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# An assessment of a cooperative education program for disadvantaged youth in Boston High School, Boston, Massachusetts.

John P. Manning

*University of Massachusetts Amherst*

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AN ASSESSMENT OF A  
COOPERATIVE EDUCATION PROGRAM  
FOR DISADVANTAGED YOUTH  
IN BOSTON HIGH SCHOOL  
BOSTON, MASSACHUSETTS

by

John P. Manning

A Dissertation Submitted to the Graduate School of  
the University of Massachusetts in partial  
fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

School of Education  
Amherst, Massachusetts

January, 1973


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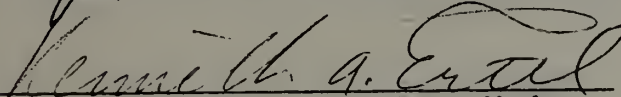
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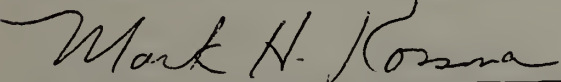
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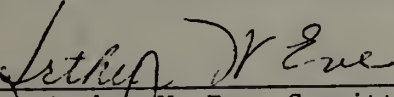
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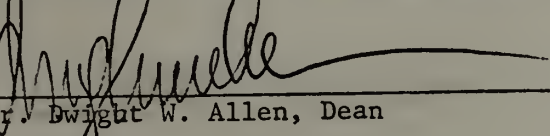
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January, 1973

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DEDICATION

This study is dedicated

to

my parents, Mr. and Mrs. George F. Manning, Sr.

and to

my brothers and sisters

George, Kenneth, Janet and Lorraine

## ACKNOWLEDGEMENTS

The completion of this dissertation and the requirements of the degree of Doctor of Education were possible because of the interest, patience, endurance and efforts of many persons. The investigator was privileged to have the support and cooperation of several individuals whose knowledge, skills, and services were invaluable to this study.

They include:

Dr. Roger Peck, Assistant Professor of Education, University of Massachusetts.

Dr. Kenneth Ertel, Associate Professor of Education, University of Massachusetts.

Dr. Mark Rossman, Assistant Professor of Education, University of Massachusetts.

Dr. Arthur Eve, Associate Professor of Education, University of Massachusetts.

Dr. Dennis Carey, Graduate, University of Massachusetts.

Dr. Charles H. Buzzell, Associate Commissioner, Division of Occupational Education, State Department of Education.

Dr. Emmanuel B. Green, Associate Professor, Boston University.

Dr. William Fitzsimmons, Director of Admissions, Harvard University.

Dr. William Grieve, The Psychological Corporation, New York, New York.

Dr. Francis X. Archambault, Jr., Assistant Professor, Boston University.

Dr. Joseph Barbeau, Associate Professor, Northeastern University.

Mrs. Ellen Winer, Instructor, Northeastern University.

Mr. Allen Chase, Graduate Student, University of Massachusetts.

Mr. Herb Custer, Graduate Student, University of Massachusetts.

Mr. Joseph L. Ippolito, Headmaster, Boston High School.

Mr. Peter Clark, Administrative Staff, Boston High School.

Miss Nancy Da Forno, Investigator's Secretary, Division of Occupational Education, State Department of Education.

Miss Jeanne Kelley, Graduate Student, Bridgewater State College.

Miss Margaret M. Callahan, Associate Director of Research and Evaluation, Boston School Department.

Staff and Faculty of the Boston High School.



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## ABSTRACT

AN ASSESSMENT OF A COOPERATIVE EDUCATION PROGRAM  
FOR  
DISADVANTAGED YOUTH IN BOSTON HIGH SCHOOL  
BOSTON, MASSACHUSETTS (January 1973)

John P. Manning, B.S.B.A., Boston College  
M.Ed., Boston University

Directed by: Dr. Roger H. Peck

### The Problem

The major objectives of this study were (1) to provide a detailed description of the significant components of Boston High School, and (2) to assess the effectiveness of the school in attaining its seven program objectives for the 1969-1971 academic years and its evaluation objectives for the 1971-1972 academic year.

### The Source of Data

Through a study of public documents, evaluation data, and personal interviews provided by the Boston Public Schools, the Department of Title I Programs, and the Office of Research and Evaluation, and Boston High School, a detailed description of the significant components of the school program was provided. This was done through the use of the case study design of research.

Using the assessment design of research, the investigator assessed the effectiveness of the Boston High School in attaining its program objectives through the use of a quasi-experimental design and statistical tests. Each objective was analyzed individually with tables and figures

illustrating the data. Separate analyses were given to the 1969-1971 and 1971-1972 academic years.

### Conclusions

- Boston High School's effort to improve attendance and tardiness was evaluated revealing that students in the Work-Study Program improved their attendance records during the first year of being enrolled in the program.
- The decline in the absence and tardiness figures throughout the three years evaluation demonstrated the increase holding power of the Work-Study Program.
- The primary failure of the Work-Study curriculum was described as the inability to provide the students with competencies needed to meet specific occupational requirements and in relating employment training and work skills to require academic subjects.
- The staff of the Work-Study Program reflected the general attitude that the students at Boston High School were lucky to be part of the program.
- The staff was described as being satisfied with the part that they played in the development of curriculum and the freedom they exercised in choosing the most appropriate type of disciplinary action.
- Students within the Work-Study Program were not always placed in jobs that interested them due to an insufficient job market.
- The curriculum offerings at Boston High School included only token courses outside of those required.

## CHAPTER I

Since the beginning of recorded history, we have had those who were disadvantaged. The federal government, mayors of large cities, and school officials in the urban centers are well aware of current problems. The American dream has become a nightmare for the disadvantaged. The job of the school is to provide meaningful and effective occupational education programs to help this group of our population become useful, productive, and self-sufficient. The solutions to these problems requires an educational program designed to make it possible for all of our people<sup>1</sup> to share in the benefits of our affluent society.<sup>1</sup>

- Richard Boss

### Background of the Problem

Cooperative education, using the term in its broadest sense of combining work and schooling, has been in existence in America since 1637. In particular, the cooperative plan of vocational education has grown rapidly over the past 25 years, and with this growth, cooperative education has left behind an illustrious past of having trained millions of youth and adults to participate successfully in the world of work. Its development has included a move from the use of the apprenticeship method in the beginning to full-time vocational schools. "However, the pressure of competition and the speed of economic life have forced the schools to assume the burden of aiding youth in their choice of occupation and providing opportunity for preparation to participate successfully in their various chosen vocations."<sup>2</sup>

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<sup>1</sup>Richard Boss, What School Administrators Should Know About Vocational Education For Disadvantaged Youth in Urban Areas, (Portland, Oregon, September, 1971 p. 20.

<sup>2</sup>Peter G. Haines and Ralph E. Mason, Cooperative Occupational Education, (Danville, Illinois, The Interstate Printers & Publishers, Inc., 1955) p. 5.

Unrelated, part-time work is still pursued by countless numbers of college and high school students every year. The related work-experience, however, is relatively new to secondary schools, particularly for certain skills. Curriculum planners, administrators, and teachers who are truly concerned with helping each child develop his abilities to his individual limits, have seized upon the work environment as a useful adjunct to the curriculum. In fact, educational institutions across the nation use the cooperative work situation as a laboratory that is expected to produce educational outcomes desired by the school. Thus, to the vocational educator of today, the job becomes an occupational laboratory, one that is controlled and supervised by the school to provide educational experiences that are not obtainable within the school itself.

#### Formalizing the Integration of School and Work Experience

It was in 1906 that Dean Herman Schneider of the University of Cincinnati began his experiment called "cooperative education" which formalized the integration of school and work experiences. His philosophy was simple: "The practice of engineering cannot be learned in a university; it can be learned only where engineering is practiced, namely, in the shop or field."<sup>3</sup> Schneider's plan was called 'cooperative education' because it was dependent upon the cooperation of employers and educators in combining to form a superior total educational program for the students."<sup>4</sup> A. Daniel Simonds of Fitchburg, Massachusetts later heard

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<sup>3</sup>H. F. Schneider, Education for Industrial Workers, (New York; World Book, 1910) p. 148.

<sup>4</sup>R. W. Woolridge, Cooperative Education and the Community Colleges of New Jersey, (New York: The National Commission for Cooperative Education, 1966) p. 1.

Schneider describe his plan and then initiated a program that became known as the "Fitchburg Plan".<sup>5</sup> The main idea of Simonds' course was to provide an opportunity for learning a trade and for obtaining a general education at the same time. Other schools followed the lead of the Fitchburg Plan and in 1917 the first cooperative education program was initiated at Hyde Park School in Boston.

### The Advantages of Cooperative Education

Historically and currently cooperative education programs have been geared to reach or attract noncollege-bound youth. The general intent has been to provide orientation to the world of work, to relate in-school learning with on-the-job training and to prepare students for entry-level jobs in the world of work.<sup>6</sup>

A major advantage of cooperative education has been that slow learners can benefit directly from experience. They have had the opportunity to experience success in a suitable work situation under planned supervision. Since students in cooperative programs were paid, the new programs attracted many students from working families to attend college. In fact, it has been documented that about one-third of the cooperative students and graduates come from the lowest socio-economic third of our population.<sup>7</sup>

At the secondary level, as previously noted, cooperative education was first introduced into the public schools of Fitchburg only two years

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<sup>5</sup>Matthew McCann, "The Fitchburg Plan of Cooperative Education" U.S. Bureau of Education Bulletin, 1913, No. 50, p. 2.

<sup>6</sup>C. W. Park, "The Cooperative System of Education" U.S. Bureau of Education Bulletin, 1916, No. 37, p. 7.

<sup>7</sup>Ibid., p. 16.

after it began in Cincinnati. It was conceived as a program for the disadvantaged, designed and used by the school department and industries of Fitchburg to keep students in high school. It has appeal for potential dropouts because of the program's earning power and the increased motivation provided by seeing immediate application of those principles learned in school.<sup>8</sup> As Schneider said, "There is in every individual a desire for self-expression, and if this cannot be had in one's work, nature will force another outlet for it."<sup>9</sup>

In New York City, since a decline in cooperative student placement during the depression, the interest in cooperative education has grown enormously. By 1955 thirty-three high schools were offering cooperative courses to over 4,000 students.<sup>10</sup> Educators cited not only the holding power of "co-op" but the development of healthy personal characteristics and the program's guidance aspects as well. The fact that cooperative students were able to remain in school because of this earning power and that the community had a program economical to operate contributed to the value of the program.

Meeting the guidance and career development needs of students have been cited as advantages of the cooperative work experience. This has allowed for a vital and realistic career exploration that may not have been possible in normal classroom situations.<sup>11</sup> Cooperative education,

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<sup>8</sup>McCann, *The Fitchburg Plan*, p. 2.

<sup>9</sup>Schneider, *Education for Industrial Workers*, p. 147.

<sup>10</sup>Grace Brennan, "Cooperative Education in New York City", *NEA Journal* XLIV, (May, 1955) p. 303-304.

<sup>11</sup>Ralph Tyler & Annice Mills, "Report on Cooperative Education: Summary of the National Study" T.A. Edison Foundation, NYC, 1961, p. 2.

therefore, has been advocated as an opportunity to observe occupational pursuits and to determine which one is most suitable to the needs, interests and abilities of students. In addition, many cooperative programs have been designed as an adjunct to a school's counseling services.<sup>12</sup>

The opportunity for guidance was one of the values that Schneider recognized and it has been amplified in every cooperative program since his time.<sup>13</sup> The initial introduction of the student into the world of work allowed him to see for himself what he liked and what he disliked about various kinds of work. In addition it gave him the opportunity to test his value system against that in operation in the business community and further helped the student to become a participating member of the adult society. Erikson, Havighurst, Keniston and others have addressed themselves to the importance of satisfactory developmental patterns in young adults and adolescents. Without a satisfactory adjustment it was noted that the result is often alienation or, in extreme cases, juvenile delinquency.

#### The Founding of Boston High School

In response to pressing concerns, the cooperative-oriented Boston High School was founded in April 1966 with an enrollment of 35 students. Conducted for its first two years in 14 different classroom locations in Boston's Title I poverty areas, Boston High School opened the doors of its permanent home at 332-334 Newbury Street, Boston, in September, 1968.

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<sup>12</sup>C. L. Reeve, "Work Study Programs" Journal of Secondary Education XXXIX, January, 1964, p. 38-42.

<sup>13</sup>Ibid, pp. 38-42.

Its present name and diploma granting powers were formally conferred on January 31, 1969.

Boston High School is a cooperative educational institution designed to meet the needs of disadvantaged students. The program is divided between academic study and work experience, with three and a quarter hours of classroom instruction and a minimum of four hours on the job in the business community.

Seven major program objectives have been identified by Boston High School authorities as crucial to the school's success:

1. Improve attendance and punctuality.
2. Provide a program of instruction that will improve pupil retention.
3. Identify potential dropouts.
4. Improve academic achievement.
5. Provide remedial instruction in reading, English usage and mathematics.
6. Provide motivation through job opportunities and job experience.
7. Develop salable skills and desirable attitudes required in employment.

Focused on these program objectives, Boston High School enrolled approximately 600 students during the academic year 1971-1972.

The present study concentrated on providing a detailed description of the significant components of Boston High School and an analysis of these components. An assessment of the school's effectiveness in meeting its seven program objectives were presented and implications both for Boston High School and for the cooperative education of disadvantaged youth in general were delineated.



### Statement of the Problem

The major objectives of this study were (1) to provide a detailed description of the significant components of Boston High School, and (2) to assess the effectiveness of the school in attaining its seven program objectives for the 1969-1971 academic years and its evaluation objectives for the 1971-1972 academic year. The specific purposes of the study were as follows:

1. Through a study of public documents, evaluation data, and personal interviews provided by the Boston Public Schools, the Department of Title I Programs, and the Office of Research and Evaluation, and Boston High School provide a detailed description of the significant components of the school program:
  - a. Provide a brief history of the institution's historical development.
  - b. Determine the student selection criteria and the overall characteristics of the student body and the staff.
  - c. Delineate the content and coordination of both the curriculum and the work phase of the program.
2. Through an analysis and synthesis of the data obtained from the same sources, assess the effectiveness of the school in attaining its program objectives:
  - a. Through use of a quasi-experimental design and appropriate statistical tests, determine the effectiveness of the school in positively affecting the students' attendance and punctuality.
  - b. Through use of a quasi-experimental design and appropriate statistical tests, determine the effect of Boston High School on the dropout rates of its students.
  - c. Through use of the pre-test-post-test quasi-experimental design and appropriate statistical tests, determine the effect of the school on the academic achievement of its students by using the California Test of Basic Skills; further assess academic achievement by using Performance Objectives of the normal instructional sequences constructed by the teachers and/or the academic departments of Boston High School.

- d. Through use of non-standardized attitudinal questionnaires and interview schedules determine the effect of the school on its students, as measured by the students' motivation resulting from job opportunities and job experience.
  - e. Through use of non-standardized attitudinal questionnaires and interview schedules determine the effect of the school through responses obtained from the faculty and administration at Boston High School, the parents of the Work-Study students, and the job supervisors and company executives who sponsor the Work-Study students in their job situations.
3. Through on-site observations made by the investigator and through various unobtrusive measures such as informal discussions with the staff of Boston High School and others connected with it, agencies which dealt with it, and proposals generated in regard to its quest for Title I assistance determine the degree to which it is accomplishing its program objectives.
  4. Through an analysis and synthesis of the findings resulting from the procedures in preceding parts 1-3 develop conclusions concerning the effectiveness of the school's attainment of its program objectives. These conclusions were based on emergent patterns rather than on specific or isolated instances.
  5. From the conclusions developed from the study, recommendations have been constructed relating to the applicability of Boston High School to the overall issue of cooperative education for disadvantaged youth.

#### Definition of Terms

The Disadvantaged - For the purposes of this study, a good definition of the disadvantaged was delineated in the Federal Register, Volume 35, of May 9, 1970: "...persons who have academic, socio-economic, cultural or other handicaps that prevent them from succeeding in.....programs designed for persons without such

programs or services result from poverty, neglect, delinquency or cultural or linguistic isolation from the community at large, but does not include physically or mentally handicapped persons..” Specifically this study employed the following additional criteria, as defined by Boston High School: Elementary school graduates, ninth grade junior high school students, senior high school students, or high school dropouts in Boston's Elementary and Secondary Education Act Title I areas who, generally, can be identified by the following characteristics:

1. Male students must be 15 years of age by October 1 of the school year in question. Female students must be 16 years of age by October 1 of the school year in question.
2. The student must have a minimum I.Q. of 80.
3. The student must have serious reading problems - two to four years below grade level.
4. Students must have repeated at least one grade.
5. The student must have a poor attendance record, defined as:
  - a. absences of more than twenty days for the previous year,
  - b. excessive tardiness - more than fifteen days tardy in the previous year,
  - c. repeated truancy - defined as at least five instances of truancy in the previous year,
6. The students must have no history of physical or emotional disability.
7. Students must be "turned off" by the more traditional forms of schooling in other Boston High Schools.

Boston High School - A cooperative program, located at 332 and 334 Newbury Street, Boston, Massachusetts, designed to answer Boston's drop-out problem with disadvantaged youth. It is a cooperative work-study program, a typical day consisting of one-half day of classroom education combined with one-half day of work experience

in the business community.

Cooperative Education - Cooperation education has perhaps been defined as an "integration of classroom work and practical industrial experience in an organized program under which students alternate periods of attendance at college with periods of employment in industry, business or government."<sup>14</sup> This definition applies equally well to the secondary schools if the word "school" is substituted for the word "college". There are other definitions of cooperative education available but their emphasis is substantially the same. In more recent years the definition has been expanded to include many kinds of unrelated work and cultural and other educational experiences, all of which are representative of Boston High School's Cooperative education program.

Work-Study Program - Until 1963 "work-study" had been a synonym for cooperative education. Since then, however, it has come to mean a kind of federal financial assistance program that provides funds to subsidize the wages of high school and college students working in non-profit organizations.<sup>15</sup>

Cooperative Work-Study Education - This term was used in the Vocational Education Act of 1963 and its amendments of 1968, and is defined to encompass the many types of work experience programs

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<sup>14</sup>Henry H. Armsby, "Cooperative Education in the United States", U.S. Office of Education Bulletin, 1954, No. 11, p. 4.

<sup>15</sup>Joseph E. Barbeau, "The Spirit of Man: The Educational Philosophy of Dean Schneider", Journal of Cooperative Education, VII, May 1970, p. 1-2.

in use in secondary vocational schools.<sup>16</sup>

Commercial Cooperative Education - A type of cooperative education program designed to teach office skills.

Distributive Cooperative Programs - A cooperative education program designed to operate in the field of merchandising and other areas involved in the distribution of goods.

Industrial Cooperative Programs - A cooperative education program designed to teach "manipulative skills in trade, industrial and technical vocations."

Diversified Occupations - A program which encompasses a wide range of occupational skills, usually on a part-time basis.

Cooperative Vocational Education - The technical term used to describe a program of part-time related work and vocational education.

Occupational Education - A term used to identify programs that provide part-time work and remedial classroom instruction for prospective high school drop-outs.

Work Experience Education - A generic term that includes cooperative education and is generally taken to mean any work program that operates "during school hours as a part of the regular school program."<sup>17</sup>

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<sup>16</sup>H. R. Wallace, Review and Synthesis of Research on Cooperative Vocational Education. (Columbus, Ohio, 1970), p. 7.

<sup>17</sup>M. D. Hunt, "Educating for the World of Work:", Education Leadership XXII, Jan. 1965, p. 221-225.

### Assumptions in the Study

The assumptions in the study were as follows:

1. Respondents would be candid and honest in their answers to questions concerning the strengths and weaknesses of the various aspects of the Boston High School program.
2. Respondents would react to attitudinal instruments in terms of their own attitudes at the time of responding to the items.
3. General information, informal assessments, and data provided by the staff of Boston High School would be both valid and reliable.
4. Boston High School would provide a generalizable case study for exploring a cooperative education program for disadvantaged youth.

### Limitations of the Study

The limitations of the study have been identified as follows:

1. This study was concerned with only the information available to the investigator and judged to be important to the stated objectives of the investigation.
2. As a whole, this study was limited to Boston High School during the period from September 1969, to June 1972. The assessment of the program objectives of the school was limited primarily to the approximately 600 students enrolled at Boston High School for the academic year 1971-72. Therefore, generalities deduced from this limited time period are somewhat limited in scope.
3. For data on academic achievement, the use of pretest-post-test quasi-experimental design had a number of limitations. As there were insufficient numbers of students available to comprise a control group for academic achievement comparisons, all findings were

interpreted with caution. Possible gains that were found could be due to (1) Boston High School's particular program; (2) simply the fact that some change in the traditional educational process had been made and the students therefore were reacting positively to the special attention paid them, rather than to the specific program components of Boston High School, and (3) normal maturation on the part of the students. Therefore, the findings and analysis for academic achievement should be viewed tentatively.

### Design of the Study

This study utilized two types of designs: (1) a case study method and (2) a multifaceted assessment design. These methods as they were used in the study are described in the following sections:

#### Use of the Case Study Method

Data from varying unobtrusive sources were analyzed in order to describe the significant components of Boston High School. As stated previously, this was the first objective of the study.

Data from public documents, evaluation materials and personal interviews provided by the Boston Public Schools, the Department of Title I Programs, the Office of Research and Evaluation, as well as by Boston High School itself were utilized. Also of importance were interviews with Joseph L. Ippolito, Headmaster of Boston High School, and his staff, and evaluation materials collected by independent investigators for the school's academic years 1969-70 and 1970-71. The 1969-70 data was collected by F. X. Archambault, J. S. Renzulli and D. H. Paulus. Their report was entitled "An Evaluation of the Boston High School Work-Study Program 1969-70. The 1970-71 report, "Evaluation of the Boston High School Work Study Program 1970-71, was written by F. X. Archambault and

J. S. Renzulli. Both were submitted to the Department of Title I Programs, Elementary and Secondary Education Act, Boston, Massachusetts.

In addition, evaluation data for the 1971-72 school year was collected by the Psychological Corporation of New York, and submitted to the Boston Public School System in cooperation with the Department of Title I Programs Office of Research and Evaluation.

Included in this section is a brief history of Boston High School's development through June, 1971; a delineation of the criteria for student selection and a description of the overall characteristics of the student body and the staff; and a description of the content and coordination of both the curriculum and the work phase of the program.

The data obtained from the aforementioned sources were analyzed and synthesized, and are presented in narrative form. The resulting narration provides a background for the second phase of this study, which is the assessment of the program objectives.

#### The Use of the Assessment Design

The second objective of the study incorporated a multi-faceted assessment design. Several assessment approaches were used to determine the effectiveness of Boston High School's accomplishment of its program objectives. The objectives and methods are as follows:

##### Program Objective I-- Improve attendance and punctuality.

Assessment procedures used: Through use of a quasi-experimental design and appropriate statistical tests, the effectiveness of Boston High School in positively affecting its students' attendance and punctuality was determined. Comparable students from other schools in the Boston system were employed for purposes of comparison. Data were analyzed by



grade level, and sex. Official attendance and tardiness figures for the schools were made available through school visits, telephone contacts, and mailings and generously provided by Boston High School's headmaster, Joseph Ippolito.

Program Objective II -- Provide a program of instruction that will improve pupil retention.

Assessment procedures used: Through use of a quasi-experimental design and appropriate statistical tests the effect of Boston High School on the drop-out rates of its students, was determined. Comparable students from other Boston high schools were used for purposes of comparison. The procedures and the instrumentation employed for the purpose of collecting data on this particular program objective is presented in a later section of this report.

Program Objective III -- Identify potential drop-outs.

Assessment procedures used: The identification and characteristics of the potential school drop-out as well as the selection criteria established by the Boston High School personnel was presented in the case study section. Also included in the assessment section of this study was a brief reiteration of how potential school drop-outs are identified and how the characteristics of the potential drop-outs are analyzed in light of their acceptance into Boston High School's educational program. Identification of potential school drop-outs was made available and submitted to the Boston High School staff through reports and recommendations submitted by school principals, guidance counselors, social workers, truant officers and local authorities.

Program Objective IV -- Improve academic achievement.

Assessment procedures used: Through use of the pre-test-post-test quasi-experimental design and appropriate statistical tests, the effect of Boston High School on the academic achievement of its students by using the California Test of Basic Skills was determined. Form W of this standardized test was used for the pre-test, Form X for the post-test. Mathematics, reading and language skills were measured also. Academic achievement was further assessed by using performance objectives of the normal instructional sequence constructed by the teachers and/or the academic departments of Boston High School. The subject areas of English, Mathematics, Social Studies and Business Education were assessed for student achievement.

Program Objective V -- Provide remedial instruction in reading, English usage, and mathematics.

Assessment procedures used: In order to determine the extent to which the Work-Study staff accomplished this particular program objective, the Stanford-Achievement Test was administered in pre-test-post-test sessions and measured achievement in the areas of arithmetic computations, arithmetic concepts, and arithmetic applications. Pre-test and post-test administrations in language arts and reading were also used as previously mentioned.

Program Objective VI -- Provide motivation through job opportunities and job experience.

Assessment procedures used: Through use of non-standardized attitudinal questionnaires and interview schedules the effect of Boston High School on its students' motivation resulting from job opportunities and job experience was determined. Of particular importance were the interviews

with the students both in the school and on-the-job, interviews with faculty and administrators at the school, and interviews with both management and supervisory personnel of participating businesses, interviews with parents, and data concerning recent graduates of the program.

Program Objective VII -- Develop salable skills and desirable attitudes required in employment.

Assessment procedures used: Through use of non-standardized attitudinal questionnaires and interview schedules, the effect of Boston High School on its students' salable skills and desirable attitudes required in employment were determined. As with the assessment of the previous program objectives, interviews with students, faculty, administration, employers, and parents were employed.

"Unobtrusive" Measures used: Various unobtrusive measures were used in the study for the purpose of supplementing the data obtained from the assessment procedures described above. The unobtrusive measures included (1) on-site informal observations by the investigator, (2) informal discussions with the staff of Boston High School and others connected with it, (3) agencies which dealt with it, and (4) proposals generated in regard to its quest for Title I assistance. Data from all the above sources were analyzed and synthesized, and conclusions drawn on the basis of emergent patterns rather than specific or isolated instances.

Organization of the Dissertation

In Chapter I of the dissertation, the problem of cooperative education for the disadvantaged has been described and its background given. The design of the study, its limitations and its significance were also presented. Chapter II will include a review of the literature on

cooperative education. In Chapter III will be a description of the significant components of Boston High School, including student selection criteria, overall characteristics of the student body and staff, and content and coordination of both the curriculum and work phases of the program. Chapter IV will describe the methodology used for measuring the the effectiveness of Boston High School in attaining its program objectives. In Chapter V will be a presentation and analysis of the data gained through the assessment procedures used in the study. Chapter VI will include the summary and conclusions.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

In Chapter I, the problem was described and its background provided. The limitations of the study were declared, terms were defined, the design of the study was set forth, and the significance of the study was discussed. This chapter includes a review of the literature on cooperative education both in general and as it relates to disadvantaged youth in particular. A general historical background from the beginning of cooperative education to the year 1906 will be presented as the introductory segment. Further elaborated is the 1906-1917 era and the work of Herman Schneider with cooperative education as a formal integration of school and work experiences. The Smith-Hughes Act of 1917 and its impact on cooperative education, the Depression, the George-Deen Act, World War II, the post-war period, and the Vocational Education Act of 1963 are also included, as significant considerations in the development of cooperative education. An explication of a wide variety of factors which have led to the success of cooperative in general and its specific application to disadvantaged youth who are actual or potential drop-outs will follow. The area of self-esteem as related to school drop-outs is also highlighted. Finally, the need for a cooperative education program, such as that in existence at Boston High School, will emerge as the most important consideration in the chapters that follow.

## Historical Background of Cooperative Education to 1906

Cooperative education has been in existence since 1637, with skills necessary for a trade or occupation originally being taught by the apprenticeship or "guild" method. An apprentice often learned at the feet of the master craftsman, who in many cases was his father.

As civilization became more complex and skills required greater depth of knowledge, master craftsmen founded schools to teach their trade. The guild system, however, continued virtually unchanged until the Industrial Revolution of the nineteenth century, when "mass production" of consumer goods became a reality. Today, there are vestiges of the apprentice system still in operation, but the system is vastly different from that practiced before 1900.

Movements sought to include more education and to lengthen the number of years spent in school; they were popular around the turn of the century. Coupled with more stringent child labor laws, they eventually led to industries developing apprenticeship programs that were open only to students who had reached the age required for leaving school. Apprentice training for students who wished to remain in school was non-existent, except for a few programs included in the Manual Labor School Movement designed to help students to earn a living without having to leave school. The idea of relating work and school in some kind of total preparation for adulthood was a concept that educators were not ready to accept. School and work were to be kept separated. It was apparent that traditional English views of a secondary education had not given way to the more practical directions that utilitarian educators desired. Secondary education was still primarily considered as preparation for college entrance even though industry required ever-increasing numbers of

skilled workers.<sup>18</sup>

Cooperative Education: 1906-1917

Cooperative education, the system of education that integrates classroom instruction with regular periods of outside work experience, began at the University of Cincinnati in 1906.<sup>19</sup> In that year, Herman Schneider, dean of the university, began what was called at that time an experiment: "cooperative education."

Schneider's primary thrust was the integration of school and work experiences. His philosophy was as follows:

The practice of engineering cannot be learned in a university; it can be learned only where engineering is practiced, namely, in the shop or field. The theory underlying the practice may be obtained outside of the university, but can best be obtained in an organized system of instruction under skilled teachers.<sup>20</sup>

The program was called cooperative education because "it was dependent upon the cooperation of employers and educators in continuing to form a superior total educational program for the students."<sup>21</sup>

The year after Schneider began his cooperative course in Cincinnati, Daniel Simonds of Fitchburg, Massachusetts, attended a meeting of metal trades manufacturers in New York City and heard Dean Schneider describe his plan. Upon his return to Fitchburg, Simonds discussed the idea of a similar plan for the local school with the school's superintendent. After careful consideration, the city council, school department and

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<sup>18</sup>Whitehead, Aims of Education, pp. 17-38.

<sup>19</sup>Armsby, Cooperative Education, No. 11, p.4.

<sup>20</sup>Schneider, "Industrial Workers", pp. 395-405.

