.	_____	_____
5. My parents and I have a lot of fun together.	_____	_____
6. I find it very hard to talk in front of the class.	_____	_____
7. I wish I were younger.	_____	_____
8. There are lots of things about myself I'd change if I could.	_____	_____
9. I can make up my mind without too much trouble.	_____	_____
10. I'm a lot of fun to be with.	_____	_____
11. I get upset easily at home.	_____	_____
12. I'm proud of my school work.	_____	_____
13. Someone always has to tell me what to do.	_____	_____
14. It takes me a long time to get used to anything new.	_____	_____
15. I'm often sorry for the things I do.	_____	_____
16. I'm popular with kids my own age.	_____	_____
17. My parents usually consider my feelings.	_____	_____
18. I'm doing the best work I can.	_____	_____
19. I give in very easily.	_____	_____

	Like Me	Unlike Me
20. I can usually take care of myself.	_____	_____
21. I'm pretty happy.	_____	_____
22. I would rather play with children younger than me.	_____	_____
23. My parents expect too much of me.	_____	_____
24. I like to be called on in class.	_____	_____
25. I understand myself.	_____	_____
26. It's pretty tough to be me.	_____	_____
27. Things are all mixed up in my life.	_____	_____
28. Kids usually follow my ideas.	_____	_____
29. No one pays much attention to me at home.	_____	_____
30. I'm not doing as well in school as I'd like to.	_____	_____
31. I can make up my mind and stick to it.	_____	_____
32. I really don't like being a boy--girl.	_____	_____
33. I have a low opinion of myself.	_____	_____
34. I don't like to be with other people.	_____	_____
35. There are many times when I'd like to leave home.	_____	_____
36. I often feel upset in school.	_____	_____
37. I often feel ashamed of myself.	_____	_____
38. I'm not as nice looking as most people.	_____	_____
39. If I have something to say, I usually say it.	_____	_____
40. Kids pick on me very often.	_____	_____
41. My parents understand me.	_____	_____
42. My teacher makes me feel I'm not good enough.	_____	_____
43. I don't care what happens to me.	_____	_____
44. I'm a failure.	_____	_____

	Like Me	Unlike Me
45. I get upset easily when I'm scolded.	_____	_____
46. Most people are better liked than I am.	_____	_____
47. I usually feel as if my parents are pushing me.	_____	_____
48. I often get discouraged in school.	_____	_____
49. Things usually don't bother me.	_____	_____
50. I can't be depended on.	_____	_____

**APPENDIX F**

**MICHIGAN STATE M-SCALES**

## APPENDIX F

### MICHIGAN STATE M-SCALES (Form b-v2 - Female) THE GENERALIZED SITUATIONAL CHOICE INVENTORY

This is a survey of your choices. There are no right or wrong answers. The results will in no way affect your grades in school.

The inventory is made up of pairs of statements. Read each pair carefully. Choose the one you would most prefer or like to do.

Answer all questions as honestly and frankly as you can. Only in this way will the results be meaningful. Remember this inventory is about you and you alone. This is not a survey of what you can do, but of what you would like to do.

#### EXAMPLE:

##### Booklet

Which would you prefer to do?

1. 1) Go to a party, or  
2) Read a book

This person marked under the number "1" on the answer sheet which means that he would prefer to go to a party to reading a book.

If you have any questions, raise your hand. If not, turn to the next page and answer all the questions. Do Not Skip Any Questions! Work as rapidly as you can and do not spend too much time on any one item.

This is not a survey of what you can do but of what  
you would prefer to do.



I would prefer to:

1. 1) Work hard for what I get, or  
2) Just get what I want
2. 1) Work hard to be smart, or  
2) Take it easy and become rich
3. 1) Be thought of as being a studious person, or  
2) Be thought of as being a carefree person
4. 1) Have the best teachers in the state in my school, or  
2) Have a large recreation center in my school
5. 1) Buy a car, or  
2) Continue my education
6. 1) Be well prepared for a job after graduation from high school, or  
2) Be well prepared to continue learning
7. 1) Pass a usual classroom examination, or  
2) Pass a college entrance examination
8. 1) Have the teacher give everyone the same grade at the beginning of the term and know I had passed, or  
2) Take chances on getting a higher or lower grade at the end of the course
9. 1) Develop a new product which may or may not be good, or  
2) Make a product as good as the best one available
10. 1) Get excellent grades because I have a great deal of ability, or  
2) Get average grades because I have average ability

I would prefer to:

11. 1) Be known to my parents as an intelligent person, or  
2) Be known to my parents as a practical person
12. 1) Be a person of leisure, or  
2) Be a person of action
13. 1) Receive money for good grades, or  
2) Have my picture in the paper for good grades
14. 1) Have someone show me the solution to a problem, or  
2) Take a long time to figure out a problem for myself
15. 1) Be known as a person with much ability, or  
2) Be known as a person with adequate ability
16. 1) Be an able person, or  
2) Be wealthy

I would prefer to:

17. 1) Work hard in everything I do, or  
2) Work at things as they come along
18. 1) Study my assignments during study hall, or  
2) Wait to study until the mood strikes me
19. 1) Perform well in class, or  
2) Watch television
20. 1) Save enough money to buy something with cash, or  
2) Buy something on credit and pay for it as I use it

I would prefer to:

21. 1) Inherit a great deal of money, or  
2) Earn a great deal of money
22. 1) Wait ten years and receive fame throughout the nation, or  
2) Receive fame in my community overnight
23. 1) Wait until I had finished college and make a better salary, or  
2) Get a job right after high school and make a good salary
24. 1) Study to go to college, or  
2) Study to get out of high school
25. 1) Enjoy myself at a museum, or  
2) Enjoy myself at a night-club
26. 1) Be known as being a "good guy" or a "good gal", or  
2) Be known as a person who "does things well"
27. 1) Do something like everyone else, or  
2) Do something outstanding
28. 1) Study for an exam one night and know that I would receive an "A", or  
2) Go to a party on this night and take a chance on a lower grade
29. 1) Work hard enough to be outstanding, or  
2) Work hard enough to pass my courses
30. 1) Learn by defeating an experienced player, or  
2) Learn by losing to an expert

I would prefer to:

31. 1) Have no outstanding abilities, but be liked by others, or  
2) Be able to do things well even though others didn't like me for it
32. 1) Buy a car, or  
2) Continue my education

I would prefer to:

33. 1) Pass a usual classroom examination, or  
2) Pass a college entrance examination
34. 1) Draw a freehand picture which may or may not be good, or  
2) Trace an excellent picture drawn by someone else
35. 1) Be thought of as a person with usual ideas, or  
2) Be thought of as a person with unusual ideas
36. 1) Make quick decisions and sometimes be right and sometimes wrong,  
or  
2) Deliberate over decisions and usually be right
37. 1) Be a person of leisure, or  
2) Be a person of action
38. 1) Be paid for the amount of work I did, or  
2) Be paid by the hour
39. 1) Work hard in everything I do, or  
2) Work at things as they come along
40. 1) Be known for what I could do, or  
2) Be known for what I do

I would prefer to:

41. 1) Memorize someone else's poem, or  
2) Create a poem of my own
42. 1) Work overtime to make more money, or  
2) Get more schooling to make more money
43. 1) Wait until I had finished college and make a better salary, or  
2) Get a job right after high school and make a good salary
44. 1) Study to go to college, or  
2) Study to get out of high school
45. 1) Be able to say I had successfully completed a task, or  
2) Be able to say I had attempted a difficult task
46. 1) Do something like everyone else, or  
2) Do something outstanding

PREFERRED JOB CHARACTERISTICS SCALE

Directions: What kind of a job do you prefer? In the following items you will find two job characteristics paired. From each pair choose the one characteristic you value most for your future job, after your education. If you prefer characteristic "1", mark in the column for response "1" on the special answer sheet. If you prefer "2", then mark in the "2" column.

Be sure to mark only one choice for each pair. Do not omit any items. In some cases, it will be hard to make a choice between the items because you may want to choose both items or neither. But remember, you must make a choice.

## EXAMPLE:

## Booklet

I prefer:

1. 1) A job which is exciting, or
- 2) A job where there are no lay-offs

This person marked under the number "1" which means that he prefers job characteristic "1".

This is a survey to find out your job preferences. There are no right or wrong answers.

If you have any questions, raise your hand and ask the examiner. Be sure to fill in the spaces at the top of the answer sheet.

Remember, if you prefer characteristic "1", mark in the "1" column; if you prefer "2", mark in the "2" column.

I prefer:

- 47. 1) A job where my opinion is valued  
2) A job with short working hours
- 48. 1) A job which does not require a college education  
2) A job where I could decide how the work is to be done
- 49. 1) A job which pays well and requires little effort  
2) A job where I could express my ideas, talents, and skills
- 50. 1) A job where I could become known for outstanding accomplishments  
2) A job where I could not be fired

I prefer:

- 51. 1) A job which has high work standards  
2) A job which permits me to take days off when I want
- 52. 1) A job where I solve problems no one else can  
2) A job which does not require a college education
- 53. 1) A job which pays well and requires little effort  
2) A job where I could decide how the work is to be done
- 54. 1) A job where I could continue to learn the rest of my life  
2) A job where I make few if any decisions
- 55. 1) A job with short working hours  
2) A job which absorbs my interests
- 56. 1) A job which does not require a college education  
2) A job which has high work standards
- 57. 1) A job which requires little thinking  
2) A job where I could decide how the work is to be done
- 58. 1) A job with short working hours  
2) A job where I could continue to learn the rest of my life
- 59. 1) A job where I could become known for outstanding accomplishments  
2) A job which does not require a college education
- 60. 1) A job which pays well and requires little effort  
2) A job which has high work standards

I prefer:

- 61. 1) A job with short working hours  
2) A job where I could express my ideas, talents, and skills
- 62. 1) A job which does not tie me down  
2) A job where I could continue to learn the rest of my life

I prefer:

- 63. 1) A job where I could not be fired  
2) A job which absorbs my interests
- 64. 1) A job which does not require a college education  
2) A job where my opinion is valued
- 65. 1) A job where I could not be fired  
2) A job where I could continue to learn the rest of my life
- 66. 1) A job which permits me to take days off when I want  
2) A job which absorbs my interests
- 67. 1) A job with short working hours  
2) A job where I solve problems no one else can
- 68. 1) A job where I could not be fired  
2) A job where I could express my ideas, talents, and skills
- 69. 1) A job which does not require a college education  
2) A job which absorbs my interests
- 70. 1) A job which requires little thinking  
2) A job where my opinion is valued

I prefer:

- 71. 1) A job with short working hours  
2) A job which has high work standards
- 72. 1) A job which does not tie me down  
2) A job where I solve problems no one else can
- 73. 1) A job where I could not be fired  
2) A job where I could decide how the work is to be done
- 74. 1) A job where I could express my ideas, talents and skills  
2) A job which permits me to take days off when I want
- 75. 1) A job which does not require a college education  
2) A job where I could continue to learn for the rest of my life
- 76. 1) A job with short working hours  
2) A job where I could become known for outstanding accomplishments
- 77. 1) A job which does not tie me down  
2) A job which has high work standards
- 78. 1) A job which does not require a college education  
2) A job where I could express my ideas, talents, and skills
- 79. 1) A job where I could continue to learn the rest of my life  
2) A job which pays well and requires little effort

- 30. 1) A job which does not require a college education
- 2) A job where I could decide how the work is to be done

I prefer:

- 31. 1) A job which has high work standards
- 2) A job which permits me to take days off when I want
- 32. 1) A job where I solve problems no one else can
- 2) A job which does not require a college education
- 33. 1) A job which pays well and requires little effort
- 2) A job where I could decide how the work is to be done
- 34. 1) A job where I could become known for outstanding accomplishments
- 2) A job which permits me to take days off when I want
- 35. 1) A job which does not require a college education
- 2) A job which has high work standards
- 36. 1) A job which requires little thinking
- 2) A job where I could decide how the work is to be done
- 37. 1) A job where my opinion is valued
- 2) A job which permits me to take days off when I want
- 38. 1) A job where I could become known for outstanding accomplishments
- 2) A job which does not require a college education
- 39. 1) A job which pays well and requires little effort
- 2) A job which has high work standards
- 90. 1) A job which does not require a college education
- 2) A job where my opinion is valued

I prefer:

- 91. 1) A job which pays well and requires little effort
- 2) A job where I could become known for outstanding accomplishments
- 92. 1) A job which requires little thinking
- 2) A job which has high work standards
- 93. 1) A job with short working hours
- 2) A job where I could decide how the work is to be done
- 94. 1) A job where I could express my ideas, talents and skills
- 2) A job which does not tie me down
- 95. 1) A job where I could become known for outstanding accomplishments
- 2) A job which requires little thinking
- 96. 1) A job which has high work standards
- 2) A job where I make few if any decisions

I prefer:

- 97. 1) A job with short working hours  
2) A job where I solve problems no one else can
- 98. 1) A job which does not tie me down  
2) A job where I could decide how the work is to be done
- 99. 1) A job with short working hours  
2) A job which has high work standards
- 100. 1) A job which does not tie me down  
2) A job where I solve problems no one else can

I prefer:

- 101. 1) A job which does not require a college education  
2) A job where I could continue to learn the rest of my life
- 102. 1) A job which does not tie me down  
2) A job which has high work standards
- 103. 1) A job where I could not be fired  
2) A job where I solve problems no one else can
- 104. 1) A job where I could decide how the work is to be done  
2) A job which permits me to take days off when I want
- 105. 1) A job which does not require a college education  
2) A job where I could express my ideas, talents and skills



## WORD RATING LIST

Following is a list of words teachers may use to describe students. You are to rate yourself on each word as you think your teachers would rate you.

Be sure to describe yourself as your teachers would, not as you would describe yourself.

Read each word carefully, then decide which of the following ratings would be chosen by your teachers to describe you.

Rating NumberMeaning of Number

1	This word would <u>never</u> describe me
2	This word <u>sometimes</u> describes me
3	This word <u>usually</u> describes me
4	This word <u>always</u> describes me

After you decide how your teacher might rate you, mark the special answer sheet.

## EXAMPLE:

## Booklet

1. Happy	1	2	3	4
----------	---	---	---	---

This individual has chosen the rating number "2" for the word "happy". This means that he feels that his teachers think that the word "happy" sometimes describes him.

If you have any questions, raise your hand. If not, turn to the next page and begin rating all of the words. Do Not Skip Any Words. Work as rapidly as you can and do not spend too much time on any one word.

Ratings:	1.	Never	2.	Sometimes	3.	Usually	4.	Always			
Teachers feel that I am:		N	S	U	A	Teachers feel that I am:		N	S	U	A
106.	talented	1	2	3	4	126.	daring	1	2	3	4
107.	practical	1	2	3	4	127.	a person who postpones	1	2	3	4
108.	average	1	2	3	4	128.	exacting	1	2	3	4
109.	logical	1	2	3	4	129.	stubborn	1	2	3	4
110.	smart	1	2	3	4	130.	perfectionistic	1	2	3	4
Teachers feel that I am:						Teachers feel that I am:		N	S	U	A
111.	successful	1	2	3	4	131.	accepting	1	2	3	4
112.	thorough	1	2	3	4	132.	carefree	1	2	3	4
113.	orderly	1	2	3	4	133.	competitive	1	2	3	4
114.	purposeful	1	2	3	4	134.	intellectual	1	2	3	4
115.	a procrastinator	1	2	3	4	135.	alert	1	2	3	4
Teachers feel that I am:						Teachers feel that I am:		N	S	U	A
116.	studious	1	2	3	4	136.	above average	1	2	3	4
117.	different	1	2	3	4	137.	productive	1	2	3	4
118.	discontented	1	2	3	4	138.	persuadable	1	2	3	4
119.	flighty	1	2	3	4	139.	a thinker	1	2	3	4
120.	responsible	1	2	3	4	140.	ambitious	1	2	3	4
Teachers feel that I am:						Teachers feel that I am:		N	S	U	A
121.	consistent	1	2	3	4	141.	contented	1	2	3	4
122.	intelligent	1	2	3	4	142.	concerned	1	2	3	4
123.	distractable	1	2	3	4	143.	an achiever	1	2	3	4
124.	nervous	1	2	3	4	144.	a planner	1	2	3	4
125.	systematic	1	2	3	4	145.	competent	1	2	3	4