<sup>21</sup>Woolridge, Community Colleges, p. 1.

employers decided to adopt the plan as presented by Schneider.<sup>22</sup> The program, which began in September, 1908, was such an immediate success that it became known as the "Fitchburg Plan."<sup>23</sup> It was further documented that "the main idea of the course was to provide an opportunity for learning a trade and obtaining a general education at the same time."<sup>24</sup>

Conceived as a program for the disadvantaged, this program of cooperative education was used by the school department and local industries as a means of keeping the Fitchburg students in school. The program had appeal particularly for the potential drop-out because of the earning power it provided for the students as well as the ease of adaptability in applying those principles learned in the classroom to the actual work experiences.<sup>25</sup> By 1913, only five years after the Fitchburg Plan was first tried, there were similar programs in schools in Rhode Island, New York, Pennsylvania, Ohio, Illinois, Indiana and Wisconsin.<sup>26</sup> Not all of these were public schools. In St. Louis, for example, the Metal Trades Association worked with the public schools as they had done in Fitchburg. In Cleveland, Ohio, the Y.M.C.A. organized a part-time cooperative program, and in Rochester, New York, it was the Chamber of Commerce that first established a cooperative program. The "Fitchburg Plan", however,

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<sup>22</sup>McCann, "The Fitchburg Plan," p. 2.

<sup>23</sup>F. A. Halsey, "Cooperative Education at Fitchburg" American Machinist, XXXIII, January 20, 1910. pp. 123-124.

<sup>24</sup>McCann, "The Fitchburg Plan," p. 2.

<sup>25</sup>H. F. Schneider, "Notes on the Cooperative System" Engineering Education, XVIII, June, 1910, pp. 395-405.

<sup>26</sup>"Cooperative Industrial Causes", Special Features in City School Systems, U. S. Office of Education Bulletin, 1913, No. 31, pp. 10-20.



established the precedent for control of the cooperative program by the public school authorities, a concept that Schneider likewise promoted, and soon all of the private secondary cooperative education programs were taken over by school departments.

Perhaps the greatest success for cooperative education in the secondary schools came in 1915 when ten high schools in New York City began cooperative courses with some sixty-three employing firms involved. This experiment was the result of three years' work by Dean Schneider, who had recommended the inauguration of such a plan after he conducted a survey in New York's public schools. Schneider's study was part of a larger study of industrial education in that city conducted by Professor Paul Hanus of Harvard. The importance of this experiment for cooperative education was due not only to the size and prominence of the school system in which it operated but also to the diverse ways in which the cooperative plan was used. Students were employed in clerical work, selling and dressmaking, in addition to the machine shops. This wide application of the principles of cooperative education set the stage for even further expansion; the employment of students in these programs had already reached a pre-war peak in the 1932-33 school year of 3,069 enrollees.<sup>27</sup>

In summary, cooperative education programs that were begun during the years 1906-1917 were primarily aimed at keeping students in school. The efforts of Schneider that led to the development of the "Fitchburg Plan" sparked the initial expansion of cooperative education programs until the passage of the Smith-Hughes Act of 1917 which provided

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<sup>27</sup>Regents of the State of New York, Education for Work, (New York: McGraw-Hill, 1938).

legislation for a greater broadening of the total "cooperative concept" as well as more and better programs.

### The Smith-Hughes Act of 1917

With the passage of the Smith-Hughes Act, vocational education came into its own. It was soon realized that this act could be used to subsidize the salaries of teacher-coordinators in cooperative programs.

Although many school districts developed their own cooperative offerings with this assistance, none utilized the Smith-Hughes Act to the extent that the Southern States Office of Education did.<sup>28</sup> With the stimulus provided by this legislation, half-day alternating cooperative vocational programs were begun in both junior and senior high schools in the Southeast, particularly in Florida and Mississippi.<sup>29</sup> Although several intermediate surveys had revealed rapid expansion of cooperative education programs, a survey by Rakestraw in 1928 showed that there were seventy-eight secondary schools in twenty-one states with some form of cooperative program. Only four years later, in 1932, this number had climbed to 167 secondary schools.<sup>30</sup>

It was apparent at the passage of the Smith-Hughes Act that high school cooperative programs would have great appeal to potential drop-outs. It was noted in the city of Pittsburgh, for example, that one-hundred students who had left school were returned by a part-time vocational cooperative program during its first year of operation.

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<sup>28</sup>L. F. Smith, "Cooperative Education in the United States", Doctoral Dissertation, University of Chicago, 1943, p. 81.

<sup>29</sup>Charles M. Arthur, "Cooperative Plan", School Life, XIX, March, 1943, p. 153.

<sup>30</sup>William T. Bawden, United States Office of Education Bulletin, No. 25, 1919, p. 3.

In a 1919 U.S. Office of Education publication on vocational education, the author describes the advantages of the cooperative plan:

In considering the advantages of the cooperative plan in the high school it is necessary to recognize that the first appeal is made to boys and girls not now in school--to those who, because of economic necessity or indifference, have left school to go to work or to loaf...

In the next place, a strong appeal is made to many boys and girls who are in high school at the cost of much real sacrifice and self-denial. If some way can be found to meet a part of the cost they can and will remain in school.

Again, some lessons can be learned only through practical experiences in the ways of the world. Some of these lessons include the proper relation between the material and spiritual phases of life, the meaning and value of money, the meaning of work and wages, and the relation between them, the importance of life motives. The cooperative plan is a contribution to the solution of some of the problems involved.<sup>31</sup>

As cooperative education spread to more and more secondary schools, more children of the larger inner cities turned to this kind of program and remained in school to graduate. With eventual expansion of cooperative programs throughout the country, the impact of the Smith-Hughes Act and the benefits it provided educators were soon seen as providing an ideal educational component that would not only help eliminate the drop-out problem but serve the educational needs of an even larger number of disadvantaged youth as well.

#### The Depression, The George-Deen Act and World War II

During the depression, employment for cooperative students dropped off sharply. Following the initial effects of the depression, however, employment rose again and served to strengthen and clarify some of the benefits of the cooperative plan. To increase further opportunities for young people, the George-Deen Act provided funds for a Diversified

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<sup>31</sup>William T. Bawden, U.S. Office of Education Bulletin, No. 25, 1919.

Occupations Program which expanded cooperative education to include a broad spectrum of skills requiring part-time employment.<sup>32</sup> One of the chief arguments in favor of cooperative education during this period was the fact that cooperative positions did lead to permanent employment. A study of graduates of the New York high schools' cooperative program for the six previous years showed that 51 percent were still employed in 1935.<sup>33</sup> At a time when unemployment was rampant, this percentage spoke well for cooperative education.

It was during the depression that another application of cooperative education for the disadvantaged commenced. Under the Indian Reorganizations Act of 1934, the WPA and other agencies of the Federal Works Projects Administration organized a cooperative program of education for Indian children in elementary and secondary schools. This program, begun in the Fort Sill Indian School, Comanche County, Oklahoma, stressed the social aspects of cooperative education. "While this program...provided specialized vocational training, it also sought the development of responsibility and qualities of leadership."<sup>34</sup> This program, or modifications of it, was adopted at several of the Bureau's Indian Schools in the years preceding the outbreak of World War II.

As World War II approached, the cooperative part-time diversified

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<sup>32</sup>B. F. Davis, "A Diversified Occupational Program: Its Origin, Establishment and Operation" Journal of Business Education, XIII, June, 1938, pp. 11-12.

<sup>33</sup>L. S. Chadwick and E. L. Osgood, "Do Co-Ops Jobs Lead to Permanent Employment" Occupations, XVI, October, 1937, pp. 70-71.

<sup>34</sup>H. J. Wharton, "Cooperative Education in Government Indian Schools", School and Society, 1940, Vol. 51, pp. 385-386.

occupations programs by 1940 had grown "from a few programs in 1934 to more than 600 at the close of the last school year."<sup>35</sup> It had spread from coast-to-coast, and during the war provided a source of war-time employment for office boys, clerks, typists and others from the business education and vocational departments of many high schools.<sup>36</sup> In an article written by Legg and Jessen entitled "School and Work Programs" it was emphasized that "work outside of school hours and cooperative work-study programs of a vocational character were probably the two most significant methods by which high school students secure work experience."<sup>37</sup> As the population continued to drift from the rural to the urban areas, the amount of work experience that young people possessed decreased sharply. Cooperative education became one way of providing this much-needed occupational experience.<sup>38</sup>

During World War II the number of work-study programs more than doubled spurred by a manpower shortage. In fact, if the effects of the George-Deen Act are included, the number of work-related programs in secondary schools increased ten times in the ten years after passage of that legislation. Not all states benefited equally. Since these federal funds usually required matching state funds, some states showed more growth in secondary cooperative education than others. Those that did

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<sup>35</sup>C. E. Rakestraw, "Cooperative Part-Time Diversified Occupations Program" Occupations, XVIII, March, 1940, pp. 403-406.

<sup>36</sup>Jesse Graham, "Quarter Century Mark in Cooperative Training" National Business Education Quarterly, XII, May, 1944, pp. 62-64.

<sup>37</sup>C. E. Legg, and others, "School and Work Programs" U.S. Office of Education Bulletin, 1947, No. 9.

<sup>38</sup>W. H. Ivins, "Status of High School Work Programs After the War Terminates", School Review, LV, December, 1947, pp. 605-609.

display noticeable growth included California, Florida, Michigan, Minnesota, and New York.

### Post-World War II

The George Barden Act of 1946 provided funds for additional development of the original Smith-Hughes Act and even further expanded its scope. Finally in 1958 the National Defense Act (Title VIII) authorized appropriation of funds to support programs limited exclusively to the training of highly skilled technicians in recognized occupations necessary to the national defense.<sup>39</sup>

Two related acts also are of importance to the historical background of cooperative education. The Area Redevelopment Act of 1961 recognized a critical function of vocational education for persons unemployed and underemployed in economically distressed areas. Identification and training of such persons was provided in the Act. The Manpower Development Training Act of 1962 provided further funding for training and skill development programs. Finally, passage of the Vocational Education Act of 1963 established significant milestones in the area of vocational education with particular emphasis on cooperative education.

### The Vocational Education Act of 1963

The Vocational Education Act of 1963 was passed by Congress on December 13, 1963 and signed into law on December 18, 1963 by President Lyndon B. Johnson. It marked the beginning of a major re-emphasis on vocational education and designated six purposes for which federal funds could be used. These purposes are listed as follows:

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<sup>39</sup>Education for a Changing World of Work, U.S. Department of Health, Education and Welfare, Office of Education, 1963, OE-80021.

1. Vocational education for persons attending high school.
2. Vocational education for persons who have completed or left high school and who are available for full-time study in preparation for entering the labor market.
3. Vocational education for persons who have already entered the labor market and who need training or retraining to achieve stability or advancement in employment.
4. Vocational education for persons who have academic, socio-economic or other handicaps that prevent them from succeeding in the regular vocational education program.
5. Construction of area vocational education school facilities.
6. Ancillary services and activities to assure quality in all vocational education programs, such as teacher training and supervision, program evaluation, special demonstration and experimental programs, development of instructional materials, and state administration and leadership, including programs and services in light of information regarding projected manpower needs and job opportunities.<sup>40</sup>

Cooperative education benefited directly from the Act. Generally, cooperative education was set up under the Act to meet the needs of all students and to insure vocational educational opportunities for all.

Employment arrangements for students were conceived as formal extensions of in-school instruction; a method of instruction which provided relevant laboratory experiences in a real-life setting. This plan for utilizing community learning stations was encouraged as being a highly effective technique of meeting individual student needs. It gained prominence and Congressional support when the National Advisory Council on Education reported:

The part-time cooperative plan is undoubtedly the best program we have in vocational education. It consistently yields high placement records, high employment stability, high job satisfaction.<sup>41</sup>

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<sup>40</sup>"Vocational Education: The Bridge Between Man and His Work", General Report of the Advisory Council on Vocational Education, 1968, p.14.

<sup>41</sup>Ibid., p. 10.

The Council further observed:

Usually, many more students apply than can be accepted; this leads to rejection of the students who need it most.<sup>42</sup>

These findings led to a further development of cooperative education programs which aided in (1) the continuation and expansion of the current effort, and (2) the involvement of more disadvantaged youth.<sup>43</sup>

The Vocational Education Act of 1963 was amended in 1968 and provisions for funding were made available only to those particular cooperative programs which satisfied the following definition:

The term 'cooperative work-study program' means a program of vocational education for persons who, through a cooperative arrangement between the school and employers, receive instruction, including required academic courses and related vocational instruction by alternation of study in school with a job in any occupational field, but these two experiences must be planned and supervised by the school and employers so that each contributes to the student's education and to his employability. Work periods and school attendance may be on alternate half-days, full-days, weeks, or other periods of time in fulfilling the cooperative work-study program.<sup>44</sup>

In order to better clarify the definition of "cooperative work-study" as set forth by the Council, the following terms were extracted from the 1971 Resource Manual on Cooperative Education published by the U. S. Department of Health, Education and Welfare, Division of Vocational and Technical Education. They are defined as follows:

Cooperative arrangement - means an arrangement between the school and an employer, evidenced by a documented training agreement, to provide instruction and experience in accordance with student-trainee needs.

Employer - means one who provides on-the-job instruction to student-trainees who are legally employed part-time or full-time, depending upon the schedule of alternation; and from whom student-trainees receive compensation.

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<sup>42</sup>Ibid., p. 10.

<sup>43</sup>P. H. DesMoines "New Developments of Occupation Training and Vocational Education" Balance Sheet, XLVI, September, 1964, pp. 21-33.

<sup>44</sup>"Resource Manual 71 for the Development of Cooperative Vocational Education Programs, (P.L. 90-576) U.S. Department of HEW, 1971, p. 26.



Required academic courses - means those courses designed for the general student body and normally required for graduation; such courses are not to be included in determining reimbursement.

Related vocational instruction - means in-school courses specifically designed to improve personal social skills, provide needed basic education (remedial), and/or develop relevant occupational skills and knowledges; such courses deemed essential in determining reimbursement. An academic course deemed essential for occupational preparation may be recognized as related vocational instruction if the course is specifically organized to meet the needs of cooperative vocational education students.

Alternation of study in school with a job - means the scheduling of employment, as part of the student-trainee's class load, in any time sequence that will assure adequate preparation in meeting qualifications for full-time employment; school credit is granted for the employment period.<sup>45</sup>

Provisions were also made for funding under two parts of the Act, (Parts B and G). Part B covers the State Vocational Education Programs while Part G provides for Cooperative Education Programs.<sup>46</sup> A comparative analysis follows:

<u>Part B</u>	<u>Part G</u>
<u>State Vocational Education Programs</u>	<u>Cooperative Vocational Education Programs</u>
<p>1. Money appropriated under Part B and allotted to the states may be expended for cooperative education programs.</p> <p>2. Purpose: To provide on-the-job work experience related to the student's course of study and chosen occupation.</p> <p>3. Students Served: Individuals who desire and need such education and training in all communities of the state.</p>	<p>1. Money appropriated under Part G and allotted to the states shall be expended for developing new programs of cooperative education.</p> <p>2. Purpose: To provide on-the-job work experience related to the student's course of study and chosen occupation.</p> <p>3. Students Served: Individuals who desire and need such education and training in all communities of the state. <u>Priority is given to areas of high rates of school drop-outs and youth unemployment.</u></p>

<sup>45</sup>Ibid., pp. 21-23.

<sup>46</sup>Guide to Cooperative Vocational Education. Minneapolis, Minn.: Division of Vocational and Technical Education, University of Minn., 1969, p. 43.

## Part B: (continued)

4. Use of Funds:  
Program operation and ancillary services.
5. Federal Portion of Support:  
Based upon statewide matching (50/50) for all basic grant vocational education programs. Application of state criteria for allocation of funds determine level of assistance.
6. Instruction:  
In-school vocational instruction related to occupational field and job training.
7. Work Periods:  
Alternate half-days, full-days, weeks, or other periods of time. (Number of hours of work generally equal the number spent in school.
8. Wage Payments:  
Regular wages established for the occupational field, usually at least minimum wage or student learner rate established by Department of Labor. Wages paid by employer.
9. Age Limitations:  
Minimum age 14 as per Child Labor Laws.
10. Eligible Employers:  
Public or Private
11. Administration:  
Administered by the state or local educational agencies under supervision of the State Board for Vocational Education in accordance with State Plan provisions.

## Part G: (continued)

4. Use of Funds:  
Program operation and ancillary services. Reimbursement of added training cost to employers, when necessary. Payment for certain services or unusual costs to students while in cooperative training.
5. Federal Portion of Support:  
All or part (100%)
6. Instruction:  
In-school vocational instruction related to occupational field and job training.
7. Work Periods:  
Alternate half-days, full-days, weeks, or other periods of time. Number of hours need not equal the number of hours spent in school.
8. Wage Payments:  
Regular wages established for the occupational field, usually at least minimum wage or student learner rate established by Department of Labor. Wages paid by employer.
9. Age Limitations:  
Minimum age 14 as per Child Labor Laws.
10. Eligible Employers:  
Public or Private
11. Administration:  
Administered by the state or local educational agencies under supervision of the State Board of Vocational Education in accordance with State Plan provisions.

## Part B: (continued)

12. Program Duration:  
Permanent.

## Part G: (continued)

12. Program Duration:  
4 years.<sup>47</sup>

As can be noted from the comparative analysis in the table above, the cooperative education programs were designed to serve an educational or training objective. Students who participated in cooperative programs did so because they wished to acquire qualifications for a predetermined area of competitive employment. In effect, the Vocational Education Act of 1963 stimulated a number of forces designed to improve and expand the vocational education program of the nation.

The historical background of cooperative education, along with a description of the various acts affecting the development and expansion of cooperative programs and their relationship to disadvantaged youth, has thus far been delineated. Presented in the section that follows are some of the major advantages of cooperative work experience programs to the student, the school, the community, the employer, and to labor in general.

#### Advantages of Cooperative Work-Experience Programs

Several books, articles and speeches have been written depicting the advantages of cooperative work-experience programs to various elements of society. In a guide prepared by the New Jersey State Department of Education entitled, "A Guide for Part-Time Cooperative Education Programs", several advantages of cooperative education to the student, the school, the community, the employer, and to labor were cited:

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<sup>47</sup> Vocational Education: A Bridge, p. 48.

### Advantages to the Cooperative Student

1. Offers an opportunity to receive some specific occupational training while attending high school.
2. Offers an opportunity to complete high school and receive the regular diploma with members of the class.
3. Offers training for boys and girls in a chosen occupation in their local community.
4. Offers an organized plan of training on the job under actual industrial and commercial conditions.
5. Offers an opportunity to secure training at a relatively low cost because it is secured while attending the public school.
6. Establishes definite work habits and attitudes.
7. Makes possible a satisfactory adjustment of work and school activities.
8. Allows a better correlation of school work and employment because the student recognizes his own needs.
9. Lends encouragement to stay in school until graduation.
10. Offers an opportunity for employment in the local community after completing high school and the training program.
11. Frequently enables students to secure full-time employment with the training agency after completing their course and graduating from high school.
12. Motivates interest in other high school subjects.
13. Develops a sense of responsibility.
14. Provides instruction in safety and good occupational habits.
15. Enables student to stay in school due to his earnings.
16. Enables him to make an intelligent choice of his life's work earlier.

### Advantages to the School

1. Broadens the curriculum.
2. Helps hold students in school longer.
3. Allows the school to offer occupational training for those who are going to enter an occupation which does not require college.

4. Provides credits which may be used for college entrance.
5. Enables the school to better meet the training needs of the community.
6. Allows training in a number of occupations at the same time and allows a comparatively low per capita cost.
7. Provides a closer cooperation with the community as a whole.
8. Provides a closer cooperation with industrial life.
9. Lessens the disciplinary problems of the school.
10. Necessitates a relatively small amount of equipment.
11. Enables other employers to see the needs for more training.
12. Helps in the establishment of evening classes.
13. Permits flexibility in instruction in any occupation, as it may readily be discontinued when the training needs of that occupation are met locally and instruction in other occupations may be substituted without disturbing the program.

#### Advantages to the Community

1. Encourages more young people to remain in their home community after completing high school.
2. Has a part in training for its own needs.
3. Causes more young people to remain in school.
4. Enables the community to give training for those who will enter occupations not requiring college training.
5. Allows training in a number of occupations at the same time and at a comparatively low per capita cost.
6. Secures the services made possible by the National Vocational Educational Acts.
7. Tends to lessen the unemployment problem because better training is being given its own people.
8. Tends to produce citizens who will feel their responsibility at an early age.
9. Gives increased buying power to its citizens in early life.
10. Promotes a closer cooperation between the community and the school.

11. Provides a closer correlation between the school and employment.

#### Advantages to the Employer

1. Gives a better acquaintance with the prospective employees of the community.
2. Provides a better source of better trained and more intelligent employees.
3. Enables them to have a part in the school program.
4. Reduces labor turnovers.
5. Enables them to have sources of trained help in peak periods.
6. Causes other employees to see the need for more training.
7. Enables employer to receive more direct returns from his school tax dollar.
8. Enables employer to secure up-to-date information about his occupation from the school for themselves and other employees.
9. Enables employer to help guide the program through representation on the advisory committee.

#### Advantages to Labor

1. Offers training which heretofore has not been possible in many instances.
2. Enables labor to help guide the program through representation on an advisory committee.
3. Provides a source of well-trained leaders.
4. Furnishes the assurance that the labor market will not be flooded.
5. Offers pre-apprentice training which will be advantageous to both apprentices and journeymen.
6. Opens the way for part-time and evening classes for apprentices and journeymen workers.<sup>48</sup>

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<sup>48</sup>Peter Festante and others, Cooperative Education Programs, (Trenton State College, N. J.: Department of Industrial Education Technology, December 1, 1965), p. 59.

Reasons for the Success of Cooperative Education and Its Application

Several reasons have been cited by vocational educators for the outstanding growth and success of cooperative education since its beginning in Cincinnati in 1906. The reason they most frequently aired was the fact that the work-experience component of the cooperative program provided increased motivation and interest on the part of the student. In an article written by Beckley and Smith entitled "Cooperative Education - The Graduates' Viewpoint", it was stated that "this fact has been true to a great extent, but the increase in motivation seems to have stemmed from the point that the student can earn money without having to leave school to do so."<sup>49</sup>

The general provisions, in fact, set forth in the State plan aptly provided a thorough description of the work experience component by establishing on-the-job training standards. These included training programs that were:

1. related to existing career opportunities susceptible of promotion and advancement,
2. designed not to displace other workers who perform such work,
3. designed to employ and compensate student-learners in conformity with Federal, state, and local laws and regulations in a manner not resulting in exploitation of the student-learners for private gain,
4. to be conducted in accordance with written training agreements between local educational agencies and employers.<sup>50</sup>

Studies of students who have graduated from high school cooperative programs point consistently to the fact that students chose, and remained in, a cooperative program for the work experience and the financial

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<sup>49</sup>D. K. Beckley and L. F. Smith, "Cooperative Education - The Graduates' Viewpoint", School Review, LIV, May, 1940, pp. 299-301.

<sup>50</sup>Vocational Education: A Bridge, p. 42.

advantage that the program offered. Closely allied to these arguments in favor of cooperative education has been the fact that this type of a work and study program made the transition from school to work much easier for the students than had the conventional school program. The benefit, particularly for the disadvantaged youth, was the opportunity for after-graduation employment.<sup>51</sup>

Meeting the guidance and career development needs of students has also been cited as an advantage of the cooperative work experience. This alone has allowed for a vital and realistic career exploration that perhaps would not have been possible in the regular classroom situation. It has also been advocated as a unique opportunity in which to observe the occupational pursuits of students and to determine which is the most suitable to their needs, interests, and abilities.<sup>52</sup>

The opportunity for guidance, one of the values recognized by Schneider, had been amplified in the subsequent cooperative programs. The introduction of the student into the world of work allowed him to see for himself what he liked and what he disliked about various kinds of work. In addition it gave him the opportunity to test his value system against that in operation in the business community. It also helped him become a participating member of the adult society. Burchill has addressed himself to the importance of satisfactory developmental patterns in young adults and adolescents. He declares that "without a satisfactory adjustment of the student, the result is often alienation or in extreme

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<sup>51</sup>L. F. Robertson, "An Exploratory Study of the Effect of Cooperative Education Programs in Beginning Occupations", Doctoral Dissertation, Colorado State College, 1965, p. 112.

<sup>52</sup>Norman Eisen, Work Experience Education in California High Schools: Status, Evaluation and Implications, University of Southern California, p. 73.



cases juvenile delinquency. Guidance in conjunction with work-study programs, therefore, must be provided to help solve this problem and sustain the interests of those who might become alienated."<sup>53</sup>

Another important attribute of the success of cooperative education has been the advantage offered to "slow learners". In a cooperative program they too had the opportunity to experience success in a suitable work situation under planned supervision. According to Stahlecher, this opportunity appeared to contribute to their future job success, for "school work programs, carefully planned and executed, can negate factors which have a deleterious influence on the lines of slow-learning youth."<sup>54</sup> Stahlecher said further that "slow-learners who are not motivated and challenged eventually leave school."<sup>55</sup>

Finally, cooperative education for disadvantaged youth has had a number of successful applications in minority group education. Blacks, Puerto Ricans and other racial minorities discovered that cooperative education can provide a means of obtaining the guidance, skills and attitudes necessary to enter a wide range of vocational opportunities formerly closed to them.

In this chapter so far several factors have been outlined which have contributed to the success of cooperative education programs. Meeting the guidance and career development needs of students through a continuous program of study and work experience has aided in serving students who

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<sup>53</sup>George Burchill, Work Study for Alienated Youth, A Casebook. (Chicago: Science Research Associates, 1962), p. 72.

<sup>54</sup>L. V. Stahlecher, "School Work Programs for the Slow-Learner", Clearinghouse, XXXVIII, June, 1964, pp. 299-301.

<sup>55</sup>Ibid., p. 299.

have been classed as "slow learners" and "disadvantaged youth" and particularly those students who are members of minority groups. Success has also been evidenced in the various types of work-experience programs available to junior high and high school youth today. These programs are described and outlined in the section that follows.

### Types of Work-Experience Programs

Cooperative education programs have taken many forms and have been instituted by many disciplines. The variations have ranged from agriculture and engineering to psychology and counseling. Form and "format" initially resulted from specific needs, with little standardization. These existed because of the continuing success of this form of education. The types of programs that have persisted, due to the efforts of curriculum planners, administrators and teachers who have been truly concerned with helping each child develop his abilities to his individual limits, are described operationally:

- A. Exploratory Work-Experience Programs - These programs involve short-term placements of students as non-paid observers or as paid workers in non-professional and professional situations. The principal objective of this type of program is guidance toward or away from occupations which the students believe they have career interests.<sup>56</sup>

It has been noted throughout the country that secondary schools have incorporated work experience programs in their curriculum in order to help students learn first-hand of an occupation by either observing it or actually engaging in it. For career exploration purposes, this program has been designed for student exposure to an occupation within a time frame lasting from six weeks to a full semester. In such programs

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<sup>56</sup>Mason, Cooperative Education, p. 67.

the amount of each school devoted to the work experience is no more than a half day and in most cases usually one or two periods plus some time after school. The rationale behind the short length of the experience is that the student has an opportunity to be exposed to an occupation in which he can see for himself the skills and knowledges that are needed as well as the demands the occupation may make upon the students' abilities. The student, therefore, can measure himself against the occupation in a relatively short time and determine whether or not a particular occupation will meet his future occupational needs.

In the exploratory program, only one work experience is offered to students in some schools whereas in others students may schedule several short-term experiences in a semester or a year. Another option in some programs is for students to be released the last period of the school day in order to work. However, this final option for the student leaves little or no supervision by the school and no related class in school.

It has been concluded by Mason and Haines that:

In short, it seems that exploratory work experience programs in which students are either observers or paid productive employees should show at least the following characteristics: (1) placements carefully selected to meet the career interests of each student, (2) experiences under the tutelage of sponsoring firms whose management and supervising employees understand their guidance role, and (3) a class in school taught by a trained counselor who can help young people interpret their experience.<sup>57</sup>

A final note documented by the authors was that in exploratory work experience programs:

1. There should be no intent to teach any job skills or knowledges, although the student probably will "pick up" some in the process of his exploration.

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<sup>57</sup>Ibid., p. 73.

2. The chief purpose of participation is that of providing vocational guidance through gaining for each student a systematic sampling of a variety of conditions of work.<sup>58</sup>

B. Released Time Work Experience Programs - Another type of work experience program, the released time program is geared primarily to needy students for the purpose of earning money. This includes slow achievers, over-age students, students whose families have a limited income and potential drop-outs. In this program the work experience may or may not have any relevance to the student's occupational objective. The opportunity is provided to the student by released class time and a lighter class load.

C. Special Education Work Experience Programs - These programs are designed especially for special education students who are employable. Students receive compensation for their work experiences and are closely supervised and guided by the special education teacher.

D. Work Experience Programs for Disadvantaged Youth - These programs have been designed for those slow achievers who have been classified as the "culturally deprived" or the "disadvantaged." Until the student is employable, the "total curriculum concept" is in effect whereby the student remains under the guidance of a teacher who conveys relevant subject matter for entrance into a job. Serving students who are high school juniors and seniors, concentration is also placed upon self-concept, personal characteristics which affect employability and school retention.

E. General Work Experience Programs - These programs are designed to help high school juniors and seniors experience the world of work

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<sup>58</sup>Ibid., p. 74.

through various work assignments in and out of school. Although not vocational in nature, students are exposed to relevant job experiences as well as subject matter applicable to all types of employment. The program, typically a year in length, is part of the curriculum with the work experience component taking place after school hours. In this program, the school coordinator will carefully match the job to the student's interests and needs.<sup>59</sup>

Following is a checklist of conditions of operation which a general education work experience program ought to meet as least minimally:

1. Selection of students. There should be a heavy involvement of counselors in this process to determine interests and aptitudes and the motivation for each student's desire to enroll in the program. Students with special problems, those wishing only to "get out of school," and those wishing specific vocational preparation should be referred to other school programs.
2. Selection of work stations and placement. The placement of a student need not have relevance to his occupational goal since the purpose of the program is not vocational preparation. But, for the student who wishes to try out a given occupation, the relevance of the training station is obviously important. The training station must be one in which labor laws are involved and in which the ethical and moral standards do not involve criticism. The personnel at the work station should understand the purposes of the program and be able to help the student understand the world of work. Even though students may find their own stations, no placement should be made until the program supervisor has made an evaluation visit and explained the purposes of the program.
3. Written agreement of employment. A placement should be approved only after the work permit has been approved and a memorandum of agreement signed by employer, school, student, and parent. The agreement, which is without legal validity, should state the conditions of employment and responsibilities of each party to the others.
4. Student evaluation. It is necessary that the student be evaluated regarding his personal effectiveness through a written evaluation by the employer and a conference between program supervisor and

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<sup>59</sup>Ibid., p. 68.