Ratings:	1.	Never	2.	Sometimes	3.	Usually	4.	Always	
Teachers feel that I am:	N	S	U	A	Teachers feel that I am:	N	S	U	A
146. teachable	1	2	3	4	166. intelligent	1	2	3	4
147. reasonable	1	2	3	4	167. energetic	1	2	3	4
148. impatient	1	2	3	4	168. "sharp"	1	2	3	4
149. friendly	1	2	3	4	169. exacting	1	2	3	4
150. efficient	1	2	3	4	170. accepting	1	2	3	4
Teachers feel that I am:	N	S	U	A	Teachers feel that I am:	N	S	U	A
151. easily dis- tracted	1	2	3	4	171. persistent	1	2	3	4
152. reliable	1	2	3	4	172. intellectual	1	2	3	4
153. serious	1	2	3	4	173. sociable	1	2	3	4
154. curious	1	2	3	4	174. alert	1	2	3	4
155. confident	1	2	3	4	175. adventurous	1	2	3	4
Teachers feel that I am:	N	S	U	A	Teachers feel that I am:	N	S	U	A
156. logical	1	2	3	4	176. productive	1	2	3	4
157. successful	1	2	3	4	177. relaxed	1	2	3	4
158. careful	1	2	3	4	178. optimistic	1	2	3	4
159. thorough	1	2	3	4	179. a thinker	1	2	3	4
160. purposeful	1	2	3	4	180. determined	1	2	3	4
Teachers feel that I am:	N	S	U	A	Teachers feel that I am:	N	S	U	A
161. studious	1	2	3	4	181. an achiever	1	2	3	4
162. energetic	1	2	3	4	182. a planner	1	2	3	4
163. responsible	1	2	3	4	183. inquisitive	1	2	3	4
164. creative	1	2	3	4	184. fault-finding	1	2	3	4
165. consistent	1	2	3	4	185. reliable	1	2	3	4

Ratings:	1. Never	2. Sometimes	3. Usually	4. Always
Teachers feel that I am:	N	S	U	A
186. patient	1	2	3	4
187. confident	1	2	3	4
188. in-the-know	1	2	3	4
189. reckless	1	2	3	4
190. "sharp"	1	2	3	4
Teachers feel that I am:	N	S	U	A
191. dependable	1	2	3	4
192. a goof off	1	2	3	4
193. dependent	1	2	3	4
194. a "wheel"	1	2	3	4
195. brilliant	1	2	3	4
Teachers feel that I am:	N	S	U	A
196. aggressive	1	2	3	4
197. a leader	1	2	3	4

## HUMAN TRAIT INVENTORY

Following is a list of statements about YOU. Read each statement carefully! Then decide whether this statement is how you always feel, usually feel, sometimes feel or never feel.

<u>Number</u>	<u>Meaning of Number</u>
1	This statement would <u>never</u> describe the way I feel
2	This statement <u>sometimes</u> describes the way I feel
3	This statement <u>usually</u> describes the way I feel
4	This statement <u>always</u> describes the way I feel

Answer each statement -- Do not leave any blank.

There are no right or wrong answers. The answers apply only to you. The way you answer these statements will not affect your school marks in any way. Mark between the lines under the number that best describes how you feel.

EXAMPLE:

## Booklet

1. I feel it is a good thing to be honest.
---

This individual has chosen number "2" for the statement "I feel it is a good thing to be honest." This means he feels that this statement sometimes describes him.

In marking your answers on the separate answer sheet, be sure that the number of the statement in the booklet is the same as the number on the answer sheet. It is best to mark your first impression; try not to change your answer. If you change an answer, erase completely your first choice and then blacken between the lines under the other column.

Ratings:		1. Never	2. Sometimes	3. Usually	4. Always
		N	S	U	A
198.	Many times I become so excited I find it hard to go to sleep	1	2	3	4
199.	I daydream frequently	1	2	3	4
200.	I work things out for myself rather than have a friend show me how	1	2	3	4
201.	It is difficult for me to keep interested in most of my school subjects	1	2	3	4
202.	I flirt	1	2	3	4
203.	Most of my school subjects are useful	1	2	3	4
204.	I like just about everything about school	1	2	3	4
205.	I have a hard time concentrating on the subject during class periods	1	2	3	4
206.	Even when I do sit down to study, I find that my mind tends to wander	1	2	3	4
207.	I like to make the best grades possible	1	2	3	4
208.	I like to study	1	2	3	4
209.	I like to plan very carefully what courses I will take in school	1	2	3	4
210.	I am said to be quick tempered	1	2	3	4
211.	I learn slowly	1	2	3	4
212.	It would be worthwhile to belong to several clubs or lodges	1	2	3	4
213.	I plan my activities in advance	1	2	3	4
214.	I think I would like the work of a teacher	1	2	3	4
215.	I want very much to be a success	1	2	3	4
216.	I would be uneasy if some of my family were in trouble with the police	1	2	3	4
217.	I get disgusted with myself if I don't do as well as I should	1	2	3	4

Ratings:		1. Never	2. Sometimes	3. Usually	4. Always				
						N	S	U	A
218.	I like to plan my activities in advance	1	2	3	4				
219.	I like being with people in social gatherings	1	2	3	4				
220.	Some subjects are so unpleasant to me that I can't talk about them	1	2	3	4				
221.	I like to be consistent in the things I do	1	2	3	4				
222.	I would like to belong to a motorcycle club	1	2	3	4				
223.	It does not bother me to speak before groups of people	1	2	3	4				
224.	I enjoy cooking	1	2	3	4				
225.	While in trains, buses, etc., I strike up a conversation with a stranger	1	2	3	4				
226.	When I have an opinion, I stand up for it	1	2	3	4				
227.	I enjoy reading the editorials in the newspaper	1	2	3	4				
228.	If several friends and I were in trouble, I would rather take the whole blame than give them away	1	2	3	4				
229.	I like just about everything about school	1	2	3	4				
230.	Even when I do sit down to study I find that my mind tends to wander	1	2	3	4				
231.	Unimportant thoughts keep running through my mind and bothering me	1	2	3	4				
232.	I enjoy social activity	1	2	3	4				
233.	I like to plan my activities in advance	1	2	3	4				
234.	I like being with people in social gatherings	1	2	3	4				
235.	I like to be consistent in the things I do	1	2	3	4				
236.	I am bothered for days by unimportant thoughts running through my mind	1	2	3	4				
237.	At least one member of my family is very nervous	1	2	3	4				

Ratings:		1. Never	2. Sometimes	3. Usually	4. Always				
						N	S	U	A
238.	I have difficulty sticking up for my rights because I am so reserved					1	2	3	4
239.	At parties I sit by myself or with just one other person rather than join a crowd					1	2	3	4
240.	I have a great deal of satisfaction when I do something better than what is expected of me					1	2	3	4
241.	I enjoy reading the editorials in the newspaper					1	2	3	4
242.	I can read a long while without tiring my eyes					1	2	3	4
243.	Most of my school subjects are a complete waste of time					1	2	3	4
244.	I like to keep people guessing what I'm going to do next					1	2	3	4
245.	I have trouble getting my school assignments in on time					1	2	3	4
246.	The questions on school tests often confuse me because I don't know what they are driving at					1	2	3	4
247.	I have to be in the mood before I can study					1	2	3	4
248.	I like large noisy parties					1	2	3	4
249.	Unimportant thoughts keep running through my mind and bothering me					1	2	3	4
250.	I have played hooky from school					1	2	3	4
251.	I have been sent to the principal for misbehaving in class					1	2	3	4
252.	I watch TV					1	2	3	4
253.	I have had many strange and unusual experiences					1	2	3	4
254.	I worry more about my looks than about my school work					1	2	3	4
255.	I feel cross and grouchy without good reason					1	2	3	4
256.	Something about a fire fascinates me					1	2	3	4
257.	I think teachers are wrong many times and won't admit it					1	2	3	4



## THE MICHIGAN STATE M-SCALES

(Form b-v<sub>2</sub> - Male)

## THE GENERALIZED SITUATIONAL CHOICE INVENTORY

This is a survey of your choices. There are no right or wrong answers. The results will in no way affect your grades in school.

The inventory is made up of pairs of statements. Read each pair carefully. Choose the one you would most prefer or like to do.

Answer all questions as honestly and frankly as you can. Only in this way will the results be meaningful. Remember this inventory is about you and you alone. This is not a survey of what you can do, but of what you would like to do.

## EXAMPLE:

## Booklet

Which would you prefer to do?

1. 1) Go to a party, or  
2) Read a book

This person marked under the number "1" on the answer sheet which means that he would prefer to go to a party to reading a book. Ignore columns "3", "4", and "5".

If you have any questions, raise your hand. If not, turn to the next page and answer all the questions. Do Not Skip Any Questions! Work as rapidly as you can and do not spend too much time on any one item.

This is not a survey of what you can do but of what you would prefer to do.

I would prefer to:

1. 1) Avoid failing in school, or  
2) Do well in school
2. 1) Receive a grade on the basis of how well I did on the teacher's test, or  
2) Get a grade on the basis of how hard I tried
3. 1) Have the best teachers in the state in my school, or  
2) Have a large recreation center in my school
4. 1) Buy a car, or  
2) Continue my education
5. 1) Be well prepared for a job after graduation from high school, or  
2) Be well prepared to continue learning
6. 1) Have the teacher give everyone the same grade at the beginning of the term and know I had passed, or  
2) Take chances on getting a higher or lower grade at the end of the course
7. 1) Develop a new product which may or may not be good, or  
2) Make a product as good as the best one available
8. 1) Receive money for my good grades, or  
2) Be allowed to take any course I wanted because of good grades
9. 1) Be successful in finishing a job, or  
2) Finish a job
10. 1) Get excellent grades because I have a great deal of ability, or  
2) Get average grades because I have average ability

I would prefer to:

11. 1) Be graded at the end of a course with the possibility of making an "A," or  
2) Get a "C" at the beginning of a course along with everyone else
12. 1) Make quick decisions and sometimes be right and sometimes wrong, or  
2) Deliberate over decisions and usually be right
13. 1) Be allowed to take extra courses before or after school, or  
2) Just take courses offered during the school day
14. 1) Complete a job which I recognize as difficult, or  
2) Complete a job which others recognize as difficult

I would prefer to:

15. 1) Do as well as most of my classmates, or  
2) Do better than most of my classmates
16. 1) Be considered as being strong but not very smart, or  
2) Be considered as being weak but smart
17. 1) Be known as a person with much ability, or  
2) Be known as a person with adequate ability
18. 1) Work at many less important jobs which I know I could finish, or  
2) Work at one very important job which may never be entirely finished in my life-time
19. 1) Be paid for how well I did a job, or  
2) Be paid the same amount no matter how I did the job
20. 1) Work rapidly just "skimming" along, or  
2) Work slowly with great thoroughness

I would prefer to:

21. 1) Have a better job than my father has, or  
2) Have a job like my father has
22. 1) Have a great deal of money, or  
2) Be an expert in my favorite school subject
23. 1) Have average ability and be liked by many people, or  
2) Have superior ability but not be liked by as many people
24. 1) Have everybody in the class get a 'C' at the beginning of the course, or  
2) Be graded at the end of the course with the possibility of getting a higher or lower mark
25. 1) Receive a grade on the basis of how much my teacher thinks I have learned, or  
2) Take a course from an instructor who gives "C"'s
26. 1) Be paid for the amount of work I did, or  
2) Be paid by the hour
27. 1) Study my assignments during study hall, or  
2) Wait to study until the mood strikes me
28. 1) Think of an idea that nobody has ever thought of, or  
2) Set a world's speed record
29. 1) Do what I think is right, or  
2) Do what others think is right

- 30. 1) Work overtime to make more money, or
- 2) Get more schooling to make more money

I would prefer to:

- 31. 1) Inherit a great deal of money, or
- 2) Earn a great deal of money
- 32. 1) Wait until I had finished college and make a better salary, or
- 2) Get a job right after high school and make a good salary
- 33. 1) Plan my life in advance, or
- 2) Live my life from day to day
- 34. 1) Study to go to college, or
- 2) Study to get out of high school
- 35. 1) Have a great deal of influence over people, or
- 2) Have a great deal of ambition
- 36. 1) Carry out the plans of others, or
- 2) Create something of my own
- 37. 1) Be known as being a "good guy" or a "good gal", or
- 2) Be known as a person who "does things well"
- 38. 1) Be very happy, or
- 2) Have lots of money
- 39. 1) Be known as a person who knows his own mind, or
- 2) Be known as a person who gets help in making decisions
- 40. 1) Do something like everyone else, or
- 2) Do something outstanding

I would prefer to:

- 41. 1) Put together a new object, or
- 2) Develop new ideas
- 42. 1) Be demanding on myself to do good work, or
- 2) Be demanding on my friends so that they will do good work
- 43. 1) Do something that I have done before, or
- 2) Do something that I never have done before
- 44. 1) Discover a gold mine, or
- 2) Discover a new medicine
- 45. 1) Have one of my children win a beauty contest, or
- 2) Have one of my children win a college scholarship

**I would prefer to:**

- 46. 1) Be thought of as being a studious person, or  
2) Be thought of as being a carefree person
- 47. 1) Be well prepared for a job after graduation from high school, or  
2) Be well prepared to continue learning
- 48. 1) Receive money for good grades, or  
2) Have my picture in the paper for good grades
- 49. 1) Do a less recognized but complete job, or  
2) Do a recognized but incomplete job
- 50. 1) Be known as a person who doesn't let problems worry me, or  
2) Be known as a person who can solve problems well
- 51. 1) Be known as a good group member, or  
2) Be known as a leader
- 52. 1) Enjoy myself at a museum, or  
2) Enjoy myself at a night-club
- 53. 1) Discover a gold mine, or  
2) Discover a new medicine

## PREFERRED JOB CHARACTERISTICS SCALE

**Directions:** What kind of a job do you prefer? In the following items you will find two job characteristics paired. From each pair choose the one characteristic you value most for your future job, after your education. If you prefer characteristic "1", mark in the column for response "1" on the special answer sheet. If you prefer "2", then mark in the "2" column. (Ignore columns "3", "4", and "5".) Be sure to mark only one choice for each pair. Do not omit any items. In some cases, it will be hard to make a choice between the items because you may want to choose both items or neither. But remember, you must make a choice.

**EXAMPLE:**

## Booklet

I prefer:

1. 1) A job which is exciting or
- 2) A job where there are no lay-offs

This person marked under the number "1" which means that he prefers job characteristic "1".

This is a survey to find out your job preferences. There are no right or wrong answers.

If you have any questions, raise your hand and ask the examiner. Be sure to fill in the spaces at the top of the answer sheet.

I prefer:

- 54. 1) A job where I solve problems no one else can  
2) A job which permits me to take days off when I want
- 55. 1) A job which does not require a college education  
2) A job where I could decide how the work is to be done
- 56. 1) A job where I solve problems no one else can  
2) A job which does not require a college education
- 57. 1) A job where my opinion is valued  
2) A job where I could not be fired
- 58. 1) A job which does not tie me down  
2) A job which absorbs my interests
- 59. 1) A job where I could be known for outstanding accomplishments  
2) A job which does not require a college education
- 60. 1) A job where I could decide how the work is to be done  
2) A job where I make few if any decisions

I prefer:

- 61. 1) A job which does not tie me down  
2) A job where I could continue to learn the rest of my life
- 62. 1) A job where I could not be fired  
2) A job which absorbs my interests
- 63. 1) A job where I make few if any decisions  
2) A job where I solve problems no one else can
- 64. 1) A job where I could become known for outstanding accomplishments  
2) A job which requires little thinking
- 65. 1) A job which has high work standards  
2) A job where I make few if any decisions
- 66. 1) A job with short working hours  
2) A job where I solve problems no one else can
- 67. 1) A job which requires little thinking  
2) A job where my opinion is valued
- 68. 1) A job where I make few if any decisions  
2) A job where I could become known for outstanding accomplishments
- 69. 1) A job where I could not be fired  
2) A job where I could decide how the work is to be done
- 70. 1) A job which does not require a college education  
2) A job where I could continue to learn the rest of my life

**I prefer:**

- 71. 1) A job where my opinion is valued  
2) A job where I make few if any decisions
- 72. 1) A job which does not require a college education  
2) A job where I could express my ideas, talents, and skills
- 73. 1) A job which requires little thinking  
2) A job where I solve problems no one else can
- 74. 1) A job which does not require a college education  
2) A job where I could decide how the work is to be done
- 75. 1) A job where my opinion is valued  
2) A job which does not tie me down
- 76. 1) A job which does not require a college education  
2) A job which has high work standards
- 77. 1) A job which does not require a college education  
2) A job where my opinion is valued
- 78. 1) A job which requires little thinking  
2) A job which has high work standards
- 79. 1) A job which does not tie me down  
2) A job where I could decide how the work is to be done
- 80. 1) A job which does not tie me down  
2) A job where I solve problems no one else can



## WORD RATING LIST

Following is a list of words teachers may use to describe students. You are to rate yourself on each word as you think your teachers would rate you.

Be sure to describe yourself as your teachers would, not as you would describe yourself.

Read each word carefully, then decide which of the following ratings would be chosen by your teachers to describe you.

Rating Number

- |   |  |
|---|--|
| 1 | This word would <u>never</u> describe me |
| 2 | This word <u>sometimes</u> describes me  |
| 3 | This word <u>usually</u> describes me    |
| 4 | This word <u>always</u> describes me     |

After you decide how your teacher might rate you, mark the special answer sheet. Use the pencil provided and make heavy marks. Ignore column "5".

## EXAMPLE:

## Booklet

1. Happy    1    2    3    4
------------------------------

This individual has chosen the rating number "2" for the word "happy." This means that he feels that his teachers think that the word "happy" sometimes describes him.

If you have any questions, raise your hand. If not, turn to the next page and begin rating all of the words. Do Not Skip Any Words. Work as rapidly as you can and do not spend too much time on any one word. Remember, you are not to use column "5".

Ratings: 1. Never					2. Sometimes					3. Usually					4. Always				
Teachers feel that I am:					N	S	U	A		Teachers feel that I am:					N	S	U	A	
81.	patient				1	2	3	4		101.	rebellious				1	2	3	4	
82.	talented				1	2	3	4		102.	nervous				1	2	3	4	
83.	inefficient				1	2	3	4		103.	systematic				1	2	3	4	
84.	practical				1	2	3	4		104.	reckless				1	2	3	4	
85.	confident				1	2	3	4		105.	dependable				1	2	3	4	
Teachers feel that I am:					N	S	U	A		Teachers feel that I am:					N	S	U	A	
86.	logical				1	2	3	4		106.	a person who postpones				1	2	3	4	
87.	smart				1	2	3	4		107.	exacting				1	2	3	4	
88.	successful				1	2	3	4		108.	lazy				1	2	3	4	
89.	careful				1	2	3	4		109.	stubborn				1	2	3	4	
90.	thorough				1	2	3	4		110.	carefree				1	2	3	4	
Teachers feel that I am:					N	S	U	A		Teachers feel that I am:					N	S	U	A	
91.	orderly				1	2	3	4		111.	intellectual				1	2	3	4	
92.	purposeful				1	2	3	4		112.	alert				1	2	3	4	
93.	uninterested				1	2	3	4		113.	above average				1	2	3	4	
94.	studious				1	2	3	4		114.	productive				1	2	3	4	
95.	different				1	2	3	4		115.	a thinker				1	2	3	4	
Teachers feel that I am:					N	S	U	A		Teachers feel that I am:					N	S	U	A	
96.	responsible				1	2	3	4		116.	ambitious				1	2	3	4	
97.	original				1	2	3	4		117.	contented				1	2	3	4	
98.	consistent				1	2	3	4		118.	an achiever				1	2	3	4	
99.	intelligent				1	2	3	4		119.	a planner				1	2	3	4	
100.	in-the-know				1	2	3	4		120.	competent				1	2	3	4	

Ratings:		1.	Never	2.	Sometimes	3.	Usually	4.	Always		
Teachers feel that I am:		N	S	U	A	Teachers feel that I am:		N	S	U	A
121.	inconsistent	1	2	3	4	141.	intellectual	1	2	3	4
122.	teachable	1	2	3	4	142.	sociable	1	2	3	4
123.	impatient	1	2	3	4	143.	a thinker	1	2	3	4
124.	passive	1	2	3	4	144.	concerned	1	2	3	4
125.	efficient	1	2	3	4	145.	a planner	1	2	3	4
Teachers feel that I am:		N	S	U	A	Teachers feel that I am:		N	S	U	A
126.	easily dis- tracted	1	2	3	4	146.	reserved	1	2	3	4
127.	reliable	1	2	3	4	147.	easily dis- tracted	1	2	3	4
128.	serious	1	2	3	4	148.	serious	1	2	3	4
129.	smart	1	2	3	4	149.	daring	1	2	3	4
130.	successful	1	2	3	4	150.	driven	1	2	3	4
Teachers feel that I am:		N	S	U	A	Teachers feel that I am:		N	S	U	A
131.	"blah"	1	2	3	4	151.	brilliant	1	2	3	4
132.	careful	1	2	3	4	152.	aggressive	1	2	3	4
133.	thorough	1	2	3	4	153.	a leader	1	2	3	4
134.	orderly	1	2	3	4						
135.	purposeful	1	2	3	4						
Teachers feel that I am:		N	S	U	A						
136.	creative	1	2	3	4						
137.	intelligent	1	2	3	4						
138.	in-the-know	1	2	3	4						
139.	decisive	1	2	3	4						
140.	systematic	1	2	3	4						