- employer. In addition, evaluation of student progress should be assessed during visits to the station by the supervisor. It is recommended that supervisors make job visitations once a month or at least twice a semester, exclusive of rating conferences.
5. Program supervision. To insure the development of desired outcomes and to prevent the program from becoming strictly a released-time, earning situation, consistent supervision by the school is necessary. Depending on travel distances and other factors such as newness of the program, the supervisor (coordinator) should be allotted supervision time in the ratio of one period for every fifteen students. But, if the supervisor is paid on an extended-day contract, the ratio can easily be 1:20, or sixty students for a three-period allocation for program supervision.
  6. Trained supervisor employed. The program supervisor need not be a vocational teacher since the program is general education in nature. Rather, the supervisor needs some training in counseling and sufficient recent experience in the world of work to be able to work with businessmen. Also, the individual must be of the type physically to withstand the demands of an intensive position and able to present a favorable image of the school in his relationships with the community.
  7. Related class used. Every student of the general education work experience program should be enrolled in a special course which promotes general occupational understandings and provides for individual counseling. The class might meet daily for one period, although shorter arrangements may fulfill the need. It is desirable that the course be taught by the program coordinator since it is he who knows best each student, his work situation, and his needs. In no cases should the related class be one that teaches specific vocational content.
  8. Program of interpretation operative. One of the prime responsibilities of the program supervisor is that of interpreting his program to other teachers, the employers, the students, and their parents. The supervisor should make use of regular publicity channels and take special pains to provide for face-to-face interpretation at every opportunity.
  9. Records kept. The program supervisor needs to keep adequate records regarding such items as work assignments and hours worked, work permits, individual student personnel folders, ratings and evaluation, and follow-up studies.<sup>60</sup>

In sum, schools are currently concerned with several different types of work experience programs. Careful study of the types reveals that

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<sup>60</sup>Ibid., pp. 77-83

particular attention has focused on (1) aiding slow achievers and disadvantaged youth, (2) attempting to increase retention by preventing drop-outs, and (3) prepare students for the general and personal characteristics required for success.

### Research in Cooperative Education

It was recognized at the beginning of the modern vocational education movement in 1906 that programs of vocational education would need special study. After 1917 this need was fulfilled by the staff of the Federal Board of Vocational Education in which the point of view prevailed that research in vocational education should not be narrowly conceived and should cover a wide range of the research continuum. Attention was to be devoted to both practical and theoretical studies of the students, the school program and vocational opportunity. The priority areas which were thought to be appropriate for the general projection of research efforts were thought to be appropriate also as a means of reviewing the research program.<sup>61</sup>

It is evident that many of the distinguishable characteristics of the development of cooperative education programs have been researched considerably in the past few years. Studies concerned with student characteristics dealing primarily with self-concept as related to disadvantaged youth and school drop-outs have been the primary target of investigation. Significant also among the research studies in cooperative education are those that cover the "education" component. Such studies include investigations of instructional content, methods, and strategies, and teaching-learning techniques. Other studies have focused on the

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<sup>61</sup>Vocational Education: A Bridge, pp. 132-133.

general area of program implementation, as well as of teacher behaviors and attitudes. Research findings in these analyses, along with those that have dealt with a continuing interest in curriculum development of cooperative programs and the employment community as stimulum in serving the cooperative student are presented in the sections that follow. It should be pointed out at this juncture that the review of the following research findings relates to the analysis of those variables measured in conjunction with Boston High School's cooperative program to be presented in Chapter 5.

#### The Cooperative Student: Self Concept of the Disadvantaged

Fostering a sense of self-esteem has been an important concern in nearly all cooperative programs for the disadvantaged. In fact, much of the contemporary emphasis of research on self-esteem and academic adjustment is concentrated upon urban, minority and disadvantaged populations. This body of research is of particular interest due to an apparent disagreement among findings that has provoked no small controversy over the lack of research reliability.

Prior to 1969, research consistently found lower self-esteem among children who were classified as culturally disadvantaged. Soares and Soares in 1969, however, published results of a study in which they reported findings that disadvantaged youth have more positive self-perception than do advantaged children. They hypothesized that the apparent lack of congruence between self-image and environmental endowment may be explained by the fact that disadvantaged children were exposed only to other disadvantaged people in their daily activities. They cited the Coleman report which postulated that when Negro pupils became part of an integrated school system, their self-esteem diminished. They further



hypothesized that the parental pressures on advantaged children might precipitate low self-esteem in these children if they feel they are not measuring up to expectations.<sup>62</sup>

Among others, Long wrote a critique of the Soares and Soares study in which she contended that their findings were contrary to results found by other researchers and, therefore, were of questionable validity.<sup>63</sup> Long's critique was in turn later rebutted by Soares and Soares, who had replicated their earlier research with the same results.<sup>64</sup>

In a study conducted by Caplan, contemporaneous with the Soares and Soares study, it was found that black children in de-facto segregated schools had lower self-esteem than the self-esteem held by black students in integrated schools. Caplan also found a positive correlation between self-esteem and academic achievement.<sup>65</sup>

The controversy has generated a high level of interest, and much research has followed which, to a large degree, has only added to the confusion. Powers, Drane and associated conducted a study whose results indicated that the self-concept of blacks is not significantly lower than that of other students. They suggested that self-image is more likely a

<sup>62</sup>A. Soares and L. Soares, "Self-Perception of Culturally Disadvantaged Children", American Educational Research Journal, VI, 1969, pp. 31-44.

<sup>63</sup>Barbara Long, "Critique of Soares and Soares' Self-Perceptions of Culturally Disadvantaged Children", American Educational Research Journal, VI, 1969, pp. 710-711.

<sup>64</sup>Soares and Soares, "Critique of Soares and Soares' Self-Perceptions of Culturally Disadvantaged Children -- A Reply", American Educational Research Journal, VII, 1970, pp. 631-635.

<sup>65</sup>Morris Caplan, "The Relationship Between Self-Concept and Achievement", The Journal of Experimental Education, XXXVII, Spring, 1969, pp. 13-16.

product of the interactions within the subgroup to which the student belongs rather than the product of the relationship he has to the general school environment. This study denies that when black students enter integrated schools their self-esteem diminishes, particularly if the student maintains a strong primary group cultural contact.<sup>66</sup>

In sum, a large majority of recent investigations of culturally disadvantaged children continued to find that these children did possess lower self-esteem than advantaged children; however, it appears that these findings are not universally accepted.

Until very recently little research had been conducted concerning specific techniques which schools have employed to enhance self-esteem. Van Koughnett and Smith studied a pilot program in Pontiac, Michigan, in 1969 in which the entire staff of a school was trained to reinforce positively the development of self-esteem in minority students. To establish initial success, handicrafts and other manual-dexterity skills were emphasized and utilized as the basis for concomitant academic instruction.<sup>67</sup>

Ausubel and Ausubel similarly made a strong case for capitalizing on the strong skills of children as bases for developing self-esteem, which could in turn be used as a confidence source to attempt other tasks. The Ausubels charge the schools are the major cause of low self-esteem, particularly in minority children, as they firmly believe the schools have set middle-class values as the goals of youth. They assert that the

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<sup>66</sup>Jerry M. Powers, et al, "A Research Note on the Self-Perceptions of Youth", American Educational Research Journal, VIII, 1971, p. 655.

<sup>67</sup>B. C. Van Doughnett and Merle Smith, "Enhancing the Self-Concept in Schools", Educational Leadership, XXVII, December, 1969, pp. 253-255.

schools must revise their approach to education to use the cultural and socio-economic values of children as motivators of learning. The development of manual skills and the recognition of blue-collar occupations as worthy are recommended as ideal beginning points for redirecting the self-esteem spiral.<sup>68</sup>

All major research has found that identification with an occupation and the selection of a career are vital components of self-esteem. Cooperative education can serve to facilitate this process. One of Tiedeman's many studies has made famous the identification of the "identity crisis" as a wound of self-esteem. Tiedeman explains the experience as that which occurs in youth who complete their education and enter the world of work with no idea of what they wish to be.<sup>69</sup> Studies by both Super and Borow confirm Tiedeman's findings and reaffirm the importance of career identification as a component of self-esteem which permits the student to possess a sense of direction which in turn provides motivation for academic achievement.<sup>70</sup>

Subsequent studies of self-esteem and vocational choice broadly support earlier findings that there exists a success cycle connecting self-esteem, vocational identification and academic motivation. Extensive studies conducted by other researchers produced similar findings concerning the mutually reinforcing effects of a self-esteem, vocational choice and academic motivation. The sample populations used in these studies included

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<sup>68</sup>Ausubel and Ausubel, "Ego Development Among Segregated Children", Education in Depressed Areas, ed. by A. Harry Passow (New York: Teachers College, Columbia, 1963), pp. 73-84.

<sup>69</sup>David Tiedeman, "Decisions and Vocational Development: A Paradigm and Its Implications", Personnel and Guidance Journal, XL, 1961, pp. 15-20.

<sup>70</sup>Donald Super, The Psychology of Careers (New York: Harper and Brothers, 1957), pp. 160-176.

college students, vocational high school students and high school students. The major conclusion of these studies was that there is great potential for the development of self-esteem, which in turn can have many other positive benefits.

It can be concluded that the major findings of the research endeavors on the topic of self-concept clearly indicated that there was a substantial relationship between the students' self concepts and their perceptions of how others would evaluate their potential for success. The vocational students were found to have lower self concepts of academic ability than non-vocational students had, which both groups were normally found to be on an equal standing in their self-concepts of vocational ability.

#### Self-Concept of the School Drop-Out

As noted earlier, a particularly important benefit of the cooperative program was the increased reduction in school drop-out rates. This particular area of concern prompted the undertaking of several studies to understand the problem better. Mink and Kaplan, for example, reviewed several studies of school drop-outs in which they concluded that the reasons were many and varied for students either staying or dropping out of school. According to their research, the typical school drop-out was sixteen years old, had a history of truancy, generally had a lower I.Q., came from a family in which other members had left school early, and had discipline and behavior problems in school.<sup>71</sup>

Several additional studies have detailed reasons for students leaving school early. One significant study conducted by Passow found that

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<sup>71</sup>Oscar Mink and Bernard Kaplan, America's Problem: Youth Education and Guidance of the Disadvantaged, (Scranton: International Textbook Company, 1970), p. 271.

students dropped out because of personal illness or accident, school retardation, lack of motivation and lack of an adequate self-concept.<sup>72</sup>

These and similar findings were also identified in the studies presented in Figure 1 below.

Characteristics studied	Types of Students under study	Reference
1. Self-concepts of academic ability.	Caucasian male high school students and drop-outs.	Kenneth A. Harding, <u>A Comparative Study of Caucasian Male High School Students Who Stayed in School and Those Who Drop Out.</u>  (Doctoral Study, Michigan State Univ., 1966)
2. Occupational problems.	Iowa High School drop-outs.	Trevor G. Howe and Kermit Buntrack, <u>Occupational Problems and Vocational Training Needs of High School Drop-outs from Rural Areas in Iowa.</u>  (Iowa State University of Science and Technology, 1966)
3. Educational aspirations, expectations, and abilities.	Male High School Students and Drop-outs.	James F. Schill, <u>Educational Aspirations, Expectations, and Abilities of Rural Male High School Seniors in Mississippi.</u>  (Office of Education, 1968)

Fig. 1. - Studies concerned with the self-concept of school dropouts.

Although the figure above represents only three studies concerned

<sup>72</sup>Harry A. Passow, Developing Programs for the Educationally Disadvantaged. New York: Teachers College Press, 1968, p. 60.

with the self-concept of school drop-outs, a comprehensive search of related studies in this area produced several more. A complete taxonomy of research of this type would, in theory, comprehend the full spectrum of descriptive data on one dimension and a complete assortment of potential student types on the other.

In conclusion, it should be pointed out that a major question commonly asked of vocational educators is: "What are some of the major strategies that have been employed to improve the self-concept of disadvantaged youth and drop-outs?" Again, Passow relates that many programs have been developed and instituted in recent years to combat the problem. Such programs contained the elements of education and employment orientation and included such strategies as:

1. Intensive guidance programs, which were implemented in the schools throughout the nation.
2. School curriculums, which were revised in a way that produced positive changes in the students attitudes particularly in the areas of dress, personal care, self control, self-esteem, independence, responsibility and school work.
3. Finally, programs were designed to change the role of the teacher from a disciplinarian to participant-learner.<sup>73</sup>

#### Other Significant Research Studies in Cooperative Education

As noted earlier, studies concerned with student characteristics dealing primarily with self-concept as related to disadvantaged youth and school drop-outs have been the primary target of investigation. Other significant studies that have been conducted include those that have dealt with instructional content, methods and strategies, teaching-learning techniques and the employment community. A sample of some of the research studies reviewed for this study are outlined in Figure 2 on the following page.

Fig. 2. - Significant studies in Cooperative Education which have relevance to the present study.

Characteristics studied	Types of Students under study	Reference
<b>INSTRUCTIONAL CONTENT:</b>		
1. Personalized learning experiences, orientation to the world of work, communication, adopting materials to the backgrounds of students.	High School Juniors and Seniors	Herman, Melvin, Sadofsky, Stanley, Rosenberg, and Bernard. <u>Work, Youth and Unemployment.</u> (New York: Thomas Crowell Company, 1960)
2. Educational Development	High School Diversified Cooperative Students	Harry Bledsoe. <u>A Comparison of the Educational Development of Diversified Cooperative Education Students and Non-Diversified Cooperative Education Students in Selected Indiana High Schools.</u> (Doctoral Study, Purdue University, 1968)
<b>METHODS AND STRATEGIES:</b>		
1. Traditional Cooperative Vocational Program vs. The Preparatory Vocational-Technical School.	High School Students in Various Occupational Areas	Lester Sanders. <u>A Comparison of Two Methods of Preparing Youth for Employment: Cooperative Occupational Education Vs. the Preparatory Vocational-Technical School.</u> (Doctoral Study, University of Missouri, 1967)
2. Traditional Cooperative Vocational Program With Released Time for Student Employment vs. Cooperative Vocational Program Without Released Time for Student Employment.	High School Students	Frank Bobbitt. <u>A Comparative Study of Two Concurrent Work-Education Models in Agriculture.</u> (Doctoral Study, University of Illinois, 1969)

Characteristics studied	Types of Students under study	Reference
<p>TEACHING-LEARNING TECHNIQUES:</p> <p>1. Individual Self-Instruction vs. Lecture-Discussion</p>	<p>High School Distributive Education Students</p>	<p>Robertson, Roy P. <u>An Experimental Comparison of Two Methods of Teaching Related Information in Distributive Education at the High School Level.</u></p> <p>(Doctoral Study, University of Missouri, 1967)</p>
<p>2. Standard Programmed Instruction vs. Enriched Programmed Instruction vs. Programmed Instruction on How to Learn Plus Traditional Instruction.</p>	<p>Technical Business Vocational</p>	<p>Lanham, Frank W. and Others. <u>A Pilot Project in Programmed Learning to Extend the Purposes And Increase Factors of Motivation.</u></p> <p>(Ann Arbor, Michigan: University of Michigan, 1963)</p>
<p>EMPLOYMENT COMMUNITY:</p> <p>Concerns and Expectations Regarding Involvement in Cooperative Education.</p>	<p>Students, Employers, Parents Participating in Programs</p>	<p>Cushman, Harold R. and Others. <u>The Concerns and Expectations of Prospective Participants in Directed Work Experience Programs.</u></p> <p>(Ithaca, New York: State University of New York, 1967)</p>

Fig. 2a.- Other significant studies in Cooperative Education which have relevance to the present study.



In summary, the cooperative education programs cited and reviewed were geared and oriented toward reaching or attracting the non-college bound youths. The general intent was to provide orientation to the world of work, relate in-school learning with on-the-job training, aid in career planning and preparation and prepare students for entry level jobs.

The need for an empirical test of cooperative education programs designed for disadvantaged youth who are potential or actual drop-outs is apparent. The Boston High School is precisely such a program. In Chapter III this program is delineated in greater detail.

## CHAPTER III

### DESCRIPTION OF THE DEVELOPMENT AND ORGANIZATION OF BOSTON HIGH SCHOOL

Chapter III depicts a historical narrative account of the initial planning, organization, and expansion of Boston High School. A step-by-step account of all developmental phases of the program as well as the characteristics of the school, its students and staff are described. Further elaborated are the curriculum areas and the work-study component of the program. Parental and community involvement will be highlighted and an introduction of the evaluation procedures and techniques used in the assessment of the program will be set forth.

#### Embryonic Stages of Development

In April, 1966, the Office of Program Development obtained funding for a Work-Study Plan under Title I of the Elementary and Secondary Education Act of 1965. This plan aided in the creation of the Work-Study Program currently known as Boston High School. An outgrowth of the 1963 "Second Chance Class" in East Boston, Boston High School was formerly attended by students representing several different schools throughout the city. Originally the program was a two-year remedial endeavor specifically designed for junior high school students who were identified by teachers, guidance personnel and others as potential drop-outs. The program for these students consisted of a full school day of instruction with special emphasis placed on the shop or trade experiences.

Only a meager thirty-eight pupils gave the program a try during its first year of operation. Enrollments, however, grew steadily to 140 pupils in 1967, to 320 pupils in 1968 and has a current enrollment of 645.

Due to the rapid increase in school enrollments and normal expansion of the Work-Study Program, it was soon recognized by the administrative staff that the instructional classes that were scattered throughout the city would finally have to be consolidated to form one physical plant that would house all classes. Finally, in 1968, a Back Bay warehouse was converted to the existing school structure and was officially named Boston High School by the Boston School Committee on January 31, 1969. Located at 332 Newbury Street, Boston, Massachusetts, and a part of the public school system, Boston High School was designed especially to meet the educational and training needs of the city's disadvantaged youth.

In order to accurately plan for these particular needs, a request for Vocational Instructional Plans authorized by the Vocational Education Amendments of 1968, was submitted to the Commonwealth of Massachusetts, Division of Occupational Education by the Boston School Committee early in the year. The plan, prepared by William H. Ohrenberger, Boston's Superintendent of Schools, and Joseph L. Ippolito, Director of the Boston High School Program, established guidelines and provided for a total expansion of the Work-Study Program. Also, working closely with the Boston High School staff in the planning of the Program was the Division of Occupational Education and the investigator of this study in particular. Following the essential application procedures for the establishment of programs in Occupational Education, under Title I, the plan included not only a statement of assurances but a narrative description of the proposed program as well. In the sections that follow, each of these areas will be elaborated.

Statement of Assurances

At the time the Instructional Plan was prepared, an eleven-point "Statement of Assurances" was submitted to the State Board of Education along with the application for funds by the Boston School Committee.

These assurances were documented as follows:

1. That all programs, services or activities covered by the application would continue after Federal Funds decreased and ceased, unless the program, services or activities were terminated by or with the approval of the State Board of Education.
2. That all programs, services or activities would be developed in consultation with representatives of the educational and training resources available in the area to be served.
3. That all programs, services or activities covered by the application would be operated in accordance with the Massachusetts State Administrative Plan for Vocational-Technical Education, and Federal Laws for Vocational Education.
4. That all Federal and/or State funds made available would be used to supplement, and to the extent practical, increase the amount of local funds that would, in the absence of such Federal and/or state funds be made available, and in no case supplant such local funds.
5. That reimbursements received would not be used for any programs of vocational education (except Consumer and Homemaking education) which could not be demonstrated to (a) prepare students for employment or (b) to be necessary to prepare individuals for successful competition of such a program or (c) be of significant assistance to individuals involved in making an informed and meaningful occupational choice.

6. That the applicant would make an annual financial statistical report which would indicate (a) a report evaluating accomplishments, and (b) such other reports as may be reasonably required by the State.
7. That the applicant would comply with Title VI of the Civil Rights Act of 1964 and all requirements imposed by or pursuant to the regulations.
8. That it is understood that the reimbursement would be discontinued when the program becomes disqualified for any failure to meet the requirements of the Massachusetts State Plan for Vocational-Technical Education and the unexpended balance of the reimbursement contracted for would be forfeited.
9. That these programs would include adequate planning to meet the vocational educational needs of potential students in the area or community served.
10. That these programs would include a plan, related to the appropriate comprehensive area manpower plan (if any), for meeting the vocational educational needs in the area or community served.
11. That this plan would indicate how, and to what extent the vocational educational programs, services, and activities proposed in the application would meet the needs set forth.

Following the establishment of the above-stated program assurances, the Boston School Committee certified compliance with them. They further agreed that the appropriate funds would be used for the development and expansion of the Boston High School Program as stipulated in the application, and that supporting documents for all expenditures would be submitted for audit. The Boston School Committee then began formulating their ideas concerning the kind of program that would best meet the educational needs

of the city's disadvantaged youth. Various criteria were established for the selection of the students, the staff, and the particular geographical areas to be served. Ideas were also formulated concerning the curriculum materials and teaching aids along with the work-study component of the school program. Further decided was the issue of parental involvement and the various employment agencies that would serve as training stations for the employment of the students. Finally, techniques for a total and on-going evaluation of the school program were decided. In the sections that follow, each of these areas will be further expanded, thereby providing a more detailed description of the general characteristics of each of the elements comprising the total school program.

#### Geographical Areas to be Served

The instructional project at Boston High School was designed primarily for those disadvantaged high school youth residing in the economically deprived areas of Boston. These areas are generally referred to as the Title I poverty areas.

During the period from May to September, 1968, students who were formally classed as Work-Study students from other city schools were selected for the Boston High School Program. The sample of students entering the program were selected from the following:

- 14 Senior High Schools
- 15 Junior High Schools
- 7 Elementary Schools (K-8)
- 2 Out-of-state schools

Priority was given to those students residing in the economically deprived areas of Roxbury, North Dorchester, Charlestown, East Boston, and South Boston (all Title I Districts) who had either academic, socio-economic or other employment handicaps. Statistically, these particular areas

have the highest rate of school drop-outs and unemployment than any other area of the city.

### Student Selection Criteria

The primary objective of any school should center around the needs of its students. This fact is quite prevalent at Boston High School as can be noted from the selection criteria established for the students that it serves.

Since the total school approach in operation at Boston High School is aimed at meeting the special remedial needs of each student, drop-out prevention, and preparing each student for a successful entry into the world of work, the selection of its students must meet certain and particular criteria in order to qualify for entrance into the program. When policies were established for eligibility requirements into the program, the following criteria was established:

1. Male students must be a minimum of 15 years and 6 months by September 1 of the year they enter, and have completed the 8th grade.
2. Girls must have reached their 16th birthday, and have completed the 8th grade.
3. Students can not have a history of physical or serious emotional disability.
4. Students must have school records that indicate repetition of one or more school grade.
5. Students will be considered who are two to four years below their grade level in reading.

According to Ippolito in an article published in May, 1969, "If your boy has a good attitude toward school and knows what he wants to do, we aren't interested in him. He doesn't need us. Preference is given to students with the worst attendance and discipline problems."<sup>73</sup>

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<sup>73</sup>May Meeting Hears Work Study Director, Citizens For the Boston Public School, (Boston, May 1969).

The selection of students for entry into the Work-Study Program is based on data obtained from personal interview, community agencies, summary records and standardized achievement tests. Referrals to the program come not only from headmasters, principals, guidance personnel and teachers but courts, social agencies, correctional institutions and other public service agencies as well.

In addition to meeting the eligibility requirements, enrollees of the program must have a previous record of failing in a normal school situation. Evidence of failure is carried on a "summary record" card which is kept on file for each student and is maintained at the school office. Included on the record card are the following:

1. Biographical data on the student
2. Standardized test results
3. Personal characteristics
4. And, a summary transcript of all course work for grades 9 through 12.

In addition to the summary record cards, the school has on file for each student the following data: Teacher judgements, Achievement test scores, Parent and learner interviews, and where applicable, Social and family agency reports. (The complete summary record used by the Boston High School personnel is included in Appendix A).

Besides the record of grade repetition and below-grade-level reading scores, enrollees are sought who have a record of truancy exceeding five instances over the preceding or current year, or absences exceeding twenty days in the preceding or current year. Frequent absences can indicate a psychological withdrawal from a school situation, a prime area the school seeks to correct. Or in the same vein, the enrollee can be a school drop-out.



### Type of Student Enrolled in the Work-Study Program

Aside from the criteria established for the selection of students for entry into the Boston High School program, the type of students entering the program must also be identified. What a student is really like -- his hopes, if any, his fears, his family situation -- in short, what his life is really like has been described by several persons who are deeply concerned with the development and success of each enrollee in the Work-Study Program.

Teaching Topics, an educational journal that is distributed by the Institute of Life Insurance, tells the story of one boy in the Boston High School Work-Study Program. His name is John, a sixteen year old and the seventh of eleven children. His job at the insurance firm was learning how to operate a multilith machine.

His father, "Teaching Topics relates, though a college graduate, frowns on further education for his son. His mother works in a nursing home to supplement the family's income. John has been contributing, too, for ten years. He has paid rent since he was six years old; first from a paper route, then from his salary as a dishwasher and laborer. His parents took him out of school so he could help with expenses. His home is shabby, and he says he lies awake at night for fear that rats will crawl over him while he sleeps. When he first expressed an interest in the Work-Study Program, he was beaten for even suggesting it. However, after much encouragement from the Work-Study supervisor and the personnel director at the life insurance company, John decided to try it."<sup>74</sup>

Of another student working at the same firm, the publication stated that the student admitted a disciplinary "hang-up" at his former high school and often skipped school. As the student put it, "when you're working at a job like this, you don't skip. I want the job and I like

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<sup>74</sup>Teaching Topics, Educational Division, Institute of Life Insurance, New York, Spring, 1969, p. 4.

the money too much to get in trouble."<sup>75</sup>

Still another young man in the program at the same company was quoted as saying he had not previously liked to study at school because the teachers pushed everything at him too fast. "I like this program because you can work at your own speed. This is the first time that I have ever passed everything. I even got more than one 'B'."<sup>76</sup>

Other examples of the types of students enrolled in the Work-Study Program include two former high school drop-outs. Over-age for high school at twenty, both students received scholarships and became the first graduates to go on to college.

Another Boston High School senior who attended the program for one year before graduating attained the honor of making the honor roll twice. One of three students employed part-time by the Boston Mutual Insurance Company, his job was that of a mail boy. The typical school day for this student consisted of industrial arts (the work-experience component, at Boston Mutual) general business, English, Geography and Mathematics. His description of the school, as quoted in the insurance firm's newsletter, follows:

The classroom situation is great. You don't have to worry about getting bawled out for the things you didn't do. It's really a casual atmosphere. If you think the teacher is wrong, you can speak up. If he's wrong he'll admit his mistake. No one is ever left behind or given a decent grade without understanding a subject. We go through material pretty fast, but we slow down if someone isn't catching on.<sup>77</sup>

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<sup>75</sup>Ibid., p. 2.

<sup>76</sup>Ibid., p. 2.

<sup>77</sup>Ibid., p. 3.

In sum, the ultimate goal inherent in the Work-Study Program is to either motivate students to seek full-time employment after graduation or enter the realm of high education. The honor student and the two scholarship recipients were part of Boston High School's first graduation class in 1969. All three students were in the 19-21 age bracket, generally following the school's pattern of students in the program as being from one to three years older than their opposite numbers in the other schools.

#### Boston High School Staff

With exception of the school Director and the school secretary, the staff of Boston High School is divided into two major job categories each with its own particular duties and responsibilities. These include the teaching staff and the job supervisory staff.

Predominately composed of males, the staff of Boston High School carry out a composite of three roles, i.e., teaching, supervising work experiences and counseling. Various statistics compiled during the current school year determined the average age of the faculty, their educational level by highest degree, and the number of years experience in teaching outside of and within a work-study program. Table 1, on the following page, depicts the data.

The staff of Boston High School is drawn from the regular teaching staffs in the Boston Public School System. Selection of a staff member is ultimately determined by the school's Director and is based on the following criteria:

1. The number of years teaching experience.
2. The kind of training the teacher has experienced.

Table 1

STATISTICS GATHERED CONCERNING  
THE TOTAL FACULTY AT BOSTON HIGH SCHOOL

	Years	A.B. Degree	M.A. Degree or Better
Average Age of Faculty	33.27		
Educational Level of Faculty By Highest Degree		10	24
Average Number of Years Teaching Experience	7.9		
Average Number of Years in Work Study	2.5		

3. A determination of how the teacher relates to students.
4. Recommendations submitted by co-workers and administrators who have knowledge of a particular teachers' teaching abilities.
5. An interview with the Boston High School staff.

In an interview written in the Citizens for Boston Public Schools Director Ippolito was quoted as stating that "if he learns of a good teacher, he watches the teacher in the classroom and then may encourage him to volunteer for the Work-Study Program."<sup>78</sup> He further stated that, "We don't care what subject he teaches, as long as he can relate to the kids."<sup>79</sup>

In accordance with the duties and responsibilities of the Boston High School personnel, a distinction is made between the responsibilities required of the teaching staff, the job supervisors and the school Directorship. A description of the responsibilities of each group is described in the sections that follow.

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<sup>78</sup>Citizens for Boston Public School, Boston, Massachusetts, May, 1969.

<sup>79</sup>Ibid.

## The Role of the Teaching Staff

The normal day at Boston High runs from 8:15 a.m. to 4:00 p.m. Both teachers and students attend class for a half day either in the morning or in the afternoon. When the students are not attending class, they are, for the most part, working an average of from four to six hours daily. It is in this half-work-day session for the students that the teacher's special duties begin. These include periodic visits with the students and their employers at on-the-job sites, and visits with the student's parents either at the school or in the home. The purpose of these visitations are:

1. to offer constant supervision to the student,
2. to determine the major problems, if any, that the student may be experiencing as a result of his work situation,
3. to determine, through contacts with employers, the student's strengths and weaknesses in order to adapt the curriculum to the student's particular needs,
4. to seek the cooperation of the employers and parents in helping to maintain an interest in the student's progress and success.

With home visitations ranking among the primary responsibilities of Boston High School's teaching staff, parents are alerted to the many facets of the total school approach. Not only is parental support of the program solicited in terms of encouraging and at times demanding that their son or daughter be punctual in their attendance at school and work, but in turn, parents are informed as to the efforts of the staff in helping to see that their child gets the most out of the school program. In a final summary evaluation of the home visitation policy, Boston's High School's Director has been quoted as stating that:

Many of the parents respond to the home visitation policy very well; therefore, a new spirit of cooperation between the home and the school begins. If they, the parents, tended to be apathetic or negative about the Boston Schools, this feeling would have a natural carry-over for us. When they see us at their doorstep, they re-evaluate their position and tend to become positive.

When we arrive at the above position we can extend this to a total cooperation between the home and the school. The parents, when they trust us, will relate valuable information to the teachers concerning the student as he is in the home and on the streets. We are able to level with the parents as to conditions of the child's total behavior and development in school and on the job.

If this happens, as it does in many cases, that the parents are reluctant or refuse to communicate with the teacher, then it is his or her job to keep after the parent through the vehicles of letters, phone calls and continued visitations, until the time comes that the parent realizes that we are persistent and that we care enough. We have won them over then.

It would be well to keep in mind that many of the parents we come in contact with are completely devoid of the traditional middle class ethic. We preach in the classrooms the value and the ultimate rewards implicit in regular attendance, reliability, punctuality, trustworthiness and overall alertness. But these concepts are altogether too abstract for many students and for many parents. In most cases, it is the lack of an objective correlative that causes this situation. It is a Herculean task to overcome this situation and yet in our five and one half years of existence our percentage of victories has been enormously high. Frankly speaking, we have complete backing from the parents. They trust and support us and this gives us the courage and motivation to attempt to be fearless administrators. The fact that we enjoy this position, certainly unique among inner city schools, can be credited mainly to the <sup>80</sup> groundwork that our teachers do in the course of their home visits.

The classroom teacher is also responsible for the students' success in the Work-Study Program by continually evaluating the student's progress, both in the classroom and in the job situation. Evaluations are conducted for each student at least twice a week in order to (1) determine the grade or "mark" the student should earn toward diploma points from the job, and (2) keep abreast of the students' overall development.

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<sup>80</sup> Joseph Ippolito, general comments concerning Boston High School's Work-Study Program, 1970.

Teachers, too, represent students in any court cases or parole violations. They set aside time for individual guidance sessions, and are available for individual remedial work. They represent the school and the school system through speaking engagements to various civic groups throughout the City and community meetings. A final requirement of the teachers is that they avail themselves for attendance at parent-teacher conferences and at Advisory Council meetings. Thus, much of the teachers' work is classed as "after-hours service."

In addition to the varied responsibilities, the school day at Boston High School, because of the uniqueness of the program, does not allow any time for faculty members to meet together. This means that all department meetings, whether formal or informal, must be held outside of the regular school hours. These meetings must be held for the following reasons:

Curriculum Development - The faculty determines the curriculum at Boston High School. Thus they must continually revise and update the present curriculum as well as develop the curriculum for the following year.

Revision of Course Objectives - The State Department of Education requires that certain objectives be met in each area of study. These require constant evaluation and revision in order to be realistic.

Construction of Teacher-Made Tests - The State Department of Education also requires evaluation to determine whether the objectives are being met. Teacher-constructed tests are necessary to determine whether the objectives have been attained.

These activities require that all the teachers in each department meet together so that an effective, continuing program can be maintained.

The school's Director gives the following description of his faculty:

We have a tight operation, we are firm but just. Our teachers are on duty twenty-four hours a day, figuratively speaking. They do more than teach academic courses. They're guidance counselors and a stand-in parents. They show youngsters how to be well-groomed and maintain personal hygiene, and listen to their personal woes. Sometimes our staff even pay for their haircuts. Therefore, we feel we have a right to expect and demand their loyalty and cooperation. That goes for their parents, too.<sup>81</sup>

### The Role of the Job Supervisor

The job supervisors are primarily responsible for developing and maintaining the part-time jobs for students. They develop and maintain contacts with businesses, trade associations, unions and the state employment services. They, besides the teachers, make regular visits to employers in the program. They visit each student to keep close supervision of performance, promptness and attitude. Their weekly visits also seek to cement school department-employers relations in order to guard against employers' major complaints of indifference and lack of reliability.

Developing the openings and maintaining contacts with employers, the supervisors serve as the primary liaison between the program staff and participating employers, and work with teachers in fitting students to specific job openings. Another part of their duties is to oversee the legal aspects of the students' work, i.e., wages, hours, safety conditions, social security and working permits. The job development phase of their duties may involve using such devices as newspaper ads, participating employers and new employers. Conferences with students are held daily so that the job supervisor has a ready supply of students to fill these

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<sup>81</sup>A Publication for New England Educational Ideas in Boston Public Schools, Apogee (Boston, 1968), p. 3.



newly developed jobs. It may be a student who is already working but deserves and is worthy of a job change. The job supervisor must set up an interview with the prospective employer, send the student to such and follow it up until the student starts his job.

### The Role of the Director

The school Director's overall responsibility is that of administering the total school program. Under a directive of the Boston School Committee, he is charged with developing all methods and procedures required for implementation of the program design. This covers student selection, staff assignments, development of curriculum materials and coordination of the academic and work-experience phases of the program. He works directly with teachers and job supervisors through regular planning sessions and discussions. In addition, he coordinates efforts of, and advises community service agencies, the city school department and participating employers on all matters concerning the program.

In summary, the major responsibilities involved in the operation of Boston High School's Work Study Program are assumed by the teaching staff, the job supervisors and the school's Director. Among the primary responsibilities of the three staff groups are those concerned with admissions, discipline, student records, coordination and curriculum matters, all of which play a vital role in the attainment of fulfilling the school's total concept -- to do as much as possible to instill in each student a positive self-image and to prepare him with the necessary skills and knowledges needed for entry into job situations or higher educational institutions.

### Curriculum of Boston High School

Boston High School offers a curriculum program that is unique in several ways: the school day is divided between work experiences and classroom activities; ninth grade students are in self-contained classes, that is, their homeroom teachers teach all subjects, and the curriculum itself is geared to its specialized student body.

Students are committed to the program fifty-two weeks a year. Although classes are in session for the normal 180 days, the student remains responsible for his or her job on a full-time basis throughout all school vacations. The school covers the normal high school years, grades nine through twelve, and uses the marking system utilized in most other Boston schools.

According to reports issued by the school, past records of students indicate severe reading and basic mathematical retardation to the extent that the students cannot handle the typical high school subjects; therefore, teaching materials are geared to the students' interests and abilities through individualized instructional methods. In addition, all courses emphasize remedial work in basic skills, using practical applications in school and on the job. Programmed instructional materials are also available to students, enabling them to work at their own pace.

The school schedule is divided into three hours and fifteen minutes of classroom activities and four hours of work each school day. Both boys and girls are served in all the basic curriculum areas with the exception of the ninth graders where only boys are enrolled in the program. A listing of the specific course offerings by grade level is provided in Table 2.

Table 2  
 CURRICULUM OF BOSTON HIGH SCHOOL BY  
 SEX AND BY GRADE LEVEL

Boys		Girls
	<u>Ninth Grade</u>	
English		
Developmental Reading		
Civic Education		
Guidance		
Basic Math		
Ancient History		
Work Experience		
	<u>Tenth Grade</u>	
Physical Science		English
Health Education		Economic Geography
Developmental Reading		Health Education
English		Developmental Reading
Applied Math		General Business
Work Experience		Work Experience
	<u>Eleventh Grade</u>	
U. S. History		English
English		U. S. History
Economic Geography		Typing I
Applied Math		Office Practice
Work Experience		Work Experience
	<u>Twelfth Grade</u>	
English		Business English
General Science		Physical Science
Applied Math		U. S. History
Problems in Democracy		Office Practice II
Work Experience		Work Experience

In addition to the courses listed in Table 2, the school provides electives for twelfth grade students. They include such courses as law, black studies, photography, ecology, and current events. Generally, Boston High School provides required courses, plus its own "mix" and replaces minor subjects with the work experience.

In planning the curriculum for its students, a strong emphasis is placed on the self-contained concept of classroom organization at the ninth grade level. This technique is considered to be most beneficial to the student during this transitional year because he is exposed to only one teacher in the classroom who is sympathetic and understanding of the students' needs. Hopefully, the percentage of drop-outs would be much less within this class group. At other grade levels, the student changes rooms for his various subjects as is the general practice in most high schools.

For their work experience, students are awarded ten diploma points. The work experience must be carried out for the full twelve months of the year as provisions and penalties are enforced for school absences and discharges from the job.

The classroom portion of the day is divided into four class periods of forty-five minutes each. A homeroom period is scheduled at the beginning and end of the class half-day and is five to ten minutes in duration. With a teacher-pupil ratio of 15-1, a great deal of attention is focused on the individual; therefore, allowing the teacher to set the pace in planning the curriculum materials for the class as a whole and monitoring individual needs for special instructional projects.

Students in all classes are given assignments during each class period and are required to be at their assigned classes at the time designated on their class schedules. If students fail to comply with the established rules then disciplinary measures are undertaken by teachers, and the school's administrators, if necessary. According to Ippolito:

We never lose the youngsters' respect. We work hard trying to understand each student and are willing to go all out for them. But we mean business and we make certain they know it. We won't tolerate

absenteeism and tardiness because we apply business standards to the classroom.<sup>82</sup>

To summarize, the Work-Study staff lays down a barrage of guidance and instruction for the purpose of helping students enter the competitive labor market better equipped to gain the most with what they have to offer. With curriculum individualized to meet the needs of each student enrolled in the Boston High School Program their preparation upon entering the labor market will not only be an asset to themselves but to their employers as well.

#### Participating Employers

Some of the largest and most respected firms in the Boston business community are participating employers in Boston High School's Work-Study Program. Among them are the New England Life Insurance Company, Massachusetts General Hospital, Filene's, Prudential Insurance Company and the First National Bank of Boston -- all of which have been with the Work-Study Program since its inception. (A complete list of all participating companies that employ Work-Study students is included in Appendix B).

For the most part, ninth and tenth graders at Boston High School are placed in "entry-level" jobs since most of these students have had no prior experience in the employment scene. The "entry-level" jobs require only basic skills and knowledges on the part of the student and include such positions as delivery, cafeteria, general stock work and maintenance.

Although it is a possibility that some students may enter their job placements with a negative attitude toward the type of duties they are expected to perform, they are assured by both teacher-coordinator and employer that they will be placed in a higher level job depending on:

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<sup>82</sup>Ibid., p. 3.

1. their attitude and performance in the present job situation,
2. their dependability and punctuality at the job,
3. their ability to follow instructions for the year of the initial job placement.

In effect, the goals of the program center around upgrading students work situations. By the time they are seniors they should be adequately prepared to step into a satisfying full-time position which could carry over after graduation.

In another article written for Teaching Topics, the fact was stressed that "on paper the program may seem like a beautiful solution to a long-time problem, but it is far from being perfect, according to the teachers".<sup>83</sup> Although the teachers do all that they can to keep the students enrolled in the school program and in attendance at their work stations, there are disappointments. Some teachers even go as far as visiting the homes and pulling the students out of bed. Thus, even though the program is unique in many respects, not all students make it through. Some get into trouble with the law and simply drop out; others lack interest and initiative.

Another problem faced by the school staff is the parents who are not aware of the normal business standards such as being punctual on the job and going to work every day. Therefore, the students find it difficult learning the proper behavior of the work-a-day world since their lifelong habits have fostered without experiencing any major responsibilities.

The positive aspects of the program outweigh the negative in most instances with benefits realized for the students and employers. Basically the students gain from their experiences in the Work-Study Program

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<sup>83</sup>Ibid., p. 3.

for many reasons:

1. Financial Assistance - All of the Work-Study students are paid for their employment. For the most part, students receive minimum wages. It has been noted, however, that salaries for students in the past have ranged from \$1.70 per hour for "entry-level" jobs for ninth graders to \$2.50 per hour for seniors in higher level positions.
2. The Maturity Factor - While employed on the job and because of their many contacts and experiences with co-workers, the Work-Study students mature more quickly. In most job situations they experience working with various groups of people while experiencing various work assignments in many different departments of the company.
3. Getting Along with Others with Different Backgrounds - A series of work assignments such as just been discussed will bring the student in contact with workers and students with quite different backgrounds. Some persons with limited education and training are very competent. Others who do have college degrees are sometimes not too effective on the job. The Work-Study students, therefore, observe a few on the job who try "to cut corners," and they will quickly observe that this does not work. They will learn that respect is earned and not freely given; they will learn that people are loyal only after they have a reason to be loyal, and they will learn cooperation is freely given when merited.
4. Observing Progress of Workers - The Work-Study students will be able to observe the progress of workers--those who have

been slowed or stopped because they lack the educational backgrounds. They, therefore, should develop a greater appreciation for the value of their education and become better students.

5. Developing An Employment Record - The Work-Study students will have a record in a real situation; one that will assist them upon graduation. This work record and recommendation will include important attributes of the job experience such as:

- a. their ability to get along with others,
- b. their willingness to assume responsibility,
- c. what a student does when a mistake is made,
- d. the creativeness of a student,
- e. the students' total work record which would document initiativeness, enthusiasm, punctuality, etc.

Employers not only have a dedication of their own to the student and the school, but they too benefit from their employment of Boston High School students:

1. New Market of Beginning Employers - The cooperating company has the opportunity to look over the Work-Study student and upon graduation, make their selection and place the graduate in a position that suits his aptitude and interests. Graduates in most instances will have direct knowledge of the company and its operation. They will have completed their training program while a Work-Study student which may have been as long as three or four years.
2. Contribution to Education - The companies participating believe that through the Work-Study Program, they are making



a real and significant contribution to education, in that, they provide some students means by which they can attain higher goals in life. They also provide means whereby school instruction becomes realistic and up-to-date.

3. Service To Community - Participating companies feel too that they are making a substantial contribution and a real service to the community. They are providing a means for drop-outs and potential drop-outs to regain their status in society.

Many company representatives who have worked directly with the Work-Study students have commented that their company has benefited greatly through their employment of students. It has been stated that through their involvement in Boston High School's Program they "have developed some excellent personnel and have caused companies to review their testing procedures which have been revised to more accurately reflect personal qualifications...for the majority of companies, this kind of program either filled jobs that were difficult, if not impossible to fill previously, or filled vacancies faster than would otherwise have been the case."<sup>84</sup>

The number of firms providing employment to students in the Work-Study Program is currently over eighty, a substantial increase over the initial number involved. There is, in fact, a waiting list of new companies who are eager to hire Boston High School's students whenever they become available for employment.

All in all, the success of the program is most often attributed to the good supervision and cooperation of employers. It is they who have shown patience and a positive attitude toward the training and development of their student employees.

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<sup>84</sup>Teaching Topics, p. 3.

Parental Involvement in the  
Work Study Program

Parents of the Work-Study students play a vital role in helping to make the program a successful one. The major requirements of the parents are that they must be willing to cooperate fully with the school in the enforcement of regular attendance at school and at work. They too, must create a desire on the part of their son or daughter for them to want to remain in school in hopes of becoming a more productive citizen.

Parental involvement begins with their required presence during the student's initial interview. During this time the support of the parents is further solicited after the aims and objectives of the program are fully explained.

In addition to working with the school's teachers and job supervisors through home visitations, parents participate in the Parent-Teacher Association and the Title I Advisory Council. With PTA meetings scheduled four times yearly and the Advisory Council sessions planned once a month, parents have the opportunity to become directly exposed to the school's operations.

To date, the school has received full cooperation and support from the parents. In fact, much of the school's success has been credited to parental interest and cooperation.

Recruitment of Students

Under the Work Study Program, staff members visit schools in the Title I poverty target areas of Roxbury, North Dorchester, Charlestown, East Boston and South Boston, seeking students whose records and background match the criteria for admission. At that time interviews are conducted with both the parents and the student.

Summary

The Boston High School Program is designed specifically to aid those youth residing in the City's Title I poverty areas. The goals of the program are (1) to reverse a record of truancy, (2) to develop reading, mathematical and other skills, (3) to eliminate negativism on the part of the student, (4) to help build an adequate self-concept of the students it serves, and (5) to prepare students for jobs after graduation.

According to the School's Director, Boston High School differs from the traditional approach to education. He outlined six key "custom tailored" characteristics of the Boston approach as follows:

1. The prestige of the school.
2. The essentiality of parent cooperation.
3. The availability of a wide range of established commercial jobs among many industrial firms.
4. The teachers' "big brother" attitude and the students' parental identification with them.
5. The self-contained small classes of about fifteen students, with one teacher for all subjects in Grade 9, described as the "critical period" for potential development.
6. And, the use of developmental classroom techniques.<sup>85</sup>

The work experience aspect of the program also helps to build realistic work attitudes and behavioral changes that are necessary to hold a job, i.e., punctuality, attendance, ability to carry out assignments and ability to get along with fellow workers. The Work-Study Program, in fact, allows a very unusual relationship to exist between participating companies and the school. The mutual dependence in planning and operating a program is not found in most school situations. The training agency serves to give practical on-the-job training to the student while the

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<sup>85</sup>Teaching Topics, p. 3.

school supplements this with the related technical information so necessary to work of this sort. The success of such a program is, therefore, dependent on both agencies - school and business.

As a whole, the program seeks to change students' indicated negative attitudes not only toward the school but toward parents, teachers, administrators, authority and peers. Building a sense of value along with confidence in their own ability to achieve will hopefully produce a more productive, better educated and self-supporting member of society.

## CHAPTER IV

### DESCRIPTION OF THE METHODOLOGY EMPLOYED TO ASSESS THE EFFECTIVENESS OF THE BOSTON HIGH SCHOOL PROGRAM

In Chapter III, a historical description of the Boston High School Program was presented in narrative form. This narration provided a background for the second phase of the present study which is the assessment of the degree of accomplishment of seven selected objectives of the Boston High School Program. The purpose of Chapter IV is, therefore, to describe the methodology employed and to determine the effectiveness of the Boston High School Program in meeting these seven objectives.

The seven major program objectives that have been identified by the Boston High School staff as crucial to its success related primarily to the students, the school staff and the community. The seven objectives, identified in Chapter I and listed in the proposal for funds under Title I, U. S. Office of Education are as follows:

1. To reduce significantly the high incidence of absenteeism and tardiness of the Work-Study students as evidenced by improved attendance in these areas.
2. To provide an academic program that will increase the retentive powers of the Work-Study Program.
3. To identify the potential drop-out in the Boston Public Schools.
4. To provide sufficient remediation in the areas required to bring students up to grade level and the results to be measured by standardized test scores.
5. To develop the student to his intellectual capacity as is possible from fall to spring in Reading, English Usage, and Mathematics.

6. To provide job opportunities that will give drop-outs or potential drop-outs a motivation to remain in school.
7. To develop a core of basic working skills that will enable them to compete successfully in the working world.

In the sections which follow, a description of the methodology employed as it relates to each program objective, will be discussed. This will include strategies employed by the Boston High School staff; an evaluation team from the School of Education, Boston University; and, the investigator of this study and other State Department personnel. Divided into two major sections, the first half of the Chapter will include a description of the methodology used in the assessment of the schools' program objectives for the school years 1969-70 and 1970-71. The evaluation processes for the 1971-72 school year, the last half of Chapter IV, is based on a revised set of program objectives and includes those evaluative strategies employed by the Psychological Corporation of New York.

Due to administrative constraints and other problems inherent in the total assessment approach, some data was not obtainable. Also, in determining the effectiveness of the Work-Study Program in meeting its stated objectives, the isolation of a control group was deemed necessary. With a control group, possible comparisons could be made and possible gains could be attributed to Boston High School's program and not to undefined variables. Control group samples were selected from the same Title I area as Boston High School's students and included a random selection of six schools: Gavin Junior High School, Cleveland Junior High School, Burke, Brighton, South Boston and Boston. The control group, too, consisted of students representing grades 9 - 12. For purposes of clarification, in further sections of this report, the control group will refer

to that sample of students representing the schools outlined above; the experimental group will refer to Boston High School's sample population. Methods used in collecting data for each program objective was obtained from school records, standardized achievement tests and specially prepared questionnaires constructed by the various evaluators. A detailed description of the methodology covering each objective for the first two school years' evaluation 1969-70 and 1970-71 follows.

1969-1970 and 1970-1971  
School Year Evaluation

Objective Number One

To reduce significantly the high incidence of absenteeism and tardiness of the Work-Study student as evidenced by improved attendance in these areas.

Sample

A breakdown of the sample for the measurement of the above stated objective included both male and female students. Experimental group (Boston High School) and control group comparisons were made based on the selection criteria established for students entering the Work-Study Program. For the experimental group, a random selection of students was made by the Work-Study staff, while similar control group samples were obtained by the Boston School Department Data Processing Center. In the overall sampling process the control group was selected for the following reasons:

1. The socio-economic constituency of the population served by the two schools was similar.
2. Students selected for the control group had attendance and tardiness records very similar to those students in Boston High School's Program. (Absences exceeding more than 20 days.)

3. The principals of the schools comprising the control group were willing to cooperate in the assessment.
4. Reading scores were also analyzed for the control group students. Those described as being at least two years below grade level in reading were included.
5. Pupil achievement had been similar in both schools.

#### Data Collection Process

Data collected in the measurement of this objective was drawn from school records. Both attendance and tardiness figures were collected for the experimental and control group by each grade level and for the total sample. The City's Data Processing Service was cooperative in several ways:

1. They compiled a list of students who had been chosen for the 1969-70 control group.
2. They forwarded to each of the six cooperating schools, a circular enlisting the support of appropriate personnel to aid in the evaluation process.
3. They visited the schools randomly selected for this experiment in order to analyze records and obtain pertinent information.

During the data collection process, it was found that students could be classified among the following enrollment categories:

- A. Enrollment for the full academic year.
- B. Late entry in the Work-Study Program (defined as entry after Sept. 3).
- C. Left and re-admitted.
- D. Discharged from the Work-Study Program.
- E. Voluntary Withdrawal.

Since admissions and withdrawals to the program fluctuated throughout the school year and in order to maintain a constant sample, only those students enrolled in the program for the full marking periods were included in the analysis. During the first year of assessment, comparisons were



also made of students' attendance and tardiness with their previous year's record.

#### Treatment of Data

The average number of absences for Boston High School and the Data Processing Center control group were compared statistically by means of two-tailed t-tests.<sup>86</sup> In the comparisons for each grade level and the total group, a hypothesis of equal absences for each group was rejected at the .01 significance level.

During the evaluation for the 1969-1970 school year a comparison of attendance figures were made, using the same sample, with student's previous years attendances while enrolled in other schools. This was true for both the experimental and control group. These comparisons, however, were made only for grades 9 and 10 as the grade 11 sample was deemed too small and in grade 12 no new students were allowed to enroll. All data was adjusted to match only four of the five marking periods in the 1969-70 school year. (In only four marking periods could complete and accurate attendance figures be obtained due to a teacher's strike during this particular school year).

The average number of tardinesses for the experimental and control groups were also compared. As for absences, two-tailed t-tests were again used to statistically test hypotheses of equal numbers of tardinesses. In addition, a comparison of the tardinesses of first year Work-Study students with their tardiness for the 1968-69 school year was also made.

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<sup>86</sup>Note: The two-tailed t-test is employed when concern is only with the difference between the mean scores of the control and experimental groups. It estimated the probability that a sample mean will depart in either direction from its predicted value.

During the second years' evaluation, academic year 1970-71, the same procedures were used. The experimental group, however, was not suitable for comparisons due to the fact that only twenty-nine of the original eighty-six members sampled were still in school. Since attendance data was available for only this small sample (N-29) the Data Processing Control group was used exclusively.

A comparison of the attendance of the first year Work-Study Program students with their attendance during the previous academic year was also made. The comparison of the average number of absences was again made statistically by using the two-tailed t-test for correlated samples.

Because the sample sizes for the other grades were deemed too small to draw valid conclusions, comparisons were made only at grade 9. As with the attendance dimension, the tardinesses of Work-Study Program students were not included in the analysis for this academic year. T-tests were used, however, to statistically test hypotheses of equal numbers of tardinesses for the experimental and control groups by grade level.

#### Objective Number Two

To provide an academic program that will increase the retention powers of the Work-Study Program.

#### Sample

Data to be analyzed for the measurement of this objective was gathered by the Work-Study staff at Boston High School and by the Staff of the Office of Research and Evaluation, Title I Programs. The sample consisted of those withdrawals by sex and grade level at Boston High School.

During the academic year 1969-70, a comparison of drop-out figures for the experimental group and a suitably selected control group was not possible for two reasons:

1. Since the evaluators began collecting data during the latter part of the school year, selecting a control group was not feasible.
2. Although attendance and tardiness figures were obtained from the Data Processing Center, there was no indication as to how a student could be classed as a drop-out.

Technically students cannot be labeled "drop-outs" who left the Boston High School Work-Study Program to enter other Boston Schools, but they are in fact drop-outs from the Work-Study Program. Since a comparison of drop-out figures for the experimental and control group was not undertaken during the first assessment year, student records were more closely scrutinized and for the second assessment year, data was made available for the purpose of making comparisons in school drop-out rates.

Withdrawal figures were sought for each grade level and by sex. Also sought were the reasons students left the Boston High School Program. These included:

1. Transferred to another Boston school.
2. Chose to leave school in order to work full-time.
3. Went into the Armed Services.
4. Were needed at home.
5. Married.
6. Other reasons which included dislike of school, parents desire, behavior, and over 16 years of age.

The statistics gathered for the purpose of determining the drop-out rate did not include those students who had moved out of the state. But, for those students who withdrew from Boston High School to return to other schools, follow-up data on the status of those students was obtained.

Further analyses were performed to determine if the Work-Study Program differentially effected the drop-out rates of males and females at various grade levels. The analyses were, however, based only on the drop-out rates for grades 10, 11, and 12, since there were no female students enrolled at the 9th grade level. An analysis was also made to determine if the holding power of the Work-Study Program improved with the students' exposure to the Work-Study Program (defined as the number of years a student has been enrolled in the program).

#### Treatment of Data

It was hypothesized that there would be no difference in the drop-out rate of students by sex and grade level. It was also hypothesized that there would be no difference in the drop-out rates for the experimental and control group. Statistically this hypothesis was tested by employing the Chi-Square technique.

The Chi-Square test applies only to discrete data and not to the continuous variables (discrete variables are those expressed in frequency counts, rather than as measurements). The test, therefore, is based upon the concept of independence, the idea that one variable is not affected by, or related to another.

To test the hypothesis that drop-outs would be evenly distributed across grade levels of exposure to the Work-Study Program, the Kolmogorov-Smirnov Test was used.

The characteristics of this testing procedure are:

1. To determine the number of drop-outs in the Work-Study Program.
2. To determine the number of drop-outs under the assumption of equal distribution by levels of exposure to the Work-Study Program.
3. To determine the cumulative proportion of observed number of drop-outs.

4. To determine the cumulative proportion of drop-outs under assumption of Equal Distribution.
5. To determine the difference of proportions.

### Objective Number Three

To identify the potential drop-out in the Boston Public Schools.

### Procedure

Neither the 1969-70 evaluation nor the 1970-71 evaluation surveyed the effectiveness of measuring this particular program objective. The topic area in general, however, was highlighted with two questions remaining in the minds of the evaluators:

1. Can the students enrolled in the Work-Study Program at Boston High actually be classified as potential drop-outs? In other words, is the selection criteria for the Work-Study students valid?
2. Is it the responsibility of Boston High School to determine which students in the Boston Public School System can be classified as potential drop-outs?

In response to the first question, it was determined unanswerable by the Boston High School Staff on the grounds that they felt that they were not qualified to accurately characterize a potential school drop-out. In the assessment of this objective, it was suggested that a single question be posed to the enrollees of the program: Do you think that you are likely to drop out of school during the present academic year?

In response to the second question it was determined that the task of screening the total school population should not be a responsibility of Boston High School. It was further suggested that this responsibility should be left to a higher level agency.

### Objectives Number Four and Five

Number 4 - To provide sufficient remediation in the areas required to bring students up to grade level, and the results to be measured by standardized test scores.

Number 5 - To develop the student to his intellectual capacity as is possible from fall to spring in Reading, English Usage and Mathematics.

### Procedure

Because the two objectives, four and five, are so closely intertwined, and because the three areas of Reading, English and Mathematics are so basic to remediation in learning, the assessment of these objectives will be treated jointly in the sections which follow. More particularly, the objectives related to academic achievement are more carefully defined as:

1. Work-Study students will evidence a greater than expected increase in Reading achievement for the interval between measurements.
2. Work-Study students will evidence a greater than expected increase in Mathematics achievement for the interval between measurements.
3. There will be a greater than expected increase in English Usage achievement by students for the interval between measurements.

### Sample

In order to assess accomplishment of this objective, A One Sample Pre-Test - Post-Test control group experimental design was planned in order to determine cognitive changes which took place in the Boston High

School students as a result of participating in the school program. However, data for a sufficient number of these students was not available due to either student withdrawal from school or student absences on the selected testing days. Therefore, the desired Pre-Test - Post-Test control group design could not be implemented, resulting in a sample of only a selected group of Boston High School students. Representing grades 9 through 12, the randomly selected sample varied in number for each achievement sub-test administered. The type of sub-tests administered to each grade level along with the sample size for the two evaluation years under scrutiny are depicted in Table 3 on the following page.

#### Instruments Utilized

The Stanford High School Basic Battery and the Stanford Advanced Battery were selected to be administered to students at Boston High School. The Stanford Achievement Test was chosen for the following reasons:

1. It is well known, widely used, and has received an acceptable evaluation in Buros Sixth Mental Measurements Yearbook.
2. It is a standardized instrument.
3. It had not previously been administered to the students of Boston High School
4. It contained sub-tests in Reading, English Usage, and Mathematics.

Although all grade levels were represented, no arithmetic tests were given to the twelfth grade girls since mathematics is not a part of the regular twelfth grade curriculum for girls.

Table 3

TYPES OF SUB-TESTS ADMINISTERED TO EACH  
GRADE LEVEL AND SAMPLE SIZE FOR SCHOOL YEARS

1969-1970 and 1970-1971

Type of Test Administered	Grade Level	Sample Size 1969-1970 Academic Year	Sample Size 1970-1971 Academic Year
Standard Advanced Battery			
Paragraph Meaning	9	76	69
Language	9	76	69
Arithmetic Concepts	9	73	57
Arithmetic Computation	9	76	66
Arithmetic Application	9	72	56
Stanford High School Basic Battery			
English	10	86	89
Reading	10	84	79
Numerical Competence	10	85	82
Stanford Advanced Battery			
Paragraph Meaning	11	67	00
Language	11	65	00
Arithmetic Concepts	11	49	00
Arithmetic Computation	11	48	00
Arithmetic Application	11	49	00
Stanford High School Basic Battery			
English	11	00	98
Reading	11	00	93
Numerical Competence	11	00	89
Stanford High School Basic Battery			
English	12	48	74
Reading	12	48	64
Numerical Competence	12	00	66
Stanford Advanced Battery			
Arithmetic Computation	12	37	00
Arithmetic Application	12	24	00
Arithmetic Concepts	12	35	00



### Objective Number Six

To provide job opportunities that will give drop-outs or potential drop-outs a motivation to remain in school.

### General Procedure

In order to assess accomplishment of this objective, a series of non-standardized attitudinal questionnaires were administered in order to determine the attitudinal changes which took place in the Work-Study students as a result of participating in the Boston High School program. These attitudinal changes relate specifically to the positive or negative attitudes toward the school's program and reflect not only the attitudes of students, but faculty members and administrators, parents, and job supervisors and executives of participating businesses and companies as well.

One standardized instrument was utilized, however, during the 1969-70 academic year. This included the Demos D Scale, an attitude Scale for the identification of school drop-outs. Although this instrument was not administered during the following years' evaluation, its description along with the other non-standardized instruments used in the assessment is provided in a later section of this chapter.

The purposes for using non-standardized instruments as opposed to standardized instruments were twofold:

1. The instruments could be drafted in such a manner so as to relate specifically to the uniqueness of the Boston High School program.
2. To seek data from several factors that usually could not be obtained from general standardized measures.