## HUMAN TRAIT INVENTORY

Following is a list of statements about YOU. Read each statement carefully! Then decide whether this statement is how you always feel, usually feel, sometimes feel or never feel.

Number

- |   |   |
|---|---|
| 1 | This statement would <u>never</u> describe the way I feel |
| 2 | This statement <u>sometimes</u> describes the way I feel  |
| 3 | This statement <u>usually</u> describes the way I feel    |
| 4 | This statement <u>always</u> describes the way I feel     |

Answer each statement -- Do not leave any blank.

There are no right or wrong answers. The answers apply only to you. The way you answer these statements will not effect your school marks in any way. Mark between the lines under the number that best describes how you feel.

## EXAMPLE:

Booklet

1. I feel it is a good thing  
to be honest.

This individual has chosen number "2" for the statement "I feel it is a good thing to be honest." This means he feels that this statement sometimes describes him.

In marking your answers on the separate answer sheet, be sure that the number of the statement in the booklet is the same as the number on the answer sheet. It is best to mark your first impression; try not to change your answer. If you change an answer, erase completely your first choice and then blacken between the lines under the other column.

Ratings:		1. Never	2. Sometimes	3. Usually	4. Always				
						N	S	U	A
154.	I worry about my grades					1	2	3	4
155.	I have been quite independent and free from family rule					1	2	3	4
156.	When I have an opinion, I stand up for it					1	2	3	4
157.	It is difficult for me to keep interested in most of my school subjects					1	2	3	4
158.	I have difficulty working under strict rules and regulations					1	2	3	4
159.	I flirt					1	2	3	4
160.	Most of my school subjects are a complete waste of time					1	2	3	4
161.	Most of my school subjects are useful					1	2	3	4
162.	I find it difficult to find the time to study my assignment for the next day					1	2	3	4
163.	I have done something that is considered dangerous just for the thrill of it					1	2	3	4
164.	When I was a youngster, I stole things					1	2	3	4
165.	Even when I do sit down to study, I find that my mind tends to wander					1	2	3	4
166.	I have to be in the mood before I can study					1	2	3	4
167.	I like to make the best grades possible					1	2	3	4
168.	I like to study					1	2	3	4
169.	I like to plan very carefully what courses I will take in school					1	2	3	4
170.	I have played hooky from school					1	2	3	4
171.	I plan my activities in advance					1	2	3	4
172.	I want very much to be a success					1	2	3	4
173.	I work under a great deal of tension					1	2	3	4

Ratings:		1. Never	2. Sometimes	3. Usually	4. Always
		N	S	U	A
174.	I have trouble waiting for a class to be over	1	2	3	4
175.	I get disgusted with myself if I don't do as well as I should	1	2	3	4
176.	I feel that I haven't any goals or purpose in life	1	2	3	4
177.	I like to be consistent in the things I do	1	2	3	4
178.	I like to go to the movies more than once a week	1	2	3	4
179.	I would like to belong to a motorcycle club	1	2	3	4
180.	I sweat very easily, even on cold days	1	2	3	4
181.	I can read a long while without tiring my eyes	1	2	3	4
182.	A college education is unimportant to me	1	2	3	4
183.	I like fiction stories more than I do factual novels	1	2	3	4
184.	I would feel satisfied if one of my papers was read to the class in school	1	2	3	4
185.	I feel I would make a good leader if given the chance	1	2	3	4
186.	I like being with people in social gatherings	1	2	3	4
187.	I take on more work than I should	1	2	3	4
188.	I enjoy cooking	1	2	3	4
189.	While in trains, buses, etc., I strike up a conversation with a stranger	1	2	3	4
190.	At least one member of my family is very nervous	1	2	3	4
191.	I belong to a crowd that tries to stick together through thick and thin	1	2	3	4
192.	I like to keep people guessing what I'm going to do next	1	2	3	4

<b>Ratings:</b>		<b>1. Never</b>	<b>2. Sometimes</b>	<b>3. Usually</b>	<b>4. Always</b>
		<b>N</b>	<b>S</b>	<b>U</b>	<b>A</b>
193.	The questions on school tests often confuse me because I don't know what they are driving at	1	2	3	4
194.	I like large noisy parties	1	2	3	4
195.	I learn slowly	1	2	3	4
196.	It would be worthwhile to belong to several clubs or lodges	1	2	3	4
197.	I think I would like the work of a teacher	1	2	3	4
198.	I enjoy social activity	1	2	3	4
199.	I would be happier if I were able to travel around the country	1	2	3	4
200.	I feel cross and grouchy without good reason	1	2	3	4
201.	I like being with people in social gatherings	1	2	3	4
202.	I think teachers are wrong many times and won't admit it	1	2	3	4
203.	The way I do things is misunderstood by others	1	2	3	4