For each attitudinal instrument drafted, several "factors" were incorporated in the overall design.<sup>87</sup> Ideas and information for inclusions were sought from the following sources:

1. by analyzing documents relating to relevant aspects of the Work-Study Program,
2. by interviewing representatives from various "interest groups": parents, faculty members, job supervisors, business executives, etc,
3. by administering general open-ended questionnaires to a relevant sample of the "interest group" members.

Both structured and open-ended questionnaires and rating scale items relating to each of the logically derived factors were then constructed. These items were then administered to the appropriate sample groups. A description of each questionnaire used in the assessment of this particular program objective can be found in the section that follows.

Utilization of Standardized Instrument  
to Determine Attitudes of School Dropouts

Demos D Scale

Administered during the fall and spring of the 1969-70 academic year, this standardized instrument was designed specifically as an attitude scale for the identification of school drop-outs. Student attitudes toward the program were measured in four basic areas.

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<sup>87</sup>FACTORS refer to the basic information areas measured. For example, attitudes toward the school program, attitudes toward teachers, attitudes toward peers, etc. Several related questions will fall under each of the information areas.

These included:

1. Attitudes toward teachers,
2. Attitudes toward education,
3. Influences by peers or parents,
4. School behavior

These attitude scales were administered to all available students in the Work-Study Program and to a selected control group sample. Both samples consisted of students representing all grade levels (grades 9-12).

Evaluations were based on the following:

1. A comparison between fall and spring testings for each subscale and for the total scale by grade level and across grades. (for Work-Study Program students only).
2. By comparison between the experimental (Boston High School-Work-Study Program) group and the control group, using a post-test only control group design.

Thus, through use of this particular instrument, two distinct bodies of knowledge could be obtained: (1) a determination of any changes in students attitudes toward the school program throughout the school year, and (2) a comparison of the Boston High School students' attitudes toward the Work-Study Program with a control group sample of students not associated with the program. The Demos D Scale was the only standardized instrument used in the assessment of attitudes toward various aspects of the Work-Study Program. All other instruments to be defined in the sections that follow include those non-standardized instruments drafted by various evaluators.

Utilization of Non-Standardized Instruments  
to Assess Attitudes Toward the  
Work-Study Program

Student Questionnaire

In order to determine the attitudes of students enrolled in Boston High School toward the Work-Study Program and teachers, a seventy-two item rating scale was administered during the 1969-70 academic year. Consisting of seven factors, ideas for the creation of this instrument were derived from individual and small group interviews with students and from an analysis of descriptive material about the Work-Study program. The seven factors included:

1. Student Attitudes Toward Teachers (5 questions)
2. Student Attitudes Toward the Administration (5 questions)
3. Counseling (5 questions)
4. Curriculum relevancy (8 questions)
5. Parental Involvement (3 questions)
6. Administrative Organization (4 questions)
7. Job Satisfaction (42 questions)

All statements in the scale were grouped in succession according to the items associated with each factor. For example, questions 1 through 5 were grouped under the first factor, questions 6 through 10 were grouped under the second factor, etc.

In this non-standardized instrument, students were asked to rate each statement according to an attitudinal scale of five response options:

Almost Always

Most of the time

Sometimes

Very Few Times

Nearly Never

During the administration of the instrument, it was requested that a check mark ( ) be placed above the appropriate response. Therefore, an indication of the students most honest and accurate representation of how they felt about each statement could be made. Figure 3 illustrates two sample statements and the rating scale employed which depicts the general format of the instrument.

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Question: 1

Teachers in the Work-Study Program feel that students are lucky to be in the program.

/	/	/	/	/
Almost Always	Most of the time	Sometimes	Very Few	Nearly Never

Question: 2

Teachers in the Work-Study Program are too strict about minor things such as being in your seat on time, talking in class, etc.

/	/	/	/	/
Almost Always	Most of the time	Sometimes	Very Few Times	Nearly Never

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Figure 3. - Examples of the format and content of the first two questions comprising the Student Questionnaire.

When the attitudes of students toward the Work-Study Program were measured during the 1970-71 academic year, a smaller sixty-eight item, five factor questionnaire was administered. During this particular years' evaluation more emphasis was placed on the factor "curriculum relevancy." In addition, the student's attitudes toward the front office staff was taken into consideration.

Although the same general format was utilized in drafting this particular instrument, the questionnaire content varied considerably.

For purposes of item analysis and comparable content information see Appendix C for both instruments used in the assessment of student attitudes.

### Faculty Questionnaire

The attitudes of teachers toward selected aspects of the Work-Study Program were solicited through the use of two non-standardized attitudinal instruments. During the 1969-70 academic years' evaluation, an eighty-four item, six-factor questionnaire was drafted. Factors for this instrument and the number of items within each factor included:

1. Communication (11 Questions)
2. The Teacher's Role in Decision Making (12 Questions)
3. Counseling (2 Questions)
4. Curriculum (29 Questions)
5. Administrative Organization (5 Questions)
6. Faculty Attitude Toward Students (6 Questions)

A different approach was taken in the design of the Faculty Questionnaire. First, unlike the Student Questionnaire, items within each factor were not grouped in succession, i.e., various statements representing each factor were scattered throughout the questionnaire, only to be combined later for the sake of the analyses. Second, although for the most part closed questions were used in the overall design, this questionnaire included five open-ended questions. In addition, several questions were set up requesting either a "Yes" or "No" response. Others solicited responses on a positive to negative scale. Response options for this category included: Excellent, Good, Fair, Poor, and Completely Absent.



Parent Questionnaire

A twelve-item questionnaire was administered during both years' evaluation under study to the parents of students enrolled in the Work-Study Program. The purpose of the administration of this instrument was to seek the cooperation of a parent group that would aid in judging how well the Work-Study Program was providing an education for its students. The sample to whom questionnaires were mailed was composed of parents of a randomly-selected group of students from the total Work-Study Program. Four factors were incorporated in the design of this instrument and included the following:

1. Knowledge About the Program
2. Communication Between the Home and School
3. A Comparison Between the Work-Study Program and the School Formerly Attended by the Work-Study Students
4. Educational and Vocational Attainment

Samples of questions asked of the parents are cited in Figure 5 below:

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Question: 3

How many times has someone from the Work-Study Program visited you at home this school year?

\_\_\_\_\_ 0 \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4

Question: 8

Compared with teachers in other schools, the teachers at Boston High School show:

\_\_\_\_\_ more concern for my child

\_\_\_\_\_ about the same amount of concern as teachers in other schools

\_\_\_\_\_ less concern than teachers in other schools

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Figure 5. - Sample questions used in the Parent Questionnaire.



No attempt was made during the evaluation of the Parent Questionnaire to determine the names of the parents who completed the form. (A sample of the complete Questionnaire is included in Appendix E).

#### Job Supervisor's Questionnaire

In order to carry the assessment process further, job supervisors were asked to evaluate the performance of the student(s) under their supervision. In an effort to accomplish this objective a thirteen-item questionnaire/rating scale was developed. Two factors were later identified during an analysis of the returns grouping the questions asked in the following categories:

1. Job Performance Characteristics
2. Adequacy of Supervision from Work-Study Program Personnel

A total of 175 questionnaires were mailed representing twenty-two participating companies. Following the mailings contacts were then made by telephone as a follow-up technique that would hopefully bring in a higher percent of returned instruments. Although this questionnaire was administered during the 1969-70 academic year neither this instrument nor a similar one was administered during the following years' assessment. (The complete Job Supervisors Questionnaire can be found in Appendix F).

#### Company Executive's Questionnaire

Finally, the attitudes of company representatives who were primarily responsible for sponsoring the Work-Study students were assessed. It was hoped that this cadre of company representatives, i.e., general managers, personnel managers and others, would provide valuable information concerning broad aspects of the company's involvement in the Work-Study Program. The questionnaire developed for administration to this sample group con-

tained four generalized questions. They are listed on this page.

Questions asked of Company Executives:

1. What, if any, benefits do you think are derived by your company as a result of cooperating with the Work-Study Program?
2. What, if any, long range benefits do you think are derived by students as a result of your company's participation in the Work-Study Program?
3. What, if any, problems are encountered by your company as a result of participating in the Work-Study Program?
4. From the point of view of your company, please suggest specific ways that you believe have the potential for bringing about significant improvements in the Work-Study Program?

Seeking the opinions of this sample was also deemed of importance because of the company executive's role of overseeing the total on-the-job performance of the student(s). This aspect of the assessment was undertaken only during the 1969-70 academic year.

#### Objective Number Seven

To develop a core of basic working skills that will enable them (the students) to compete successfully in the working world.

#### Procedure

In order to assess the accomplishment of this particular program objective an analysis of key responses obtained from the instruments described in Program Objective Six was made. The treatment of this objective, therefore, can be analyzed as a combination of the attitude and work experience components comprising all of the instrumentation previously discussed.

In an effort to further determine the types of basic working skills acquired by the Work-Study students while enrolled in the program and after graduation, a Graduate Follow-up Questionnaire was administered

to a sample of seventy-six students who had graduated from Boston High School in the Spring of 1970. A five-page questionnaire containing twenty-five questions was used. Such questions that were asked are as follows:

- . Have you ever worked for the same company after graduation that you worked for when you were a student at Work-Study?
- . Were you provided with enough information at Work-Study about the kind of work that would be best for you after graduation?
- . Were you provided enough information at Work-Study about how to handle money?

It was also hoped that a final objective could be assessed: That the Work-Study students transfer the skills and attitudes developed while taking part in the Work-Study Program into adulthood; therefore, becoming productive, self-supporting individuals prepared to contribute his or her share to the American Democracy. This objective, however, would include a longitudinal analysis of the effects of the total Boston High School Work-Study Program and should be kept in mind as a recommendation for future assessments.

#### Summary

In the present section, a description of the methodology employed to assess the effectiveness of the Boston High School Program was presented for the academic years 1969-70 and 1970-71. A discussion of the methodology centered around the attainment or non-attainment of the program's seven objectives. Further detailed was an identification of various sample groups, types of instrumentation employed and procedures for administering the questionnaires. In the following section is a

description of the methodology as related to a modified evaluation design developed by the Psychological Corporation of New York in efforts to strengthen Boston High School's procedures in both the educational and vocational spheres. Although the first section of this chapter has served to provide base-line information concerning a portion of the total assessment process, major emphasis will be placed on the final evaluation section of the chapter covering solely those evaluation procedures undertaken during the 1971-72 academic year.

1971 - 1972  
School Year Evaluation

The 1971-1972 evaluation of the Boston High School Work-Study Program gathered information concerning the program's overall operations as opposed to an assessment of each program objective. The design for this academic years' plan, a modified plan based on an assessment of the program during the previous summer's Work-Study session, provided data that would aid in determining various strengths and weaknesses of all aspects of the school program. Basically, the plan called for an evaluation of:

1. the students and staff at Boston High School,
2. the scope and quality of instruction at the school,
3. the school's relationship with various businesses and companies participating in the employment of Work-Study students,
4. the placement of Boston High School's students in various jobs,
5. the nature of the particular jobs obtained for the Work-Study students,
6. the performance of the Work-Study students both on-the-job and in the classroom,

7. the training of Boston High School's teachers.

### General Procedure

In determining the effectiveness of the school's operations and the effect on its students a series of evaluation objectives were established. They included the following:

1. To appraise the student selection techniques and procedures as well as the guidance services provided for those chosen.
2. To assess the effectiveness of the program staff -- administrators and supervisors, teachers and coordinators.
3. To evaluate the school's educational facilities, equipment and materials.
4. To analyze the quality and effectiveness of the instruction, the curriculum, and the teacher training and orientation.
5. To appraise the student's attainment of the designated performance objectives.
6. To appraise the program's coordination with cooperating business and industry.
7. To gauge the value of the job supervision and advice that teachers give their students.
8. To appraise the program's coordination with parents.

In assessing the accomplishment of each of the above-stated evaluation objectives, several strategies were employed: field observations, interviews with personnel associated with the program, questionnaire surveys, and an examination of school records. Details of each procedure appear on the following pages.

I. Observation procedures were undertaken to obtain data related to:

A. While at school

1. classroom and laboratory functions.
2. the adequacy of general facilities and equipment.
3. the quality and relevance of curriculum materials.
4. actual instruction techniques and procedures.

B. While on-the-job

1. student's attitudes and work habits.
2. the types of work assignments.
3. the vocational training being offered.
4. the relations between students and teachers who supervise the job experience phase of the program.

II. Interviews were conducted with a broad cross-section of those individuals involved in the program. Information, opinions and suggestions for improvement pertaining to all aspects of the total school program were sought from:

A. While at school

1. the students.
2. the school's administrators.
3. the teacher/coordinators.
4. the central office staff.

B. While on-the-job

1. the students.

2. the business and company managers.

3. the job supervisors.

III. Questionnaires were administered for the purpose of obtaining data related to student attitudes, general work habits, and the degree of employability. Through use of these instruments additional data was collected, supplementing and reinforcing that which had been gathered through observations and interviews. The two non-standardized instruments involved:

A. A questionnaire survey for the management of cooperating businesses and industry in the Boston High School Work-Study Program.

B. A questionnaire survey for all teachers/coordinators designed to obtain facts about the classroom activities and employment of their students.

IV. Finally, School Records were examined for the purpose of collecting relevant data related to:

A. Attendance and conduct records.

B. Background of students.

C. Qualifications of teachers/coordinators.

D. Specific staff assignments and responsibilities.

E. Guidelines or regulations for the administration of the program.

F. Standardized test scores for the purpose of analyzing performance objectives.

As in the first section of the chapter, a more complete description of the methodology covering each objective will be defined. Where

applicable the various sample groups, evaluation procedures and treatment of data for each objective will be highlighted.

#### Evaluation Objective Number One

To appraise the student selection techniques and procedures, as well as the guidance services provided for those chosen.

#### Procedure

The evaluation plan utilized in collecting information related to this objective included an examination of school records. An attempt was made, through the investigation, to determine the extent to which the student enrollees matched the program's selection criteria.

The guidance services provided to a selected sample of students was also investigated. Examination of records from guidance personnel as well as interviews with teacher/coordinators and students were made.

#### Evaluation Objective Number Two

To assess the effectiveness of the program staff -- administrators and supervisors, and teacher/coordinators.

#### Procedure

In the assessment of this objective, the evaluation design included the involvement of two specially prepared interview guides. One interview guide was prepared specifically for Boston High School's central office administrators. Another guide was geared toward other school administrators and teacher/coordinators. In addition, a more detailed questionnaire was drafted for the purpose of seeking ideas concerning recommendations and improvements in the program. (This questionnaire will be discussed under the procedure section of objective four).



The purpose behind the use of the interview guides was to ensure uniformity and completeness of coverage of all topic areas to be discussed during the interview sessions. Ideas and suggestions for improvement of the school program were solicited as exemplified by the following sample questions asked of the participants:

Questions for Central Office Administrators

- In what way is the program effective in reducing school failure and the rate of student drop-outs in your program?
- In your judgement, what are the programs values in preparing students for employment?

Questions for other School Administrators and Teacher/Coordinators

- In your opinion, is the number of students involved in the Work-Study Program appropriate in relation to the facilities, materials, staff and opportunities for employment? What would be your reasons for increasing or decreasing the number students involved?
- What problems, if any, have been caused by changes in the availability of employment opportunities?

The Interview Guide for Central Office Administrators contained six items whereas the Interview Guide for other Administrators and Teacher/Coordinators sought responses from a twelve-item instrument. (Complete interview guides for both areas under concern are included in Appendix G).

Evaluation Objective Number Three

To evaluate the school's educational facilities, equipment and materials.

Procedure

The assessment of this objective was accomplished strictly by on-site observations to the school. During this assessment year, 1971-72, seven visits were made by various evaluators to the Boston High School's

program to determine the adequacy, quality and relevance of all educational aspects related to the programs' effectiveness.

#### Evaluation Objective Number Four

To analyze the quality and effectiveness of the instruction, the curriculum and the teacher training orientation.

#### Procedure

A twenty-two item Teacher/Coordinator Questionnaire was prepared in order to obtain from all faculty members facts about the school's instructional program and the general area of in-service training for teachers. In addition, the instrument included a final section which sought to obtain responses in reference to how the school's procedures helped in attaining particular program goals. Four response options ranging from "Excellent" to "Poor" provided the rating scale for the assessment of each goal statement. The inclusion is exemplified in Figure 6 below.

(The complete Teacher/Coordinator Questionnaire can be found in Appendix H).

	<u>Excellent</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>
Development of ability to devise and use instructional materials.				
Improvement of Work-Study Program and its philosophy.				
Development of techniques of guidance and counseling.				
Establishment of procedures for coordinating activities with business and industry.				
Development of forms and check-lists for use in evaluation of students' work, activities, and in follow-up.				

Figure 6. - Samples of goal statements found in Teacher/Coordinator Questionnaire.

Evaluation Objective Number Five

To appraise the student's attainment of the designated performance objectives.

Procedure

During the summer of 1971, the Title I Office of Research and Evaluation and the Boston High School program staff allotted a period of time for the purpose of setting up performance objectives for all subjects to be taught in the ensuing school year. This was done to comply with a request by the State Department of Education.

Class lists were obtained from the school's records, in order to examine test scores related to the curriculum units used in the various classes. These scores were then analyzed to determine how many of the Work-Study students advanced in achievement according to the particular curriculum units in which they were subjected.

Both scores and tests were also reviewed to judge whether or not the curriculum materials being used could easily be converted to performance objectives - the ideal method of instruction for classes in the Work-Study Program.

A "Basic experimental model" arranged the objectives according to the normal sequence in which they were taught. Units in the model contained, for each subject, sets of related performance objectives. An average of about five units were then clustered under each subject, with each unit comprising from three to eight objectives.

For the most part, tests were constructed by the department heads and were administered by the classroom teachers either immediately following pertinent instruction or at the end of a completed unit. The primary aim of constructing the tests was to aid in reflecting the

school's philosophy as well as having application to the student learners.

Tests were then converted to numerical scores ranging from zero to one-hundred. Where possible, the results were classified according to sex. Statistical charts were then constructed for each department representing all subject areas: English, Math, History, Physical Science, Law, Typing, Office Practice, Current Events, Area Studies and Black Studies. Because the material covered in a particular unit varied according to teachers in many cases, some difficulty arose in tabulating results. Results for males and females were tallied separately where they were taught in separate classes. This was true for English in grades 10, 11, and 12, applied math in grade 10, and U. S. History in grade 11.

#### Evaluation of Objective Number Six

To appraise the program's coordination with cooperating business and industry.

#### Procedure

The assessment of this objective was accomplished through the use of an eight-item questionnaire administered to the managers and job supervisors of companies employing the Work-Study students. In this survey, an attempt was made to determine the employer's opinions concerning (1) the student's preparation for the type of work he/she was doing, (2) student's attitudes toward their jobs, (3) the work habits of the students under their employ, and (4) the nature of the student's attitudes toward the Work-Study Program. Ideas and suggestions for the improvement or extension of the program were also sought.

In addition, interview guides were prepared and administered to Students at their job sites. In particular, students were asked:

1. How long they had been working at their job.
2. How they were taught to do the work they were doing.
3. The things that they liked or disliked about their job experience.
4. What kind of assistance they had received from their teacher/coordinator in obtaining their job.

The Questionnaire Survey of Management of Cooperating Business and Industry and the Interview Guide for Students at Job Sites can be found in complete form in Appendix I.

#### Evaluation Objective Number Seven

To gauge the value of job supervision and advice that teachers give their students.

#### Procedure

Two different series of interviews were conducted to assess accomplishment of this objective. One interview guide was specially prepared to acquire responses from the employers of the Work-Study students; the other interview guide solicited opinions from the students themselves while in the school setting.

The interview guide for the employers contained twenty-three items and sought direct responses particularly through use of open-ended questions, about the job supervision aspect of the program and the advice given to students by teachers.

Priority questions to be closely examined included:

#### Value of Job Supervision

- What personal or skill qualifications, if any, are Work-Study employees required to meet?

- Have you been satisfied with the performance of Work-Study Program employers?
- Do you use a work-performance rating of any kind in evaluating the work of student employees?
- What services have been rendered by the Work-Study teacher-coordinator?

#### Advice Given to Students by Teachers

To what extent, if any, have student employees had personal problems (behavior, appearance, responsibility, performance, etc.)?

In what ways, if any, have your student employees changed in any of the following ways since you hired them:

- a. Personality
- b. Behavior
- c. Work habits and skills

The interview guide for students was also directly related to the assessment of this particular evaluation objective. A seven-item guide, both this open-ended questionnaire and the questionnaire prepared for the employers of the Work-Study students can be examined more closely in Appendix J.

#### Evaluation Objective Number Eight

To appraise the program's coordination with parents.

#### Procedure

During the 1971-72 evaluation year, little appraisal was made of the parents opinions concerning the Work-Study Program. One Parent-Teacher Association (PTA) meeting, however, was attended by eighty parents. During the course of that particular evening, the program was discussed with several of the parents followed by individual conferences with teachers to further discuss the progress of selected students.

All in all, in the assessment of this objective, various school records were studied. This included the "Principal's Monthly Report to the Superintendent", student discharges with parental involvements, and absence and tardiness records in lieu of parental support in helping to keep their child's attendance punctual and regular.

#### Summary

In this chapter, a description of the methodology as related to Boston High School's program objectives and evaluation objectives were discussed. Divided into two major sections, the first half of the chapter included a description of the methodology used in the assessment of the school's program objectives for the school years 1969-70 and 1970-71. The last section of Chapter IV included the evaluation processes employed during the 1971-72 academic year.

Although major concentration was placed on various instrumentation designed specifically for the assessment of each program objective during the first two years of the programs' evaluation, there was less dependence on the use of questionnaires during the final years' evaluation. For this evaluation, emphasis was placed on observation and interviewing techniques.

In the chapter that follows is presented the analyses and interpretation of the data as related to each program objective and the series of evaluation objectives. Although base-line data will be presented for the initial assessment, the 1971-72 academic years' evaluation will be in the forefront of discussion.

## CHAPTER V

### PRESENTATION AND ANALYSIS OF ASSESSMENT DATA

Chapter V renders a presentation and analysis of the data generated through the assessment procedures outlined in Chapter IV. In the previous chapter the seven program objectives for the 1969-1970 and the 1970-1971 academic years of the Boston High School Program were identified with a description of the methodology employed as it related to each objective. Identified further was a revised set of eight evaluation objectives which served as a base for analyzing the school program during the 1971-1972 academic year. The methodology as related to each evaluation objective was also defined.

In this chapter data will be presented and analyzed in the following manner: First, the evaluation data of Boston High School's Work-Study Program for the 1969-1970 and 1970-1971 academic years will be presented and analyzed collectively for each program objective. Second, data gathered in reference to a revised set of evaluation objectives established by the Psychological Corporation of New York and relating to the Work-Study Program for the 1971-1972 academic year will be analyzed and will serve as the final section of the chapter.

Following is a presentation and analysis of the data as it relates to each program objective.



Data Analysis  
for  
1969-1970  
and  
1970-1971  
Academic Years

Objective Number One

To reduce significantly the high incidence of absenteeism and tardiness of the Work-Study student as evidence by improved attendance in these areas.

Presentation and Analysis of the Data

As established in Chapter IV, the analysis of this objective was based on the following data:

1. Experimental and control group comparisons were made based on the selection criteria established for students entering the Work-Study Program.
2. Attendance and tardiness figures were collected and compared for both the experimental and control group by grade level and for the total sample.
3. Comparisons were made of the Work-Study students' first year attendances and tardinesses with their previous years' record. (Comparisons were made only for grades 9 and 10, as the grade 11 sample was deemed too small and no new students were enrolled in grade 12.
4. The average number of attendances and tardinesses for both the experimental and control group were compared.

School records of the control group, used for comparison purposes in the analyses which follow, were examined for the purpose of selecting a

sample of students who had similar backgrounds as the experimental group -- those students enrolled in the Work-Study Program. As a guide in selecting students who would comprise the control group sample, reference was made to the selection criteria established for the Work-Study students at Boston High School. The outcome of this task included the identification of several high school youth throughout the City of Boston. Representing grades 9 through 12, this selected sample of students will serve as the comparative group for the analysis of each program objective where experimental-control group comparisons are made.

### Enrollments

The initial comparisons made in the assessment of this objective involved the sample of students selected for both the experimental and control group who had been enrolled in a course of study for the full academic years 1969-1970 and 1970-1971. It was with this sample that attendance and tardiness analyses were made. Table 4 below sets forth a comparison of the enrollment figures for the Work-Study sample and the control group sample who were enrolled for the full academic years under study.

Table 4

ENROLLMENT FIGURES FOR THE EXPERIMENTAL AND CONTROL  
GROUP SAMPLES BY GRADE LEVEL FOR FULL ACADEMIC YEARS  
1969-1970 and 1970-1971

	Exp. (gp)	Con. (gp)	Exp. (gp)	Con. (gp)	Exp. (gp)	Con. (gp)	Exp. (gp)	Con. (gp)
Grade level	9	9	10	10	11	11	12	12
Enrolled for full year 1969- 1970	86	35	112	44	67	53	55	40
Enrolled for full year 1970- 1971	101	26	115	16	118	30	83	22

Attendance

In order to determine if the attendance item in Objective One was sufficiently accomplished the average number of attendances for the experimental and control groups were compared for each grade level and for the total group. The results of these analyses are presented in Table 4 for both the 1969-1970 and 1970-1971 academic years. Also presented in Table 5 are the sample sizes and their respective means and variances.

Table 5

COMPARISON OF AVERAGE NUMBER OF ATTENDANCES FOR THE WORK-STUDY GROUP VS. THE CONTROL GROUP FOR THE ACADEMIC YEARS 1969-1970 and 1970-1971

Grade	Year	Work Study			Control Group			t	Level of sig.
		N	$\bar{X}$	S	N	$\bar{X}$	S		
9	1969-1970	86	4.91	4.37	35	30.29	19.30	7.6	$p < .01$
9	1970-1971	70	8.07	5.52	26	37.81	23.73	9.69	$p < .01$
10	1969-1970	112	8.86	7.94	44	42.61	32.60	6.9	$p < .01$
10	1970-1971	87	10.40	8.92	16	37.56	31.23	6.69	$p < .01$
11	1969-1970	67	7.91	5.16	53	42.79	24.48	8.1	$p < .01$
11	1970-1971	101	10.11	6.68	30	32.13	29.36	6.90	$p < .01$
12	1969-1970	55	13.25	9.66	40	33.70	18.74	6.4	$p < .01$
12	1970-1971	80	10.89	7.03	22	22.77	11.48	5.97	$p < .01$

In computing  $t$  values for the experimental versus the control group by grade level, all were found to be statistically significant for both academic years at the .01 level of significance. This indicates that the absences of Work-Study students were significantly lower than for the control group, thus rejecting the null hypothesis that for each comparison the average number of absences for both groups were equal. In fact, during the 1969-1970 academic year, the frequency of absences for the control group was four times that of the Work-Study group. For the 1970-1971 academic year the control group's absences were from two to four times more frequent than the Work-Study group.

To further analyze the attendance records of the students in the Work-Study Program, a comparison was made of the student's first year attendance with their attendance record the previous year in other Boston schools. Comparisons were also made the following academic year (1970-71) with students who had been enrolled in the Work-Study program for one full year.

Since the sample size in grades 10, 11, and 12 were deemed too small for comparison purposes during the 1969-1970 school year only a comparison was made at the ninth grade level. For the same reason, during the 1970-1971 school year only data for the ninth and tenth grades were used.

Again, testing the hypothesis that the average number of absences was equal before and after exposure to the Work-Study Program, comparisons of the average number of absences were made by using  $t$ -tests for correlated samples. The results of the comparisons of attendance records for the Work-Study students with their previous years' attendance records are presented in Table 6 on the following page.

Table 6

COMPARISONS OF ATTENDANCE RECORDS OF WORK-STUDY STUDENTS  
WITH PREVIOUS YEARS' ATTENDANCE RECORDS FOR ACADEMIC YEARS  
1969-1970 and 1970-1971

Grade	1968-1969			1969-1970			1969-1970			1970-1971		
	N	X	S	X	S	t*	N	X	S	X	S	t
9	55	32.03	27.25	3.23	2.75	7.9	44	44.39	30.28	10.07	6.52	7.7
10	27	36.15	27.44	7.02	7.18	4.1						

\*Two-tailed tests were used in all cases.

As indicated in Table 6, in grades 9 and 10 for the 1969-1970 academic year and in grade 9 for the 1970-1971 academic year, the number of absences for first year students in the Work-Study Program were significantly lower than the absences of the same sample group during the 1968-1969 and 1969-1970 school years. In interpreting the results from Table 6, it should be kept in mind that the sample does not include all of the first year students enrolled in the Work-Study Program. The statistics do seem however, to indicate that the Work-Study Program has had an effect on reducing the number of absences of potential drop-outs, thus achieving the attendance aspect of Objective One.

### Tardiness

To determine if the Work-Study Program affected the school-related tardiness of students, the average number of tardinesses for the experimental group and control group were compared by grade level. A comparison, similar to the comparison utilized for attendance data, was made for the tardiness figures again using the t-test to statistically test the null hypothesis that each group would show an equal number of tardinesses. Table 7 depicts the results of the analysis.

Table 7

COMPARISON OF THE AVERAGE NUMBER OF TARDINESSES FOR THE  
EXPERIMENTAL AND CONTROL GROUP BY GRADE LEVEL FOR THE  
ACADEMIC YEARS 1969-1970 and 1970-1971

Work Study					Control Group				
Grade	Year	N	$\bar{X}$	S	N	$\bar{X}$	S	t	Level of sig.
9	1969-1970	86	8.63	7.44	35	14.89	17.98	2.00	$p > .05$
9	1970-1971	70	7.91	7.96	26	8.88	8.42	.52	$p > .05$
10	1969-1970	112	8.69	10.02	44	10.59	11.02	.97	$p > .05$
10	1970-1971	87	8.06	9.34	16	20.81	16.35	4.32	$p > .05$
11	1969-1970	67	11.16	15.55	53	16.12	16.39	1.60	$p > .05$
11	1970-1971	101	11.86	10.77	30	13.13	15.10	.52	$p > .05$
12	1969-1970	55	21.91	11.87	40	10.48	12.07	4.03	$p > .05$
12	1970-1971	80	15.51	11.08	22	11.72	12.97	1.35	$p > .05$

As indicated in Table 7 above for the 1969-1970 analysis grades 9, 10, and 11 showed no significant difference in tardiness at the .05 level; however, there was a significant difference at the 12th grade level where the Work-Study Program group showed a higher incidence of tardiness than the control group. The possible causes for this were determined to be: (1) the large amount of absences attributed to the control group sample (see Table 5) undoubtedly produced a reduction in the control group's number of tardinesses, and (2) the procedures employed for recording and the standards regulating tardinesses were much stricter for the Work-Study group.

For the 1970-1971 analysis of data depicted in Table 7, there was a similar difference at the 12th grade level in that the Work-Study group again showed a higher rate of tardinesses. Thus, because of the lack of a significant reduction of tardinesses on the part of the Work-Study students indications are that for the 1969-1970 and 1970-1971 academic years the program has not satisfied the tardiness objective.

In the assessment of this objective a further comparison was made of the tardiness records of first year Work-Study students with their records the previous year while enrolled in other schools. Because of the small number of first year students enrolled in grades 11 and 12, only ninth and tenth grade students were used in the analysis when comparing data for the 1968-1969 and 1969-1970 school years. During the 1969-1970 and 1970-1971 academic years, however, comparisons only at the ninth grade level were used since data was not available for the other grades. The data gathered in relation to the tardiness records of the Work-Study students are presented in Table 8 below.

Table 8

TARDINESSES OF FIRST YEAR WORK STUDY STUDENTS VS. TARDINESSES OF THE SAME STUDENTS PRIOR TO ENTRANCE INTO WORK-STUDY FOR (1968-69 - 1969-70) and (1969-70 - 1970-71)

Grade	1968-69			1969-70			1969-1970			1970-71		
	N	X	S	X	S	t	N	X	S	X	S	t
9	55	9.18	9.07	6.79	6.74	1.72	44	13.73	13.97	10.8	9.62	1.35
10	27	11.95	11.75	5.51	5.38	3.00	Not Available					

Using a two-tailed t-test as a means for analyzing the data in Table 8, it can be concluded that no significant difference was shown at the ninth grade level; however, for the tenth grade Work-Study students enrolled in the program during the 1969-1970 academic year, the statistics on the tardiness figures indicate a significant reduction. It can also be noted in Table 8 that the analysis of data concerning school tardinesses depicts the sample size, mean scores and the standard deviations for each years' analysis.

#### Objective Number Two

To provide an academic program that will increase the retention powers of the Work-Study Program.

#### Data Analysis

During the 1969-1970 and 1970-1971 academic years a total of three-hundred and sixteen students withdrew from the Work-Study Program. An analysis of the withdrawals of male students with the reasons for leaving as indicated by the students themselves is presented in Table 8 on the following page.

An analysis of the data presented in Table 9 clearly indicates that a majority of male students withdrew from the Work-Study Program to either work in full-time jobs or to attend other Boston schools. Very few students withdrew from the program in order to enter the armed services, to get married or because they were needed at home.

For the most part, more students withdrew from the program while enrolled in either the ninth or tenth grade as opposed to those students who were in their junior and senior years. It can also be noted that the withdrawals from the program were fewer during the 1970-1971 academic year than for the 1969-1970 school year.



Table 9

MALE WITHDRAWALS FROM BOSTON HIGH SCHOOL  
 1969-70 AND 1970-71 ACADEMIC YEARS  
 BY GRADE LEVEL, WITH INDICATED  
 REASONS FOR WITHDRAWAL

Reasons for Leaving the WSP	1969-70 9	1970-71 9	1969-70 10	1970-71 10	1969-70 11	1970-71 11	1969-70 12	1970-71 12	Total for Both Years
To Attend Other Boston Schools	21	23	23	13	7	6	1	2	96
Work	26	20	33	15	11	10	3	2	120
Armed Services	0	1	2	2	1	1	0	2	9
Needed At Home	2	0	1	2	0	1	0	0	6
Married	0	0	1	0	0	0	0	1	2
Other	6	10	2	3	0	6	2	1	30
Totals	55	54	62	35	19	24	6	8	263

In order to further analyze the withdrawal figures at Boston High School data was also gathered to determine the number of female students who withdrew as well as their reasons for leaving the program. Statistics representing these withdrawals are presented in Table 10 on the following page.

As established in Chapter IV, females were not enrolled in the Work-Study Program at the ninth grade level. Therefore, withdrawal data is available only for females enrolled in the tenth, eleventh, and twelfth grades. Females, too, withdrew from the program primarily to work in full-time jobs or to attend other Boston schools. Although the number of males that withdrew from the program was over five times that of female withdrawals, more male than female students were enrolled in the school program during the two academic years under scrutiny.

#### Retentive Power of the Work-Study Program

The analysis of Boston High School's efforts in retaining students in the Work-Study program is based on the following data:

1. Comparisons were made of drop-out rates between the experimental and control group for the 1970-1971 academic years' evaluation.
2. Various reasons were established for students leaving the Work-Study Program.
3. Analyses were made to determine if the Work-Study Program differentially affected the drop-out rates of males and females at various grade levels.
4. Analyses were made of the number of Work-Study drop-outs by years of exposure to the Work-Study Program.

Table 10

FEMALE WITHDRAWALS FROM BOSTON HIGH SCHOOL  
 1969-70 AND 1970-71 ACADEMIC YEARS  
 BY GRADE LEVEL, WITH INDICATED  
 REASONS FOR WITHDRAWAL

Reasons for Leaving the WSP	1969-70 9	1970-71 9	1969-70 10	1970-71 10	1969-70 11	1970-71 11	1969-70 12	1970-71 12	Total for Both Years
To Attend Other Boston Schools	NA	NA	1	1	1	3	1	1	8
Work	NA	NA	8	9	5	4	2	2	30
Armed Services	NA	NA	0	0	0	0	0	0	0
Needed at Home	NA	NA	2	0	1	0	0	0	3
Married	NA	NA	1	2	1	2	0	0	6
Other	NA	NA	1	1	0	2	0	2	6
Totals	NA	NA	13	11	8	11	3	5	53

In applying the label "drop-out" to all students who withdrew from the Work-Study Program, some disagreement arose. All of the entries, however, in Tables 9 and 10 depicting male and female withdrawals are considered actual drop-outs from the Work-Study Program.

Becoming more specific in seeking to analyze the retentive power of the Work-Study Program as stated in Objective Two, a comparison was made only during the 1970-1971 school years' evaluation between the drop-out rates of the experimental and control group by using the Chi-Square technique. In each case the hypothesis tested was: there is no difference in the drop-out rates between the experimental and control group. The analysis of the comparative drop-out data is shown in Table 11.

Table 11

COMPARISON OF DROP-OUT RATES  
EXPERIMENTAL GROUP VS. CONTROL GROUP  
(1970-1971)

	Drop-outs	Enrolles	Total
Experimental Group	150	417	567
Control Group	19	142*	161

\*Students who were enrolled in control group schools but did not report for classes were classified here as enrollees.

The results of this analysis indicate that there was a significant difference in the rate of drop-outs between the experimental and control group. Actually, for the control group sample, a number of students were placed in the "enrollees" category who may have been actual school drop-outs. The drop-out rate comparison, however, were 11.8 percent for the control group as compared to 26.5 percent for the experimental group.

Although some confusion existed in the number of drop-outs in the control group sample, the Work-Study Program had significantly reduced the drop-out rate of its students due to the nature and uniqueness of the program.

In further consideration of the analysis of this objective, a comparison was again made using the Chi-Square technique to test the hypothesis: no difference exists in the drop-out rate by sex at the various grade levels. Data relating to this comparison is presented in Table 12 below.

Table 12

COMPARISON OF THE DROP-OUT RATE OF WORK-STUDY  
STUDENTS BY SEX AND GRADE LEVEL

	Grade 10		Grade 11		Grade 12		Total	Total	Total
	M	F	M	F	M	F	M	F	
Enrolled in School	93	20	52	20	43	12	188	52	240
Drop-outs	62	13	19	8	6	3	87	24	111
Total	155	33	71	28	49	15	275	76	351

The drop-out rate for females (46.1 percent) in the Work-Study Program totaled 24 out of 52 for grade levels 10, 11, and 12. Male drop-outs totaled 87 out of 188 representing 46.2 percent. Thus, no difference existed in the drop-out rate between males and females.

As indicated in Table 12 a higher percentage of both males and females dropped out of the program while enrolled in the tenth grade. Drop-out data as presented here represents the evaluation conducted during the 1969-1970 academic year.

During the 1969-1970 evaluation an analysis was also made to determine if the holding power of the Work-Study Program improved with increases student exposure to the program. This was accomplished by administering the Kolmogorov-Smirnov test, the results of which are presented in Table 13. Testing the hypothesis that there was no differential effect of the program due to increased exposure, the number of drop-outs should be evenly distributed among the years of exposure to the program.

Table 13

KOLMOGOROV-SMIRNOV ANALYSIS OF NUMBER OF DROP-OUTS  
BY YEARS OF EXPOSURE TO WORK-STUDY PROGRAM\*  
1969-1970

	Years Enrolled in Work-Study Program			
	1	2	3	4
Number of Drop-outs	104	50	11	1
Number of Drop-outs under Assumption of Equal Distribution by Level of Exposure to Work-Study	41.5	41.5	41.5	41.5
Cumulative Proportion of Observed Number of Drop-outs	104/166	154/166	165/166	166/166
Cumulative Proportion of Drop-outs under Assumption of Equal Distribution	41.5/166	83/166	124.5/166	166/166
Difference of Proportions	62.5/166	71/166	40.5/166	0

\*Development and presentation of data in this Table is credited to Archambault, Renzull and Paulus in their evaluation of the Work-Study Program, 1969.

The results of the data presented in Table 13 indicate that the holding power of the Work-Study Program has improved with increased exposure to the program. The analysis further indicated that after two years of exposure to the program the probability of students graduating is very likely.

In sum, the results of the data collected in reference to the assessment of Objective Two clearly presents a positive picture of the Work-Study Program. Most of the analyses related to the attendance aspect of the program vividly points out that the program has had a profound effect on retaining the students it enrolls.

### Objective Number Three

To identify the potential drop-out in the Boston Public Schools.

#### Explanation

As described in the previous chapter, no attempt was made to assess accomplishment of this program objective because of a lack of concrete data. The primary difficulty lay in the identification of actually determining who was and who was not a potential school drop-out.

Although it was suggested that each student comprising the total school population be asked a question concerning the likelihood of their dropping out of school, such an attempt at screening all students was not undertaken. Because Boston High School did not see it as their responsibility to undertake such a project, it was suggested that the assessment of this objective should be left to a higher level research agency.

### Objective Number Four and Five

Number 4 - To provide sufficient remediation in the areas required to bring students up to grade level, and the results to be measured by

standardized test scores.

Number 5 - To develop the student to his intellectual capacity as is possible from fall to spring in Reading, English Usage and Mathematics.

Because of the similarity of assessment procedures utilized in the accomplishment of Objective Four and Five both have been treated jointly in the analyses which follow. Before any analysis could be made, however, it is necessary to note that the general research design planned to be employed to test the hypothesis related to these objectives was the One-Sample Pre-Test Post-Test Design. But, due to extenuating circumstances post-test data was not gathered for the control group sample. Therefore, the achievement results analyzed for both the 1969-1970 and 1970-1971 academic years must be interpreted as possible results of the program rather than as necessary concomitants of exposure to the Boston High School curriculum. Achievement gains might also be attributed to any number of other factors unrelated to the program itself.

#### Data Analysis

Outlined in Table 3 in the previous chapter are the various types of sub-tests administered to the Work-Study students. Sample sizes were given for each grade level (grade 9 through 12) as well as the identification of the instrument -- either the Stanford High School Basic Battery or the Stanford Advanced Battery.

In the analyses which follow data will be treated in the following manner:

1. Pre-Test Post-Test comparisons of the statistics gathered for each sub-test administered will be made for the two academic years.



2. Data will be presented as comparisons for each grade level.
3. Mean scores and the respective standard deviations will be presented for each sub-test. (The sample size for each grade level can be referred to in Table 3).

Stanford Advanced Battery: Grade 9

The results of the ninth grade achievement data on the sub-tests for "Language" and "Paragraph Meaning" are presented in Table 14. Comparisons of Pre-Test Post-Test administrations are made for the academic years 1969-70 and 1970-71.

Table 14

RESULTS OF STANFORD ADVANCED BATTERY FOR  
SUB-TESTS: LANGUAGE AND PARAGRAPH MEANING  
1969-1970 AND 1970-71

Grade 9

Sub-Test	Pre-Test		Post Test		t	Level of Sig.
	Mean	S	Mean	S		
(1969-1970) Language	65.86	14.18	68.70	15.39	1.99	p<.05
(1970-1971) Language	66.41	14.85	71.62	14.28	3.64	p<.01
(1969-1970) Paragraph Meaning	17.64	9.55	23.01	10.41	6.59	p<.05
(1970-1971) Paragraph Meaning	18.75	9.80	22.39	10.29	4.01	p<.01

As indicated from the table above, there were significant gains at the .05 level of significance in both the "Language" and "Paragraph Meaning" sub-tests for the academic year 1969-1970. Similar gains were made during the following years' evaluation of the incoming ninth graders as indicated by a t-score of 3.64 in "Language" at a .01 level of significance and a t-score of 4.01 in "Paragraph Meaning" at the same level of significance.

Further sub-test administrations of the Stanford Advanced Battery to ninth grade students included Arithmetic Concepts, Arithmetic Computations and Arithmetic Application. Results of the data obtained from these sub-tests are included in Table 15 as a comparison of the evaluation results for the two academic years under study.

Table 15

RESULTS OF STANFORD ADVANCE BATTERY FOR  
SUBTESTS: ARITHMETIC COMPUTATION,  
ARITHMETIC CONCEPTS AND  
ARITHMETIC APPLICATION  
(1969-1970 and 1970-1971)

Grade 9

Sub-Test	Pre-Test		Post Test		t	Level of Sig.
	Mean	S	Mean	S		
(1969-1970) Arithmetic Computation	9.70	4.75	16.68	7.45	10.90	$p < .01$
(1970-1971) Arithmetic Computation	10.26	5.40	15.09	7.63	6.64	$p < .01$
(1969-1970) Arithmetic Concepts	10.32	4.09	15.36	6.69	7.30	$p < .01$
(1970-1971) Arithmetic Concepts	10.84	3.92	12.32	5.40	2.29	$p < .05$
(1969-1970) Arithmetic Application	8.69	4.53	10.86	4.46	4.22	$p < .01$
(1970-1971) Arithmetic Application	9.20	3.36	11.27	4.47	4.05	$p < .01$

An analysis of the sub-test scores depicted in the Table above clearly indicate very significant gains, the results of which should be interpreted cautiously. (Possible attributed to participation in WSP).

Stanford High School Basic Battery: Grade 10

An analysis of achievement scores for grade 10 are summarized in Table 16 below. Exemplified are sub-tests scores in English, Reading and Numerical Competence. Comparisons are also made at this grade level for the two-year evaluation.

Table 16

RESULTS OF STANFORD HIGH SCHOOL BASIC BATTERY  
FOR SUB-TESTS: ENGLISH, READING AND  
NUMERICAL COMPETENCE  
(1969-1970 and 1970-1971)

## Grade 10

Sub-Test	Pre-Test		Post-Test		t	Level of Sig.
	Mean	S	Mean	S		
(1969-1970) English	26.63	12.14	32.15	14.88	5.18	$p < .01$
(1970-1971) English	33.70	8.16	35.88	8.30	3.27	$p < .01$
(1969-1970) Reading	19.89	7.59	20.62	8.05	1.23	$p < .05$
(1970-1971) Reading	37.37	8.09	38.00	8.48	.81	$p < .05$
(1969-1970) Numerical Competence	15.54	8.77	17.46	7.27	2.14	$p < .05$
(1970-1971) Numerical Competence	38.17	6.83	40.85	8.64	4.03	$p < .01$

An analysis of the English sub-tests for both academic years reveals significant differences in the pre-test and post-test scores at the .01 level of significance. The "Numerical Competence" sub-test for the 1969-1970 academic year indicates a lower score on the pre-test at the .05 level of significance and a t-score of 2.14 shows gains in the direction most desired. An analysis of the "Numerical Competence" sub-test for the 1970-1971 academic year also shows a lower pre-test score

at the .01 level of significance and a t-score of 4.03. However, analysis of "Reading" scores for tenth graders in 1969-1970 and 1970-1971 reveals that there was no significant difference between Pre-test and Post-test scores at the .05 level of significance with 1970-1971's "Reading" scores only showing a t-score of .81.

#### Stanford High School Basic Battery: Grade 11

During the 1969-1970 academic year, the Stanford Advanced Battery was administered to Boston High School's eleventh grade students for the purpose of measuring either positive or negative differences in the areas of Language, Paragraph Meaning, Arithmetic Concepts, Arithmetic Computation and Arithmetic Application. Since the analysis of the results of these sub-test administrations showed significant gains in all areas, only the results of the following years' evaluation (Stanford High School Basic Battery) will be presented in Table form.

As noted in Table 17 on the following page, comparisons of Pre-Test, Post-Test results are identified for the three sub-tests: English, Reading and Numerical Competence. An analysis of the scores clearly indicate significant gains in the areas of "English" and "Numerical Competence." In the area of "Reading", however, the sub-test scores show no significant difference between the pre-test and post-test administrations. Like the tenth graders, students enrolled in the eleventh grade in the Work-Study Program show a definite weakness in their reading abilities.

Table 17

COMPARISON OF PRE-TEST POST-TEST  
RESULTS OF THE STANFORD HIGH  
SCHOOL BASIC BATTERY BY  
SUB-TESTS

Grade 11

Sub-Tests (1970-1971)	Mean Scores		Standard Deviations			Level of sig.
	Pre-Test	Post-Test	Pre-Test	Post-Test	t	
English	38.59	39.95	10.40	9.56	2.17	$p < .05$
Reading	40.38	40.84	9.09	8.63	.68	$p > .05$
Numerical Competence	38.87	42.36	7.68	8.93	5.28	$p < .01$

Stanford High School Basic and Advanced Battery: Grade 12

Grade 12 analyses for the assessment of objectives four and five were based during the school year 1969-1970 on the results of the Stanford High School Basic Battery with sub-test scores available in the areas of Reading and English. The Stanford Advanced Battery was administered to Boston High School's seniors the following year in which scores were gathered for the areas of Arithmetic Concepts, Arithmetic Computation and Arithmetic Application. The results of both administrations are presented as a comparison of scores in the Tables which follow.

Depicted in Table 18 is a comparison of the mean scores for each sub-test. Considering a .01 level of significance during 1970-71 testing and a .05 level of significance for the previous years' testing, the reading scores of seniors show little to no gain indicating perhaps a serious lack in the Work-Study curriculum. On the other hand, significant gains were shown in "English" at the .05 level of significance for both evaluation years. Further gains were shown in the area of "Numerical Competence" at the .05 level of significance for the school year 1970-

1971. (See results in Table 18 below).

Table 18

RESULTS OF HIGH SCHOOL BASIC BATTERY FOR SUB-TESTS:  
READING, ENGLISH AND NUMERICAL COMPETENCE  
FOR 1969-1970 and 1970-1971

Grade 12

Sub-Tests	Pre-Test		Post-Test		t	Level of Sig.
	Mean	S	Mean	S		
(1969-1970) Reading	25.70	12.17	21.67	10.05	4.22	$p < .01$
(1970-1971) Reading	39.55	8.27	39.94	8.71	2.68	$p > .01$
(1969-1970) English	33.85	15.52	34.04	15.70	.11	$p > .05$
(1970-1971) English	37.46	8.75	39.50	8.81	.18	$p > .01$
(1969-1970) Numerical Competence*	NA	NA	NA	NA	NA	NA
(1970-1971) Numerical Competence	38.97	7.83	39.14	9.27	.07	$p > .05$

\*The "Numerical Competence" sub-test was not administered during the 1969-1970 academic year.

In Table 19 on the following page are the results Stanford Advanced Battery for sub-test scores in Arithmetic Computation, Arithmetic Concepts and Arithmetic Application. No significant gains were found between the mean scores of the pre-test and post-test for this battery. (Conditions surrounding the administration of this test to the seniors may have had some impact on the test results as re-scheduling of the test was necessary due to a teacher's strike in the City.)

Table 19

RESULTS OF STANFORD ADVANCED BATTERY FOR SUB-TESTS:  
 ARITHMETIC CONCEPTS, COMPUTATION AND  
 APPLICATION FOR  
 (1969-1970)

Grade 12

Sub-Tests	Mean Scores		Standard Deviations		t	Level of Sig.
	Pre-Test	Post-Test	Pre-Test	Post-Test		
Arithmetic Computation	21.78	22.46	8.27	9.10	.88	$p < .05$
Arithmetic Concepts	19.69	18.66	7.18	8.57	1.88	$p < .05$
Arithmetic Application	17.04	17.58	5.29	7.07	.63	$p < .05$

### Summary

In summarizing achievement test results for both the 1969-1970 and 1970-1971 academic years, ninth grade achievement results as measured by the Stanford Advanced Battery showed gains that were significant on all of the sub-tests. Grade 10 achievement results as measured by the Stanford High School Basic Battery were not as favorable. "English" and "Numerical Competence" sub-tests indicated significant gains for both years but the "Reading" sub-test showed no significant gain. Eleventh and twelfth grade "Reading" results also failed to show significant gains.

Overall testing results for the 1969-1970 and 1970-1971 academic years indicated that "Reading" was the only serious area of weakness in the Work-Study Program curriculum. Recommendations relating to this lack of achievement will be discussed in the chapter which follows.

### Objective Number Six

To provide job opportunities that will give drop-outs or potential drop-outs a motivation to remain in school.

In order to assess accomplishment of this objective, a primary tool was utilized during the 1969-1970 academic year, i.e., the Demos D Scale. The purpose behind the utilization of this standardized instrument was to measure attitudes toward teachers, attitudes toward education, influences by peers and parents and school behavior. In addition, other non-standardized instruments were developed to measure student attitudes and faculty attitudes toward the Work-Study Program.

For the 1970-1971 academic year only non-standardized instruments were employed in the assessment of Objective Six. These involved the administration of a student questionnaire, faculty attitude scale, parent questionnaire and a job supervisors and company executives attitude scale.

Although results of the Demos D Scale were considered insignificant for this reporting due to the questionable validity of the instrument, only an analysis and comparison of the 1969-1970 and 1970-1971 findings obtained from the non-standardized instruments follow.

### Student Questionnaire

An analysis of this questionnaire reveals the measurement of seven factors: Student attitudes toward teachers, student attitudes toward the administration, counseling, curriculum relevancy, parental involvement, administrative organization and job satisfaction. Data gathered in reference to each factor is analyzed independently.

A. Attitudes Toward Teachers - When the student questionnaire was administered initially to the Work Study students only five questions out



of the seventy-two item questionnaire referred directly to "attitudes toward teachers." Conversely, during the following years' evaluation of student's attitudes toward teachers, 1970-1971, a revised student questionnaire contained nine items in the measurement of this factor. For purposes of analysis, therefore, three of the prime items included in both questionnaires have been extracted. Presented in Table 20 are the response options and the respective percentages as related to each question.

Table 20

STUDENT QUESTIONNAIRE RESPONSES TO SELECTED STATEMENTS  
CONCERNING STUDENT ATTITUDES  
TOWARD TEACHERS

- QUESTIONS: 1. Teachers in the Work-Study Program feel that students are lucky to be in the program.
2. Teachers in the Work-Study Program are too strict about minor things such as being in your seat on time, etc.
3. Teachers in the Work-Study Program take a greater personal interest in students than teachers in the school I previously attended.

	Almost always	Most of the time	Some- times	Very Few times	Nearly never	No response
Question 1: (1969-1970)	56.5	20.1	16.9	3.3	2.9	0.3
(1970-1971)	59.2	20.1	14.4	3.7	2.5	0.0
Question 2: (1969-1970)	20.7	24.5	28.7	14.5	11.0	0.6
(1970-1971)	30.6	24.4	27.8	9.6	7.6	0.0
Question 3: 1969-1970)	43.8	26.6	18.9	6.8	2.7	1.2
(1970-1971)	41.4	20.7	24.6	6.5	6.5	0.3

From the analysis of the percentage ratings in Table 20 it appears that the general attitude held by students in the Work-Study Program is that "teachers feel that students are lucky to be in the program" an attitude which has been interpreted as being somewhat negative to the students. Further indicated is the fact that the students are not too seriously concerned about the Work-Study teachers being strict about talking in class, being in their seat on time, etc. Only a low 20.7 percent selected the response option "Almost always" when rating the statement. (#2) A more positive attitude held by the students was the fact that the teachers took a greater interest in them than the teachers in the previous schools they had attended. A majority of the response options relating to this statement (#3) included "Almost always" or "Most of the time."

B. Student Attitudes Toward the Administration or the Front Office Staff - The number of questionnaire items in the Student Questionnaire relating to this particular factor for both years' evaluation amounted to nine (9). Again, for the sake of analysis, three of the most relevant questions pertaining to "students attitudes toward the school's administrative staff" have been extracted. These questions along with the response options relating to each question and the percentage ratings are presented in Table 21 on the following page.

According to the student's rating, the front office staff does make attempts in seeking jobs that are best suited to individual interests and needs. The response to this question (#1) was favorable with the attitude prevailing for the two years' evaluation under discussion.

Although students indicated an unfavorable attitude toward discussing their problems with persons in the front office, they displayed a

Table 21

STUDENT QUESTIONNAIRE RESPONSES TO SELECTED STATEMENTS  
CONCERNING STUDENT ATTITUDES TOWARD  
ADMINISTRATORS AND FRONT  
OFFICE STAFF

- QUESTIONS:
1. The people in the front office really try to find a job that is best suited for me.
  2. People in the front office pay serious attention to suggestions made by students.
  3. If I have a problem I feel comfortable in discussing it with someone in the front office.

	Almost always	Most of the time	Some- times	Very few times	Nearly never	No response
Question 1: (1969-1970)	15.7	20.7	25.1	15.4	21.3	1.8
(1970-1971)	19.0	15.0	22.1	17.8	26.1	0.0
Question 2: (1969-1970)	7.7	20.1	34.9	19.5	14.5	3.3
(1970-1971)	16.1	22.9	32.3	15.0	13.3	0.3
Question 3: (1969-1970)	10.9	12.1	21.3	17.8	36.4	1.5
(1970-1971)	9.9	13.9	26.6	16.4	33.1	0.0

favorable attitude toward the administrator's acceptance of suggestions made by the students.

For the most part, the percentage of responses for each question remained somewhat constant during both academic years. As noted in the Table, the greatest difference in the percentages of the five response options occurred in the rating of Question 2. It seems, apparent, therefore, that during the second year of the evaluation, the attitudes of the students in the Work-Study Program had changed considerably toward the front office personnel; generally more positive attitudes.

C. Counseling - Similar items concerning student attitudes toward the counseling services available to them were also included in the 1969-1970 and 1970-1971 Student Questionnaires. As with the two previously presented attitude factors, analysis will be based on selected items representative of this particular factor. Displayed in Table 22 below are the questions with the various response options and the respective percentage ratings for each response.

Table 22

STUDENT QUESTIONNAIRE RESPONSES TO SELECTED STATEMENTS  
CONCERNING STUDENT ATTITUDES  
TOWARD COUNSELING

- QUESTION: 1. I am provided with enough information and advice at the Work-Study Program about how to get along with others at work.
2. I am provided with enough information about the kind of work that I will be best suited for in the future.
3. I am provided with enough information at the Work-Study Program about how to handle my money.

	Almost always	Most of the time	Some- times	Very few times	Nearly never	No response
Question 1: (1969-1970)	29.0	29.0	19.8	9.2	11.8	1.2
(1970-1971)	20.1	22.7	23.5	15.0	18.7	0.0
Question 2: (1969-1970)	14.2	16.0	19.5	16.6	32.5	1.2
(1970-1971)	9.1	13.6	22.1	17.3	38.0	0.0
Question 3: (1969-1970)	26.3	15.1	16.6	11.5	27.8	2.7
(1970-1971)	6.2	11.0	15.0	16.4	51.3	0.0

A large portion of the Work-Study students indicated dissatisfaction with various aspects of the vocational counseling services available to them. Particularly obvious during both the 1969-1970 and 1970-1971 academic years was the relatively high percentage of student responses indicating that they "nearly never" were provided enough information about the kind of work that would best be suited for them in the future.

A surprising difference in the response ratings for question number three between the two years administration of the Student Questionnaire revealed that during the latter year, 1970-1971, the Work-Study students seriously felt that they were not provided enough information about how to handle money. This fact was indicated by 51.3 percent of the students rating the response negatively.

The greatest area of satisfaction on the part of the Work-Study students concerning the counseling factor was that a good majority (58 percent) of the students considered that they "almost always" or were "most of the time" provided with enough information and advice about how to get along with others at work.

D. Curriculum relevancy - Since this area is so critical in maintaining student interest thus making his school/work experience a meaningful one and resulting in a desire for the student to stay in school, an analysis will be made of specific questions and responses that were included in both the 1969-1970 and 1970-1971 Student Questionnaire. Table 23 on the following page depicts the pattern of response ratings for three selected statements relating to the student's attitudes toward curriculum relevancy.

More of a positive than a negative attitude prevailed on the part of the Work-Study students when considering the transfer of knowledge from the classroom to the job situation. This attitude, however,

Table 23

STUDENT QUESTIONNAIRE RESPONSES TO STATEMENTS  
CONCERNING STUDENT FEELINGS TOWARD  
CURRICULUM RELEVANCY

- QUESTIONS: 1. What I am learning is very helpful to me on the job.
2. What I learn in school provides me with enough information about the responsibilities of voting, etc.
3. What I learn in school provides me with enough information about music and art.

	Almost always	Most of the time	Some-times	Very few times	Nearly never	No response
Question 1: (1969-1970)	15.4	18.6	26.0	10.7	28.1	1.2
(1970-1971)	12.5	13.6	28.9	13.0	31.7	0.3
Question 2: (1969-1970)	12.4	23.4	33.1	12.8	17.4	0.9
(1970-1971)	15.9	22.4	31.2	14.4	16.1	0.0
Question 3: (1969-1970)	2.7	1.2	7.7	12.4	74.5	1.5
(1970-1971)	13.6	15.9	33.4	14.4	22.1	0.6

weakened during the 1970-1971 academic year as 31.7 percent of the student responses indicated that "nearly never" what they had learned in school was helpful to them while on the job.

When the Student Questionnaire was administered during the 1969-1970 school year, an overwhelming 74.5 percent of student responses indicated that what they learned in school "nearly never" provided them with enough information about music and art. During the following year, however, a more favorable attitude toward this aspect of the curriculum persisted.

E. Parental Involvement and Administrative Organization - Only during the 1969-1970 school years' evaluation were items included in the Work-Study Questionnaire concerning these factors. With only few statements inserted for the assessment of parental involvement it can be concluded that:

1. The Work-Study students considered parents to have a good knowledge of their child's work and progress in school.
2. The Work-Study students felt that "most of the time" parents were very interested in the Work-Study Program and had expressed an interest in becoming involved in various school functions.

An analysis of student attitudes pertaining to various aspects of administrative organization in the Work-Study Program concluded that:

1. The general attitude prevailed that the Work-Study students favored the basic structure of the Work-Study Program and that their needs were being adequately met.
2. The Work-Study students felt, in a very positive manner, that they were getting a better education through their involvement in the Work-Study Program than they were getting in the school which they previously attended.

(All complete statements pertaining to student attitudes toward parental involvement and administrative organization as well as the tabulations for each statement can be found in Appendix C).

F. Job Satisfaction - A major factor of the Student Questionnaire, forty-one statements dealt directly with student attitudes toward their jobs. (See Appendix C, items 31-72) An analysis of the responses indicated both positive and negative reactions. More particularly, the aspects most favored in the assessment of "job satisfaction" included:

1. The Work-Study student feels that he gets along well and has respect for the persons with whom he works on his present job.
2. The Work-Study student considers his immediate supervisor one who follows through with his promises.
3. The Work-Study student feels that he has opportunities to present a problem, complaint or suggestion to his employer.
4. He feels that his immediate supervisor takes an interest in him as a person as well as how well he does on the job.
5. He feels that his immediate supervisor gives him "straight" answers when he asks him something.
6. He feels that his immediate supervisor is courteous and friendly toward him.
7. Finally, the Work-Study student feels that his immediate supervisor keeps him informed about what is going on around the plant.

On the other side of the pendulum are the negative attitudes expressed by the students when rating other job-related factors. For the most part, the student feels:

1. That his present position forces him to work with certain individuals whom he dislikes.
2. That he feels somewhat prejudiced in relation to his particular age group.
3. That the interest in his job is not so great that he talks



about it after working hours.

4. That he does not regard his present job as a lifetime career.

5. That he feels criticized at times by his immediate supervisor for happenings over which he has no control.

6. That he does not receive pay increases or promotions which he feels he deserves.

### Summary

An overall review of the findings of the Student Questionnaire indicated that the students in the Work-Study Program expressed positive feelings toward the program in many ways. First, they felt that the teachers in the program took more of a personal interest in them than had the teachers in schools previously attended. Second, their work experiences were considered valuable and rewarding since the job supervisors were generally friendly and courteous.

Students projected negative feelings toward the front office staff as they felt uncomfortable discussing problems with them. Students also indicated negative feelings toward school curriculum areas which had little or no relevancy to their work situations.

### Faculty Questionnaire

Another means of assessing accomplishment of Objective Six was through the use of a Faculty Questionnaire. Administered to all faculty members, this non-standardized instrument was developed to sample the attitudes of the faculty toward those aspects which had been determined as crucial to the success of the Work-Study Program. The factors measured were: Curriculum Relevancy, Communication, Teacher's Role in Decision Making, Program Objectives, Vocational Counseling, Administrative Organization and Attitudes Toward Students. The assessment centered around two Faculty Questionnaires; one administered during the 1969-1970 school year and the other administered during the 1970-1971 school year. Reference can be made to both Questionnaires and their respective attitude scales in Appendix D. A brief summary of the results of each factor follows.

A. Curriculum Relevancy - According to the faculty at Boston High School more emphasis needs to be placed on the areas of Remedial and Developmental Reading since that aspect of the curriculum is considered the weakest. This fact was also brought to light when an interpretation was made of the Stanford Achievement Test. Aside from this expression of curriculum revision, it was the attitude of the majority that more and better coverage was needed for such curriculum areas as Drug Education, Sex Education, Family Life Education and other courses which deal primarily with personal and social development. All other areas of the curriculum including the basic skills taught were considered by the faculty to be satisfactory in meeting the needs of the students.

B. Communication - The purpose behind the inclusion of this factor in the Faculty Questionnaire was to determine the attitudes of the teachers toward the administration, toward job supervisors and toward parents. Of these three communication channels, the most revealing attitudinal changes as represented statistically, occurred between the faculty and the administration. Table 24 presents the percentage of response ratings according to a five-point scale.

Table 24

FACULTY ATTITUDES CONCERNING COMMUNICATION  
BETWEEN FACULTY AND ADMINISTRATION

COMMUNICATIONS	Excellent	Good	Fair	Poor	Absent
Academic year: 1969-1970	59.0	26.0	15.0	0.0	0.0
Academic year: 1970-1971	12.0	33.0	37.0	18.0	0.0

An analysis of the data presented in Table 24 above clearly points out that during the 1969-1970 academic year communications between the faculty and the administration were rated from "good" to "excellent." (A total response of 85 percent). This perhaps was due to the close working relationship among all concerned with getting the Work-Study Program off the ground and operating at the desired level of efficiency. During the following year, however, communications lagged with 37 percent of the teachers rating communications "fair" and another 18 percent rating them as being "poor." It should be noted that during this evaluation year, 1970-1971, less time was devoted to the teachers on a more personal basis since the school was operating on a more normal basis.

The faculty's attitudes toward communications between job supervisors and parents of the Work-Study students followed a similar pattern as the results of the previous analysis. For the most part, communications weakened in all channels during the 1970-1971 academic year. See Table 25 and 26 below for a presentation of the results.

Table 25

FACULTY ATTITUDES CONCERNING COMMUNICATION  
BETWEEN FACULTY AND JOB SUPERVISORS

COMMUNICATION	Excellent	Good	Fair	Poor	Absent
Academic year: 1969-1970	33.0	55.0	11.0	0.0	0.0
Academic year: 1970-1971	18.00	49.0	21.0	12.0	0.0

Table 26

FACULTY ATTITUDES CONCERNING COMMUNICATION  
BETWEEN FACULTY AND PARENTS

COMMUNICATION	Excellent	Good	Fair	Poor	Absent
Academic year: 1969-1970	37.0	52.0	11.0	0.0	0.0
Academic year: 1970-1971	12.0	46.0	27.0	12.0	0.0

C. Counseling - The faculty at Boston High School very favorably responded to the fact that teachers in the Work-Study Program should take an active role in the counseling of students. A majority of the faculty members also felt that they were adequately prepared to function in this capacity.

D. Teachers Role in Decision Making - This factor in the Faculty Questionnaire dealt with the degree to which teachers participate in various aspects of the decision making process. Four areas were investigated and included:

1. Decision making in reference to student selection.
2. Decision making in reference to job assignments.
3. Determination of curriculum.
4. Determination of disciplinary action.

In brief, a surprising contrast was revealed concerning the topic of student selection. In the first years' evaluation, 86 percent of the faculty felt that they had sufficient part in determining who would be selected for enrollment in the Work-Study Program. When the evaluation was made the following year, 1970-1971, only 15 percent of the faculty felt that they had an "excellent" opportunity to help in deciding student selections while 22 percent stated that they had no part at all. Also, during the 1969-1970 academic year, 46 percent of the faculty indicated that they aided in deciding the types of job assignments that was best suited for individual students. But, during the following year only 27 percent of the faculty helped in making these decisions. Favorable attitudes for both years revealed that the faculty played a major role in deciding the curriculum best suited to student needs and the type of disciplinary action most appropriate in reprimanding the Work-Study students.

E. Program Objectives - Since faculty members are selected on the basis of their commitment to the objectives of the program, it is not surprising to reveal that a large majority of the faculty indicated satisfaction and favorable attitudes toward this aspect of the program.

The program objectives established at Boston High School have served to aid in the development of the overall approach to educating the Work-Study students. This approach has been the primary goal that all concerned have sought to achieve.

F. Administrative Organization - Items dealing directly with "administrative organization" were included in the Faculty Questionnaire in an effort to seek the faculty's opinion regarding the organizational set-up of the Work-Study Program. In general, overall attitudes toward the present organization were favorable. Those areas in which the faculty expressed some disagreement included items related to the self-contained classroom and homogeneous grouping.

G. Faculty Attitudes Toward Students - Interesting results were shown when data for this factor was collected. Nearly 40 percent of the faculty felt that the students were not interested in getting ahead and would not "work hard" unless forced to do so. In response to another item the faculty, 55 percent rating the item, felt that the students took pride in being in the Work-Study Program.

In sum, an assessment of faculty attitudes reveals a modest acceptance of most areas of the Work-Study Program by a majority of the faculty. Strong feelings were generated in favor of the faculty's role in counseling as well as their role in making decisions concerning curriculum and disciplinary measures.

Less favorable attitudes were expressed by the faculty of the Work-Study Program toward the relevancy of the curriculum in meeting the needs of the students. It was also determined that more faculty participation should be allowed in the student selection process and in job placements.

Parent Questionnaire

A solicitation of parental attitudes sought responses relating to three major factors: Communication between home and school, Comparisons between the Work-Study Program and schools previously attended and Educational and vocational attainment.

An analysis of these factors reveals that the communications between home and school have shown some improvement. Table 27 depicts the percentage of visitations made by the parents to the school. (This includes visitations that were made at least once during the year). Also depicted are the percent of parents who have been visited by the Boston High School staff.

Table 27

PARENT-FACULTY VISITS BETWEEN  
HOME AND SCHOOL

	Parents visits to school	Parents visited by BHS staff
Academic year: 1969-1970	67.0	50.0
Academic year: 1970-1971	75.00	38.0

As noted, 67 percent of the parents had visited the Work-Study Program as least once during the 1969-1970 academic year. This percent increased the following year with an even higher percent (75.0) of parents visiting the program. Conversely, the school staff made frequent visits to the homes of the students; 50 percent of the parents were visited during the first academic year while 38 percent of the parents were visited the following year.

When parents were asked to compare the Work-Study Program with the school their child had formerly attended an overwhelming majority responded that their child had learned more through their participation in the Work-Study Program. Parents also felt that their child was more likely to graduate from high school as a result of attending the Work-Study Program. Finally, the general attitude prevailed among the parents that their child was more likely to get a better job in the future as a result of their association with the Work-Study Program.

#### Job Supervisors and Company Executive Attitude Scale

Two additional attitude scales were administered during the 1969-1970 academic year in an effort to seek the attitudes of job supervisors and company executives toward the Work-Study Program. The areas assessed were: Job performance characteristics and Adequacy of supervision from Work-Study personnel. Several open-ended questions were also included in order to obtain suggestions relating to the improvement of the program.

An analysis of the results of these two questionnaire administrations indicated that the employers' attitudes were very favorable when considering the student's: (1) high level of interest toward his work, (2) cooperation with fellow employees, (3) receptivity to direction, (4) promptness, and (5) physical and mental readiness to work.

In comparison with other non-Work-Study employees, the job supervisors generally rated the Work-Student of Boston High School as being more cooperative. The company executives further indicated satisfaction with the Work-Study personnel because of the active part they took in supervising the students.



### Objective Number Seven

To develop a core of basic working skills that will enable them (the students) to compete successfully in the working world.

### Analysis of Data

In order to assess accomplishment of this final program objective, a follow-up questionnaire was developed and mailed to a sample of seventy-six members of the 1969-1970 graduating class. Information gathered from this questionnaire aided in determining if the Work-Study students were able to compete successfully in the world of work.

Twenty-six or 35 percent of the questionnaires were returned. Out of a total of twenty-four questions, fourteen referred particularly to the effect of the Work-Study Program in relation to the students' present job situations. A summary of the responses included the following:

1. Three percent of the respondents that were enrolled in the program indicated that they were not full-time students in colleges or professional schools.
2. Seventy-seven percent of the students indicated that they were employed in jobs that were considered above entry level.
3. The mean hourly wage of the graduates was reported as being \$2.87 per hour; some wages reported were as high as \$4.01 per hour.
4. A majority of the graduates felt that they were neither provided enough information at Work-Study about the kind of work best suited for them after graduation nor were they provided enough information about how to find jobs.
5. Only fifty-four percent of the students expressed that they were not provided enough information about how to handle money.

6. Seventy-three percent of the graduates indicated that they could get another job if they lost their present job.

7. Forty-six percent of the graduates felt that they got a better job because of having graduated from the Work-Study Program.

8. Fifty percent of the respondents felt that more time should be spent on academic studies rather than on the job.

Generally, the attitude of the graduates toward the Work-Study Program were favorable. However, suggestions for improvement were noted:

- The program should be more college-oriented.
- The academic and work segments of the program should be more related.
- A greater degree of responsibility should be given to the students.

Thus, an attempt was made to assess accomplishment of Objective Seven. Although there have been obvious weaknesses in preparing students for the working world as determined by the survey and through suggestions offered by the students themselves, efforts are being made by the Boston High School staff and administrators to see that the Work-Study student possesses the necessary skills and knowledges that will be needed in most future work endeavors.

#### Summary

In Chapter V, thus far, Boston High School's seven program objectives have been identified. The data generated through assessment procedures outlined in Chapter IV was presented and analyzed collectively for the 1969-1970 and 1970-1971 academic years. In the section that follows, data generated in reference to a revised set of evaluation objectives relating to the Work-Study Program for the 1971-1972 academic year will be analyzed.

Data Analysis  
for  
1971-1972  
Academic Year

The previous section of this chapter provided baseline evaluation data for Boston High School's Work-Study Program for the 1969-1970 and 1970-1971 academic years. The design for this final section of Chapter V provides data that will aid in determining various strengths and weaknesses of all aspects of the school program during the 1971-1972 school year. The plan developed by the Psychological Corporation of New York, calls for an evaluation of:

1. Boston High School's Progress Toward Performance Objectives.
2. Interviews with students, staff, job coordinators, and employers.
3. Questionnaires administered.
4. Observations of various functions of Boston High School.
5. Results of California Achievement Tests.

Progress Toward Performance Objectives

As indicated in Chapter IV, the purpose of formulating performance objectives for the areas of English, Mathematics, Social Studies and Business Education was to more specifically define areas of concentration of the Work-Study students thus enabling a more exact evaluation of the advancement in achievement during the 1971-1972 school year. A basic experimental model arranged the objectives according the normal sequence in which they were taught. Where permitted, results were tallied according to sex at each grade level. These results are summarized in Tables 28, 29, 30 and 31.

Table 28  
 PERFORMANCE OBJECTIVE ACHIEVEMENT  
 FOR  
 ENGLISH, MATHEMATICS, WORLD HISTORY

Grade 9  
 (males)

Subject	Total Number of Performance Objectives	Unit Number	Number of Performance Objectives	Sample Tested	Percentage of Students Achieving Performance Objectives
English	16	1	2	117	83.0
		2	3	117	95.0
		3	4	112	80.0
		4	3	102	83.0
		5	4	112	88.0
Applied Math	15	1	4	103	70.0
		2	2	111	66.0
		3	2	110	70.0
		4	5	105	78.0
		5	2	100	94.0
World History	40	1	8	101	88.0
		2	8	109	97.0
		3	8	113	87.0
		4	8	103	92.0
		5	8	97	90.0

Table 29  
 PERFORMANCE OBJECTIVE ACHIEVEMENT  
 FOR  
 ENGLISH, MATHEMATICS, ECONOMIC GEOGRAPHY

Grade 10  
 (males and females)

Subject	Total Number of Performance Objectives	Unit Number	Number of Performance Objectives	Sample Tested	Percentage of Students Achieving Performance Objectives
English (Males)	34	1	5	115	73.0
		2	3	117	75.0
		3	10	115	79.0
		4	9	117	70.0
		5	7	109	70.0
English (Females)	39	1	11	47	87.0
		2	10	52	87.0
		3	4	45	96.0
		4	7	44	98.0
		5	7	38	95.0
Applied Math (Males)	28	1	6	54	67.0
		2	6	63	69.0
		3	7	57	59.0
		4	6	56	59.0
		5	3	48	57.0
Applied Math (Females)	15	1	4	49	94.0
		2	2	51	92.0
		3	2	47	85.0
		4	5	46	83.0
		5	2	46	87.0
Economic Geography (Females)	35	1	7	51	78.0
		2	7	49	63.0
		3	7	45	78.0
		4	7	46	93.0
		5	7	42	93.0

Table 30

PERFORMANCE OBJECTIVE ACHIEVEMENT  
ENGLISH, MATHEMATICS, SOCIAL STUDIES, BUSINESS EDUCATION

Grade 11  
(males and females)

Subject	Total Number of Performance Objectives	Unit Number	Number of Performance Objectives	Sample Tested	Percentage of Students Achieving Performance Objectives
English (Males)	40	1	*	95	73.0
		2	*	90	76.0
		3	*	94	84.0
		4	*	95	82.0
		5	*	79	83.0
English (Females)	40	1	5	27	70.0
		2	5	25	92.0
		3	4	20	48.0
		4	7	22	69.0
		5	19	21	76.0
Applied Math (Females)	27	1	7	38	82.0
		2	8	33	78.0
		3	5	38	82.0
		4	4	33	76.0
		5	3	39	82.0
U. S. History (Males)	21	1	3	90	90.0
		2	3	88	98.0
		3	4	88	81.0
		4	5	89	82.0
		5	6	76	88.0
U. S. History (Females)	21	1	3	22	73.0
		2	3	25	68.0
		3	4	19	69.0
		4	5	21	76.0
		5	6	20	80.0
Office Practice (Females)	23	1	4	25	56.0
		2	3	27	100.0
		3	5	24	87.0
		4	5	23	96.0
		5	6	19	100.0

\*The number of Performance objectives completed in each unit were not specified.

Table 31

PERFORMANCE OBJECTIVE ACHIEVEMENT  
ENGLISH, MATHEMATICS, BUSINESS EDUCATION

Grade 12  
(males and females)

Subject	Total Number of Performance Objectives	Unit Number	Number of Performance Objectives	Sample Tested	Percentage of Students Achieving Performance Objectives
English (Males)	26	1	8	96	84.0
		2	7	102	88.0
		3	5	100	74.0
		4	6	99	76.0
English (Females)	32	1	13	25	87.0
		2	3	23	86.0
		3	4	22	78.0
		4	12	26	73.0
Applied Math	38	1	6	40	75.0
		2	11	36	81.0
		3	8	58	81.0
		4	4	48	71.0
Algebra II	16	1	3	42	81.0
		2	6	41	83.0
		3	4	39	69.0
		4	3	34	88.0
Office Practice	14	1	8	23	87.0
		2	3	21	95.0
		3	1	22	90.0
		4	2	24	87.0
Typing II	22	1	4	25	96.0
		2	4	23	96.0
		3	4	12	99.0
		4	4	14	100.0

It can be concluded from the previous Tables covering the Achievement Test results that the tests administered in all curriculum areas were adequate measures of the performance objectives for which they were designed.

Sample groups ranged in size from 12 to 117 pupils with more than three times as many males than females involved in the testing. Each sample group was exposed to a number of performance objectives ranging from 2 to 19. This was due to the diversified manner in which subject content was covered by individual teachers. (In one curriculum area, Grade 11 English, the number of performance objectives in each unit were not specified by the instructor; therefore, data for these units were not included in the evaluation.)

The grade of 60 was set as the criterion of attainment of the performance objectives. As noted by the percentages of students achieving the performance objectives in the various curriculum areas, a majority of the pupils - representing all grade levels - scored more than 60. The only areas in which low scores were reported included one unit in English at Grade 11 for females and one unit in Office Practice, Grade 11 for females.

In instances where the males and females were taught in separate classes the results were tallied separately. This was true for the sample groups in English, Grades 10, 11, and 12; Applied Mathematics, Grade 10; and U. S. History, Grade 11. Since only male students were enrolled in the program at the ninth grade level, no results were shown for female students.

An analysis of the percentage scores indicates that the greatest difference in the scores between the males and the females were found



in the U. S. History scores at the eleventh grade level. In these units, the percentages of the males achieving the objectives ranged from 6 to 29 points higher than the females in the corresponding classes.

English test scores indicated similar results for both males and females. There was one exception, however, at the eleventh grade level. The percentage of male students attaining the performance objectives exceeded the scores for the females by a difference of 6 to 36 points.

In the area of Applied Mathematics, the females led the males by substantial margins. The range of points covering all curriculum units of this course was from 6 to 42 points.

Thus, the goal to formulate performance objectives that would meaningfully reflect the school's philosophy and apply realistically to the student population was realized.

### Interviews

As a part of the 1971-1972 evaluation of Boston High School's Work Study Program several interviews were conducted with members of the teaching and administrative staff, job coordinators and employers. The major theme of the interview discussions revolved primarily around the study aspects of the school's program. Other interviews dealt with the employment factor and were held with students at the job sites. The number of interviews held during the school year included the following:

High School Principal -3  
 Administrative Assistant to Principal -3  
 Teachers (includes job coordinators) - 22  
 Students at school - 40  
 Students at job sites - 59  
 Places of employment - 22

Although interview guides were utilized for the purpose of collecting a uniform set of data, a complete tally of the responses will not be presented here. Instead, the results of the interview sessions will be

summarized for each interview category in the sections which follow. (All complete interview guides can be referred to in the final sections of the Appendices).

A. Interviews with Boston High School's Principal - From an analysis of the substance of these interviews the following conclusions were drawn:

- The Principal at Boston High School has established firm and realistic rules for the school's administration and implementation.

- The Principal was responsible for orienting the teachers in job supervision techniques and in instructional procedures.

- The school's approach to remedial reading was established for the 1971-1972 school year and provided for the inclusion of reading instruction in every class regardless of the subject.

- The coordinators and administrative assistants had succeeded in employing all active students in the Work-Study Program, thereby keeping the students in school and on the job.

- Plans were underway for changes in personnel in some of the academic areas due to some of the teacher-coordinator's inability to adequately supervise students in their place of employment.

- Plans were underway to expand the school plant in order to provide more classroom space and provide more office space for the school's specialists.

In sum, it was concluded by the evaluators that the Principal had a thorough knowledge and grasp of the school's operations. It was further commented that the Principal had a "clear idea of how the program should be conducted."

B. Interviews with Administrative Assistant - The outcome of these interview sessions produced the following information about the Boston High School Program:

- Small group sessions were held with teachers for the purpose of formulating performance objectives, redesigning course content and reporting, using and filing test scores.

- Suggestions were made to revise the general plan for Remedial Reading to involve a small group of teachers as opposed to the entire faculty. The overall plan would call for the testing of students during the summer before the regular school session so that scores would be available at the beginning of the school year and students could be assigned to classes in terms of ability.

- In a final interview, the administrative assistant made reference to the report of the faculty which included the following information about Reading and Mathematics:

During the spring and summer of 1971 all ninth grade students and incoming tenth grade students were given a Battery of Reading Tests in order to determine their deficiencies and grade levels. Dr. Luciano and Dr. Hanley from Boston State College served as Reading Consultants during this time and also for the school year 1971-1972. Their emphasis during the spring and summer was in training the teachers in the administration of the various tests and holding workshops, not only with the reading teachers, but with the content area teachers. They put on demonstration lessons for teachers and assisted in selecting materials for the Reading Program. For the school year 1971-72, the following was accomplished:

1. Four remedial groups were set up for those students in need of small group instruction.
2. Demonstration lessons by the consultants for those teachers involved in the reading program.
3. Conferences were held each week between the consultants and reading teachers.
4. Review of reading materials by teachers and consultants to determine their effectiveness.

In the months of July and August, 1972, all incoming tenth grade students will be given a Battery of Reading Tests to be administered by those teachers who will be teaching reading during the school year. The following will also be implemented during the 1972-1973 school year:

1. Instead of having 12 teachers involved in the Reading Program, there will be only 5 who will be concentrating only on reading.
2. A remedial program will be set up for any tenth grade student who is in need of one.
3. Extension of the Remedial Program into Grade 11.
4. Each Reading Class will have its own Paperback Library with material at appropriate grade level.

During the 1971-1972 school year, plans were made in the Math Department to offer three different alternatives or 'tracks' at each grade level for each student enrolled at Boston High School. The curriculum of each track varies greatly. Track A would be analogous to 'college preparatory' work in mathematics in Grades 9-12 and would involve 25% of the students. Track B being a 'general mathematics' curriculum would incorporate many of the techniques and terminology of a 'modern math' program and would involve approximately 50% of the student body. Track C would be similar to the curriculum offered 'slow' 'basic' or 'remedial' math students.

Students' involvement in each track would be determined by each student's ability and/or his math teacher's recommendation. For example, enrollment in any one of the three tenth grade tracks would be determined by the amount of mathematics achievement exhibited by a student in the ninth grade and his math teacher's recommendation for tenth grade placement. This method of placement would affect all students who were then enrolled in Boston High School in June.

Any new student enrolling in Boston High School for the 1972-73 school year will take a 'mathematics inventory' prior to scheduling his classes. His performance on that inventory will determine his track.

With regard to the new math objectives rewritten for each grade and track, plans are made to follow more closely the planned objectives. A more rigid adherence to these objectives will hopefully result in a smoother transition for any student who is shifted from one session to another as well as greater continuity from one year to another.

C. Interviews with Teachers - When teachers were interviewed, the following outcomes were reported:

- For the most part, the teachers at Boston High School considered their teaching experiences more rewarding while involved in the Work-Study Program than they had found it to be in previous schools.

- Most teachers at Boston High School were pleased with the Principal's leadership style.

- The faculty expressed a high opinion of the whole school atmosphere and credited the administration with a major role in this achievement.

- Practically all of the teachers expressed their approval of the discipline exercised in the program and found it a necessary solution to many of the student's difficulties.

- A majority of the teachers expressed approval of the employment phase of the program; many reported that their students were in positions that would offer advancements and future permanent positions.

- As far as teaching Remedial Reading was concerned, many of the teachers did not approve of being responsible for corrective reading activities in their classes. Most of the teachers felt that these activities did not coincide with the teaching of their subjects.

D. Interviews with Students: At School - The results of the interviews with the Work-Study students showed these findings:

- The students at Work-Study, for the most part, expressed a real satisfaction with their experiences in the program and

felt that their expectations had not been disappointed.

- The aspect most admired about the program was the fact that "the teachers really care," or "the teachers are really interested in us."

E. Interviews with Students: At Job Sites - During interviews with students at job sites it was discovered that:

- Most students expressed that they had been assigned a job that they enjoyed.

- The students indicated that the things they most liked about their job was: (1) the people with whom they were associated, (2) the particular job itself, (3) the place of employment, and (4) the teachers.

- Those aspects that most displeased the Work-Study students about their jobs was: (1) the job was boring, (2) absence of freedom of choice in jobs, (3) there were no breaks during work, and (4) they disliked their supervisor.

- When students were asked how they were taught to do their jobs, they were about evenly divided between those who replied that they had received training from a supervisor or older employee and those who said they had picked up what they needed to know for themselves, had learned from other Work-Study students, or had been instructed sufficiently in school.

- When asked, the students expressed the type of work that they would like to be doing in the future; many were the extensions of the type of work they were presently doing while enrolled in the Work-Study Program.

F. Interviews with Employers - The substance of the facts and opinions expressed by the employers during the job-site interviews are summarized as follows:

- While a majority of the employers stated that no personal qualifications or skills were required of the students for job entry, others reported that a general aptitude or achievement test was administered in order to seek students with mechanical inclinations, an ability to read, or a cooperative attitude.

- All but one employer reported that they had found the youths to be satisfactory workers.

- According to most of the employers interviewed, the students presented no problems of absenteeism or tardiness.

- When asked if the students presented problems with regard to characteristics such as behavior, appearance, and responsibility, all of those interviewed with the exception of one replied "None."

- Several employers indicated that positive changes had occurred in the student's personality, behavior, and work habits as a result of their employment.

- According to most of the employers, the student's jobs helped them to prepare for specific careers. (Career possibilities included: banking, printing trades, draftsmen, laboratory technicians, machinist, and stock clerks.)

- All but one employer interviewed expressed that they would hire the same students on a regular basis after they had finished school.

- When asked their opinions of the Work-Study Program, every employer praised the program's strength. Many noted gains in the maturity of the students, work skills and habits and academic skills.

- The employer's recommendations for improving the school program included: improve the reading program, rotate the students in order to give them more variety of experiences, advertise the program more in order to get additional employees to cooperate, and provide rating sheets for the employers to use.

In sum, interviews were conducted with the school's administration, faculty, students and cooperating employers in order to determine general attitudes toward the Work-Study Program. Findings reveal that all of those interviewed who are directly involved with the Work-Study Program are very satisfied with the results of their involvement.

#### Questionnaires Administered

During the 1971-1972 school year evaluation only two questionnaires were administered. As indicated in Chapter IV these included:

1. A Teacher-Coordinator Questionnaire (administered to a total of 46 teachers).
2. A Questionnaire Survey of Management of Cooperating Business and Industry (administered to 12 employers).

Facts were obtained concerning various aspects of the Work-Study Program as well as suggestions for improvement. For purposes of analysis the most relevant questions, as identified by the investigator, in each questionnaire have been selected for data presentation in the sections that follow. Complete results from both questionnaires can be found in Appendix H and I.



Responses from Teacher-Coordinators

The questions selected from this questionnaire for purposes of analysis are numbers: 1, 4, 6, 9, 12, and 16 through 22.

Question 1: Including this year for how many years have you been involved in the Work-Study Program? (See results in Table 32)

Table 32

YEARS INVOLVED IN WORK-STUDY PROGRAM

No. of years involved	No.	%
1	13	28.2
2	7	15.2
3	9	19.6
4	11	24.0
5	6	13.0
Total:	46	100.0

Most of the teachers (28.2 percent) responding to this question indicated that they had been involved in the Work-Study Program for one year. Another 24 percent, however, indicated that they had been involved in the program for four years. Only 13 percent of the teachers had been involved in the program since its beginning.

Question 4: Are places of employment readily available for your students? (See results in Table 33 on the following page).

For the most part, places of employment are readily available for the students. Only one teacher-coordinator responded "No" to the question. A total of 81 percent responded "Yes" and "Sometimes."

Table 33

## AVAILABILITY OF EMPLOYMENT

Responses	No.	%
Yes	21	46.0
Sometimes	16	35.0
Not Very Often	6	13.0
No	1	2.0
No Response	2	4.0
Total:	46	100.0

Question 6: In your opinion, is the curriculum geared to meet the needs of the students? (See results in Table 34)

Table 34

## DOES CURRICULUM MEET THE NEEDS OF STUDENTS?

Responses:	No.	%
Very much so	25	54.0
To some degree	20	44.0
Not at all	0	0.0
No response	1	2.0
Total:	46	100.0

As indicated from the Table above, a total of 98 percent of the faculty responded either "Very much so" or "To some degree" when rating the above-stated question. None of the teachers responded "Not at all" to the question asked.

Question 9: In your judgement, what is the attitude of management in business and industry toward this program? (See results in Table 35).

Table 35

## ATTITUDE OF MANAGEMENT

Response	No.	%
Very favorable	39	85.0
Somewhat favorable	6	13.0
Slightly favorable	0	0.0
Not at all favorable	0	0.0
No opinion	0	0.0
No response	1	2.0
Total:	46	100.0

An overwhelming 86 percent of the faculty considered the attitude of management in business and industry toward the Work-Study Program to be "Very favorable." None of the faculty indicated that the attitude of management was "not at all favorable."

Question 12: Do you believe that changes or improvements are needed in the procedure for selecting and placing Work-Study students for job opportunities?

A summary of some of the faculty's responses included:

- Changes in the methods of selection and screening for job placement.
- Have teachers and students plan together for student employment.
- Added counseling to inform students about career opportunities and to strengthen the job training program.
- Introduction of apprenticeship scheme.

- Wider range of employment opportunities for Spanish-speaking students.

Questions 16-22: Please evaluate how the school's procedures have helped you to attain each of the following goals. (See results in Table 36).

Table 36

## TEACHERS' RATINGS OF SCHOOL'S GOALS

Questions	Excellent	Good	Fair	Poor
16. Development of ability to devise and use instructional materials.	23	21	0	2
17. Improvement of the Work-Study Program and its philosophy.	15	26	2	3
18. Development of techniques of guidance and counseling.	14	19	10	3
19. Establishment of procedures for coordinating activities with business and industry.	20	15	8	3
20. Development of forms and checklists for use in evaluation of students' work, attitudes, activities and in student follow-up.	15	22	5	2
21. Development of procedures for home visits and liaison with the Department of Labor.	19	21	3	2
22. Recognition of need for more extensive involvement of parents and the community in the Work-Study Program.	25	16	3	2

In sum, the faculty's ratings of the school's philosophy and organization of their attainment of the program goals were either "Excellent" or "Good." Only a few of the faculty members rated "Poor" to any of the responses.

Responses of Employers of Cooperating Business and Industry

Due to the low number of returned questionnaires (N-12) only the data for three of the questions comprising the Questionnaire Survey of Management of Cooperating Business and Industry are reported here. These questions, considered by the investigator to be the most relevant, relate particularly to the work attitudes and habits and the degree of employability of the Work-Study students. The question numbers as included in the questionnaire are: 4, 5, and 6. (See complete tabulations of all questions in Appendix I).

Question 4: In the main, what is the quality of the students' attitudes toward their jobs? (See results in Table 37)

Table 37

EMPLOYERS RATING OF THE QUALITY OF THE STUDENTS  
ATTITUDES TOWARD THEIR JOBS

Response	No.	%
Very favorable	3	25.0
Satisfactory	8	66.7
Not quite up to par	1	8.3
Unsatisfactory	0	0.0

As noted from the Table above, a majority of the employers considered the student's attitude toward their jobs to be either "Very favorable" or "Satisfactory." None of the employers rated the attitudes of the students as being "Unsatisfactory."

Question 5: What is your rating of the work habits of the students?  
(See results in Table 38)

Table 38

EMPLOYERS RATINGS OF THE WORK  
HABITS OF STUDENTS

Responses	No.	%
Excellent	1	0.8
Good	6	50.0
Average	4	33.3
Below Average	1	0.8
Poor	0	0.0

Although only 12 employers rated the responses, over half of them rated the work habits of the students as being either "Excellent" or "Good." Only one employer rated the work habits of the students as "Below Average."

Question 6: What is your rating of the degree of employability of the students? (See results in Table 39)

Table 39

EMPLOYERS RATINGS OF THE DEGREE OF EMPLOYABILITY  
OF THE STUDENTS

Responses	No.	%
Excellent	2	16.5
Good	4	33.3
Average	2	16.5
Below Average	3	25.0
Poor	0	0.0
No Response	1	0.8

A high percent of the employers rated the employability of the students as indicated by the ratings in Table 39. A surprising 25 percent of the employers rated the employability of students as "Below Average."

Briefly summarizing the results of the two questionnaires utilized during the 1971-1972 evaluation it can be concluded that the teacher-coordinators and the employers of the cooperating businesses are satisfied with the workings of the Work-Study Program. The teacher-coordinators expressed their greatest satisfaction with respect that the program has helped them personally to develop their abilities to more adequately make use of the instructional materials. The cooperating employers expressed satisfaction with attitudes, work habits and employability of the Work-Study students. Responses such as these reflect attitudes which are vital to the future success of the Work-Study Program.

### Observations

Evaluation team members made frequent observations during the 1971-1972 academic year of Boston High School's instructional program, the teaching methodology and techniques employed by the classroom teachers and the attitudes and rapport of the faculty and students. Information obtained through these observations are summarized as follows:

- It was observed by many of the evaluators that serious work was going on in the classrooms and that the value seemed to be appreciated by both the students and faculty.
- Adherence to general school regulations seemed to be excellent.
- It was observed that the structure of planned instruction in general was formal and proved to be suitable in meeting the students' needs and interests.

- Many of the lessons taught, however, consisted of detached subject matter and often carried on until the end of the class period with no time allowance made for a final summary. (The evaluators felt that due to the student's limited interest span it is generally desirable to allow time for summation at the end of the class period).

- In several classes it was observed that appropriate use of audiovisual equipment was being made.

- In most classes the course content was realistic and was related in all instances to life and employment needs.

- In the science classes it was observed that students were provided with laboratory equipment such as scales, measures, microscopes, weights, or supplies needed to acquire first hand experiences in science.

- At the job sites the evaluators observed the work patterns and routines of the students. For the most part, procedures in the employment establishments seemed to present a structure which served as a guide to the job behavior of the students.

- Observations at the employment scene also indicated that some of the immediate supervisors of the students did not seem to have a clear concept of the program nor the goals toward which it was directed.

- In several instances it was observed that many of the supervisors tried seriously to familiarize the students with job requirements and in general were protective of those students who were not doing their job well.



- In general, the teacher-coordinators did a good job of helping the students that they supervised to maintain standards necessary for employment.

In sum, the observations made by the evaluators produced both positive and negative results. For the most part, however, the Work-Study program was observed as functioning very well and the needs of the students were being met.

### Results of California Achievement Tests

A final means of evaluating the school program during the 1971-1972 academic year was through the administration of the California Achievement Test. A pre-test post-test administration to all grade levels produced scores for the areas of reading, mathematics and language. The mean scores and the mean differences along with the national percentiles for each subject area are presented in Tables 40, 41, and 42 followed by an analysis of the results.

Table 40

#### RESULTS OF CALIFORNIA ACHIEVEMENT TESTS READING TEST SCORES

1971-1972

GRADE	N	Pre-Test			Post-Test			Mean Difference		
		Standard Score	Grade Equiv.	Nat'l %ile	Standard Score	Grade Equiv.	Nat'l %ile	Standard Score	Grade Equiv.	Nat'l %ile
9	80	443	5.6	14	462	6.4	15	19	0.8	1
10	108	476	7.0	16	492	7.5	14	16	0.5	-2
11	85	507	7.8	15	516	8.2	14	9	0.4	-1
12	93	526	8.5	14	543	8.9	15	17	0.4	1

The results of the achievement test scores in Table 40 show that there is a definite deficiency in the reading abilities of the Work-Study students. All grade equivalent scores indicate that the students are an average of four years behind the level at which they should be achieving. Although the scores are significantly below national norms, there is proof of slight improvement in scores from the pre-test to post-test administrations. This improvement can hopefully be attributed to the students exposure to the Work-Study Program.

Table 41

RESULTS OF CALIFORNIA ACHIEVEMENT TESTS  
MATHEMATICS TEST SCORES

1971-1972

GRADE	N	Pre-Test			Post-Test			Mean Difference		
		Standard Score	Grade Equiv.	Nat'l %ile	Standard Score	Grade Equiv.	Nat'l %ile	Standard Score	Grade Equiv.	Nat'l %ile
9	81	429	6.2	13	472	7.2	18	43	1.0	5
10	114	475	7.3	15	505	8.0	16	30	0.7	1
11	91	521	8.4	19	544	9.0	24	23	0.6	5
12	94	526	8.5	17	526	8.6	16	0	0.1	-1

The results of achievement in mathematics show higher scores in the mean difference than those shown for the reading scores. Still in this achievement area, the grade equivalency is from three to four years below the normal grade level. The national percentiles are significantly low, however, there was a positive movement in scores in all grade levels from the pre-test to the post-test administrations.

Table 42

RESULTS OF CALIFORNIA ACHIEVEMENT TESTS  
LANGUAGE TESTS

1971-1972

G R A D E	N	Pre-Test			Post-Test			Mean Difference		
		Stan- dard Score	Grade Equiv.	Nat'l %ile	Stan- dard Score	Grade Equiv.	Nat'l %ile	Stan- dard Score	Grade Equiv.	Nat'l %ile
9	79	424	4.9	10	455	5.8	13	31	0.9	3
10	111	459	6.0	11	491	7.1	13	32	1.1	2
11	90	493	7.1	12	509	7.7	14	16	0.6	2
12	93	478	6.6	7	493	7.1	9	15	0.5	2

The Language test scores in Table 42 show that the Work-Study students are from three to five years below the normal rate of achievement. One mark of success can be noted, however, at the tenth grade level where the students advanced one grade level from the pre-test to the post-test administrations. The national percentile scores, although somewhat high than the scores for Reading and Mathematics, are significantly low.

In sum, all three of the achievement areas measured have produced test scores that fall below the grade equivalency levels. Although much has been done by the Work-Study staff to correct the deficiencies in these subject areas (through individualization, construction of performance objectives, etc.) efforts should continuously be made to identify and upgrade these weaknesses as experienced by the Work-Study students.

## Summary

An overview of the evaluation of the Boston High School Work-Study Program for the academic year 1971-1972 has been presented on the previous pages. Through use of performance objectives, interviews, questionnaires, observations and standardized tests, the investigator has attempted to evaluate the effects of the Work-Study Program on its student enrollees by presenting the evaluation results.

Through this evaluation, it has been revealed that for the most part the stated objectives for 1971-1972 were achieved with only minor areas of weakness. In Chapter VI, which follows, the summary, conclusions, and recommendations of the study are presented.

## CHAPTER VI

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The major objectives of this study were: (1) to provide a detailed description of the significant components of Boston High School's Work-Study Program, and (2) to assess the effectiveness of the school in attaining its seven program objectives for the 1969-1970 and 1970-1971 academic years and its evaluation objectives for the 1971-1972 academic year.

The purposes of the study were:

1. Through a study of public documents, evaluation data, and personal interviews provide a detailed description of the significant components of the Work-Study Program. This was accomplished by providing a brief history of the school's historical development, delineating the content and coordination of both the curriculum and the work phase of the program and by describing the student selection criteria and the overall characteristics of the student body and the staff.

2. Through an analysis and synthesis of the data obtained from the same sources, assess the effectiveness of the school in attaining its program objectives. This was accomplished in the following manner:

- a. Through use of a quasi-experimental design and appropriate statistical tests, the effectiveness of the school in positively affecting its students' attendance and punctuality was determined.

b. Through use of a quasi-experimental design and appropriate statistical tests, the effect of Boston High School on the drop-out rates of its students was determined.

c. Through use of the pre-test post-test quasi-experimental design and appropriate statistical tests, the effect of the school on the academic achievement of its students was determined by using the California Test of Basic Skills. Further assessed was the academic achievement of the Work-Study students by use of Performance Objectives of the normal instructional sequence constructed by the teachers and/or the academic departments of Boston High School.

d. Through use of non-standardized attitudinal questionnaires and interview schedules, the effect of the school on its students was determined as measured by the student's motivation resulting from job experiences.

e. Through use of non-standardized attitudinal questionnaires and interview schedules, the effect of the school was determined by responses obtained from the faculty and administration at Boston High School, the parents of the Work-Study students, and the job supervisors and company executives who sponsor the Work-Study students in their job situations.

#### METHODOLOGY USED IN THE STUDY

The study has incorporated two types of designs: (1) a descriptive case study method, and (2) a multifaceted assessment design.

##### Case Study Method

In order to obtain information needed to describe the organizational and operational design of Boston High School, the investigator gathered data from the following sources:

1. Personal interviews with the Boston High School administrative and teaching staff.
2. Public documents and school records.
3. Evaluation materials collected by independent investigators during the 1969-1970 and 1970-1971 academic years.
4. The Department of Title I Programs, Office of Research and Evaluation.
5. The Psychological Corporation of New York for evaluation data collected during the 1971-1972 academic year.

Through an analysis and synthesis of the data obtained from informational documents, private interviews and research reports, the growth and development of Boston High School was enumerated and presented in narrative form. The resulting narration provided a background for the second phase of the study which included the assessment of the degree of accomplishment of seven selected objectives.

#### Assessment Design

Several assessment approaches were used to determine the effectiveness of Boston High School's accomplishment of its program objectives. The methods employed as related to each program objective are as follows:

1. Objective One - Improve attendance and punctuality

Assessment procedures used: Official attendance and tardiness figures were made available for Boston High School and a comparable control group sample. School visits, telephone contacts, interviews and other school records aided in the assessment of this objective.

2. Objective Two - Provide a program of instruction that will improve pupil retention.

Assessment procedures used: Data was again collected and analyzed through

access to school records. It was determined during the data collection process that the identification of drop-outs was practically impossible for all of the City's schools. An approach suggested but one that was never carried through involved the asking of one question to all of the students both in Boston High School and to other schools submitting the control samples. That was: Do you think you are likely to drop out of school during this academic year?

3. Objective Three - Identify potential drop-outs.

Assessment procedures used: No standard measure was utilized in determining who and who was not considered a potential drop-out. For purposes of matching students to Boston High School's selection criteria, reports and recommendations were submitted by school principals, guidance counselors, social workers, truant officers and local authorities.

4. Objective Four - Improve academic achievement.

Assessment procedures used: The California Test of Basic Skills was utilized in the assessment of this objective. Form W of this standardized instrument was used for the pre-test, Form X for the post-test. The areas that were measured included Mathematics, Reading and Language skills. Achievement was further assessed by use of performance objectives constructed by the Boston High School teachers for the subject areas of English, Mathematics, Social Studies and Business Education.

5. Objective Five - Provide remedial instruction in Reading, English Usage and Mathematics.

Assessment procedures used: The Stanford-Achievement Test was also administered in pre-test post-test sessions and measured achievement in the areas of Arithmetic Computations, Arithmetic Concepts, and Arithmetic Applications.



6. Objective Six - Provide motivation through job opportunities and job experiences.

Assessment Procedures used: Non-standardized attitudinal questionnaires and interview schedules were utilized in the assessment of this objective. Of particular importance were the interviews held with the Work-Study students both at school and on the job, and interviews with the management of participating businesses and parents.

7. Objective Seven - Develop salable skills and desirable attitudes required in employment.

Assessment Procedures used: Non-standardized attitudinal questionnaires and interview schedules were also used in the assessment of this program objective. In addition, various unobtrusive measures were used for the purpose of providing supplemental data. These unobtrusive measures included: (1) on site informal observations made by the investigator, (2) informal discussions with the Boston High School staff, (3) agencies that dealt with the school program, and (4) proposals generated in regard to its quest for Title I assistance.

#### SUMMARY OF FINDINGS AND CONCLUSIONS

Boston High School is a public school that was created for the development of a Work-Study Program to fulfill the philosophy that a "marriage of relevant educational experiences and regular employment" will motivate students to remain in school.

A descriptive document of the program's objectives, student selection criteria, curriculum, an evaluation of the total school program and an assessment of the effects of the program on the students, staff, parents and graduates were presented in Chapters III, IV, and V. The most significant points are summarized as follows:

1. The evaluation of the Boston High School Work-Study Program was carried out with the assistance of the Boston School Department, the administration and staff of Boston High School, the student body of Boston High School, the investigator of this study, and the Psychological Corporation of New York and other outside agencies.

2. The total evaluation of the Boston High School Program was conducted over a three-year period and included the academic years of 1969-1970, 1970-1971, and 1971-1972.

3. Following the objectives written for each academic year, the evaluations sought to present data as related to the accomplishment of each of the program objectives.

4. Student selection criteria was defined indicating the Title I area to be served, the age limitation for accepting students into the program, the students overall I.Q. (a minimum of 80), previous records of school delinquency, absenteeisms and tardinesses and general educational status.

5. The faculty and staff of Boston High School indicated an attitude that there was a lack of communications within the school family. The faculty indicated that there was little opportunity to share experiences and innovative ideas. The students indicated that there was a communications gap whereas they could not discuss problems or future plans with a faculty member.

6. The staff of the Work-Study Program reflected the general attitude that the students at Boston High School were lucky to be a part of the program. They viewed the students in the program with increased interest and attempted to play a greater role in the selection of students for the program as well as placing students in their job situations. The

staff was described as being satisfied with the part that they played in the development of curriculum and the freedom they exercised in choosing the most appropriate type of disciplinary action. For the most part, the philosophies of the Work-Study staff corresponded with the major objectives of the Work-Study Program.

7. The faculty indicated a lack of classroom supervision by the administration, thus leaving them to be unsure of instructional methods.

8. The primary failure of the Work-Study curriculum was described as the inability to provide the students with competencies needed to meet specific occupational requirements and in relating employment training and work skills to required academic subjects. Subject matter taught in the classroom had little relevancy for most of the students when they tried to apply the knowledge they had learned to actual job situations.

9. Classroom procedures of Boston High School lack flexibility with too much time being spent of the "listen-write" methods rather than the "experience" method.

10. Boston High School lacks the percentage of minority faculty members need to fulfill the needs of the minority students.

11. The curriculum offerings at Boston High School included only token courses outside of those required. This omitted opportunities for students to develop personal and social interests in such areas as Art, Music, Race Relations and Sex Education.

12. Students within the Work-Study Program were not always placed in jobs that interested them due to an insufficient job market. Efforts were made, however, to match future job positions with the

students' specific interests or ability.

13. Students were not given the opportunity to take full advantage of the Work-Study program because of the lack of formalized procedures in the assignment of students to jobs. Limits in the job selection may restrict a student from learning the profession he is really interested.

14. The counseling services of Boston High School provided the Work-Study students information about how to get along with fellow workers but failed to make available information concerning future employment possibilities or information about how to handle earnings.

15. Only a small percentage of the parents of the Work-Study students enrolled at Boston High School have been visited by faculty members or have visited the school more than one time.

16. Boston High School's effort to improve attendance and tardiness was evaluated revealing that students in the Work-Study Program improved their attendance records during the first year of being enrolled in the program. The Work-Study students also maintained better attendance and tardiness records when compared to other students with similar backgrounds but not enrolled in the Work-Study Program.

17. The decline in the absence and tardiness figures throughout the three years evaluation demonstrated the increased holding power of the Work-Study Program.

18. The desired level of academic improvement was essentially met. This finding was based on the results of the Stanford High School Basic Battery, the Stanford Advanced Battery, the California Achievement Test and the performance objective test scores. Not all grade levels showed significant gains in every area tested. However, the overall

results were considerably greater than what might have been expected of students who had previous records of social and academic difficulties. Past years' evaluations indicated serious remedial reading deficiencies within the program but during the 1961-1972 academic year remedial reading instruction was incorporated into every subject area. Thus, many students had been encouraged to remain in school as a result of their improvements in reading skills.

19. Student performance on the job was not formally evaluated except by faculty to the employer. The employers were given only sketchy information of what to expect from students.

#### RECOMMENDATIONS

Based on the findings, conclusions and probable implications of the study, the investigator makes the following recommendations:

- I. Recommendations concerning the faculty and administration of Boston High School:
  - A. Group sessions should be held for faculty members on a regular basis in order to provide opportunities for an exchange of ideas and experiences.
  - B. An effort should be made by the faculty members to modify their "lucky-to-be-here" attitude toward the Work-Study students.
  - C. The administration and front office staff should make every effort to create an atmosphere which would encourage students to come to them with problems.
  - D. The administration should more closely supervise the instructional methods used by the classroom teachers and offer suggestions for improvement.

- E. Faculty members should take a more active part in helping to meet the needs of students as far as job placements and promotions are concerned.
  - F. Serious attempts should be made by the teachers to relate the classroom experience to the student's job experience. For example, the filling out of job applications could be incorporated in the English curriculum; the study of particular occupations could be incorporated in the Social Studies curriculum.
  - G. The classroom teacher should structure the class time to involve fewer lecture-note taking sessions and more activity-oriented sessions with a review time at the conclusion of the class period to help students "bring together" the subject matter that was presented to them.
  - H. The employment of more minority faculty members should be undertaken. This would hopefully enable those minority students enrolled in the Boston High School Program to better relate to members of their own race.
- II. Recommendations concerning the curriculum of Boston High School:
- A. Mini-courses should be offered in order to provide students the opportunity to select courses of personal interest; offerings such as Art and Music. Courses pertaining to the social interests of the students could also be offered in this manner. Interest in such areas as Sex Education, Drug Education, and Home and Family Life have been expressed by students of the Work-Study Program.

- B. Career information should be incorporated in the school's instructional content wherever applicable to the subject taught. Students enrolled in the eleventh or twelfth grades should also be offered training in fundamental industrial or business concepts that are generally applicable to that occupational family.

III. Recommendations concerning the counseling services at Boston High School:

- A. Student job opportunities should be expanded to provide a wider variety of career experiences. In this connection, the procedure for selecting places of employment should be formalized.
- B. The Work-Study students should receive more training and counseling about how to handle their earnings.
- C. Care should be taken to reinforce the students' feelings that this program was instituted to help them with their particular problems and is operated by staff members who care about them. The sense of privilege that such feelings have generated has intensified the student's motivation to succeed and has improved their chances for doing so.
- D. In-service workshops for the faculty at Boston High School should focus on the general area of counseling in order to help teachers develop better counseling skills and techniques.

IV. General recommendations concerning the Work-Study Program:

- A. Parents of the Work-Study students should be encouraged

to take a more active part in the program and a greater interest in their child's accomplishments while in attendance at Boston High School and their respective job situations.

- B. The Work-Study students should be continually encouraged to adhere to the "rules and regulations" of the Boston High School Program. Without being petty, the faculty should encourage the students to form needed work habits of attendance and punctuality.
  - C. A more formal method of evaluating student performance in employment should be established, perhaps including the use of more detailed checklists that would reveal, other points, whether the youngster is engaging in the variety of tasks contemplated and not being confined to a single routine.
  - D. A written document should be developed to serve as a guide to the employers of the Work-Study students. This would inform them of the program's philosophy and of the role that they are expected to play as a cooperating employer.
- V. Recommendations to the Central Administration of the Boston Public Schools.
- A. Boston High School represents a positive effort to offer a racially balanced program of instruction thus providing the school system a successful model for replication to other parts of the state.



- B. Provision should be made so that the administrators and faculty from other schools in the city and state will have the opportunity to observe successful practices used in the Boston High School to promote racial harmony and community cooperation.
- C. Further study and investigation should be undertaken utilizing the present data base but focusing on the positive accomplishments of the Boston High School in the area of race relations for the purpose of implementing Recommendations A and B.

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APPENDIX

APPENDIX A

SUMMARY RECORD CARD

OF

BOSTON HIGH SCHOOL'S WORK-STUDY PROGRAM

SUPPLEMENTARY RECORD TRANSCRIPT

BOSTON PUBLIC SCHOOLS ACCREDITED BY NEW ENGLAND ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS INC.

LAST NAME	FIRST NAME	MIDDLE NAME	SEX	STUDENT NO.	GRADING SYSTEM
HOME ADDRESS	DISTRICT	ZIP CODE	M <input type="checkbox"/> F <input type="checkbox"/>	DATE OF BIRTH	A-B C D-E
PARENT OR GUARDIAN	NO. AND STREET	HOME TEL.		PLACE OF BIRTH	HONORS PASSING FAILING
ENTERED FROM	DATE ENTERED	LEFT	REENTERED	GRADUATED	APPROX. <input type="checkbox"/> JR. YR. <input type="checkbox"/> MID. SR. <input type="checkbox"/> FINAL <input type="checkbox"/>
				RANK	IN CLASS OF
				RANK	IN CLASS OF
					COLL
					ALL

9	10	11	SCORES:	ACTIVITIES
12				





APPENDIX B

COMPANIES EMPLOYING BOSTON HIGH SCHOOL'S  
WORK-STUDY STUDENTS

## \*COMPANIES EMPLOYING WORK-STUDY STUDENTS

ALLEN BROTHERS  
 AMSTACC  
 ADAMS AND ABBOTT  
 BINGHAM, DANA AND GOULD  
 BLUE CROSS-BLUE SHIELD  
 BRUNING, CHARLES CO.  
 BOSTON BLUEPRINT CO.  
 BOSTON EDISON  
 BOSTON UNIVERSITY (WILBURS)  
 B. U. MEDICAL CENTER  
 CABOT CORPORATION  
 CASA BARBI  
 CRUM AND FOSTER  
 DANIELS AND NATHANSON  
 EMPLOYERS' COMMITTEE  
 FARNSWORTH MAILING  
 FASHION LANE  
 FEENEY'S GULF  
 FILENE'S  
 FIREMAN'S FUND INSURANCE CO.  
 FIRST NATIONAL BANK  
 GENERAL ENVELOPE CO.  
 GROOM, THOMAS STATIONERY  
 HANCOCK, JOHN MUTUAL INSURANCE CO.  
 HARTFORD INSURANCE CO.  
 HARVARD MEDICAL  
 LAHEY CLINIC  
 LIBERTY MUTUAL INSURANCE CO.  
 LITTLE BROWN PUBLISHING CO.  
 KINGSTON PRESS  
 MASSACHUSETTS GENERAL HOSPITAL  
 NATIONAL TRUCK  
 N. E. MUTUAL LIFE INSURANCE  
 NORTHEASTERN (WILBURS)  
 PECK OFFICE SUPPLY INC.  
 PETER BENT BRIGHAM HOSPITAL  
 PRUDENTIAL INSURANCE CO.  
 RELIANCE INSURANCE CO.  
 RYAN-ELIOT CO.  
 STATE STREET BANK  
 STAR BRUSH  
 STEPHEN-ARNOLD  
 THORPE-MARTIN  
 TRAVELER'S INSURANCE CO.  
 UNITED FRUIT  
 UNIVERSITY HOSPITAL  
 U.S.M. CORPORATION  
 WARD MFG.  
 WORKMEN'S COMPENSATION

\*Note: Only companies employing students placed there by the Work-Study staff are included in this list. Companies participating through the efforts of individual students in job procurement are not included.

APPENDIX C

STUDENTS ATTITUDES TOWARD THE  
WORK-STUDY PROGRAM

STUDENT QUESTIONNAIRES ADMINISTERED

1969-70 ACADEMIC YEAR  
1970-71 ACADEMIC YEAR

## BOSTON HIGH SCHOOL - WORK-STUDY PROGRAM

## STUDENT QUESTIONNAIRE

1969 - 1970

Please DO NOT sign your name to this questionnaire. No attempt will be made to identify the person completing this form, and individual forms will be read only by members of the evaluation team.

The items listed on the following pages were derived from areas of concern and questions that were raised by students in the Work-Study Program (WSP) in a number of small group discussions with the evaluating team. Thus, the items reflect concerns and issues that the students consider to be important in the operation of the WSP.

You can help make the WSP a better program by giving careful thought to each of the questions that follow. Please check the space that gives the most honest and accurate representation of your feeling about each statement or question.

1. Teachers in the WSP feel that students are lucky to be in the program.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

2. Teachers in the WSP are too strict about minor things such as being in your seat on time, talking in class, etc.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

3. Teachers in the WSP show preferences toward certain groups of students.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

4. Teachers in the WSP take a greater personal interest in students than teachers in the school that I previously attended.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

5. I like my teachers in the WSP.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

6. If I have a problem, I feel comfortable in discussing it with someone in the front office.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

7. The people in the front office really try to find a job that is best suited to me.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

8. People in the front office pay serious attention to suggestions made by the students.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

9. People in the front office really care about moving students into better jobs.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

10. People in the front office are fair about disciplining students who have broken the rules.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

11. I am provided with enough information and advice about how to get along with the people at work.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

12. I am provided with enough information about the kind of work that I will be best suited for in the future.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

13. I am provided with enough information about the job market and future job possibilities.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

14. I am provided with enough information about how to handle my money.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

15. I am provided with enough information about how well I am doing in my school work.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

16. What I learn in school is helpful to me on my job.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

17. What I learn in school provides me with enough information about problems.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

18. What I learn in school provides me with enough information about sex education.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

19. What I learn in school provides me with enough information about drug education.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

20. What I learn in school provides me with enough information about the responsibilities of citizenship, voting, etc.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

21. What I learn in school provides me with enough information about music and art.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

22. What I learn in school provides me with enough information about how to get along with people.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

23. What I learn in school provides me with enough information about spending, borrowing and saving money.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

24. My parents know the names of the courses I am taking and the names of the persons who are teaching these courses.

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never



25. My parents know what I do at my job.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

26. My parents are interested in the WSP and ask questions about work and school.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

27. The WSP places enough emphasis on extra curricular activities such as clubs, sports, etc.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

28. Since some students are faster or slower than others, more learning would take place if these students were transferred to other classes.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

29. I would prefer for both boys and girls to be in the same classes.

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

30. Do you think you are getting better education in the WSP than in the school you previously attended?

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

31. Does your present job tire you too much physically?

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never

32. Do you get restless during working hours, and feel that the day is dragging endlessly?

/	/	/	/	/
Almost always	Most of the time	Sometimes	Very few times	Nearly never.

33. In general, do you get along well with the persons with whom you work on your present job?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

34. Does your present position force you to work with certain persons whom you dislike?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

35. Do you get along satisfactorily with the people under whom you work?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

36. Do you feel that you can always trust the people under whom you work?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

37. Do you feel respect and regard for the people under whom you work?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

38. Do you feel you are paid a fair salary for the work you do?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

39. Have you been able to get the promotions and pay increases which you feel you deserve?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

40. Are you afraid of losing your job?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

41. Do you feel that there is any particular prejudice toward your age group in your occupation (e.g. that you are too young)?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

42. Are you so interested in your work that you talk about it a great deal even after working hours?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

43. Do you feel that you are really interested in your present job?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

44. Is your present job in the area of work (not necessarily the same job) you wish to remain in permanently?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

45. Are you generally happy and cheerful when you are at work?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

46. Do you think your work is worthwhile and important?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

47. Are you proud of your job and the work you do?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

48. Are you embarrassed when people ask you what work you do?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

49. Does your present job help you toward the occupational goals you have set yourself?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

50. Do you regard your present position as a lifetime position?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

51. Does your immediate supervisor give you an opportunity to prove your ability?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

52. In your opinion does your immediate supervisor spend sufficient time planning the work that you do?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

53. Does your immediate supervisor criticize you in front of others?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

54. Does your immediate supervisor follow through on his promises?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

55. Do you feel that you have proper opportunity to present a problem, complaint, or suggestion?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

56. Does your immediate supervisor avoid you when he knows you want to see him about a problem?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

57. Does your immediate supervisor take an interest in you as a person as well as in how well you do your job?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

58. In your opinion does your immediate supervisor spend sufficient time directing the work that you do?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

59. Are you criticized by your immediate supervisor for happenings over which you have no control?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

60. Does your immediate supervisor explain to you the why of an error to prevent recurrence of the error?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

61. When a change is ordered in your work procedure, are you usually given sufficient explanation of why the change is necessary?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

62. Does your immediate supervisor give you straight answers when you ask him something?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

63. On the job does your immediate supervisor take a reasonably democratic attitude toward you?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

64. Does your immediate supervisor deny in taking care of your complaints?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

65. Do you feel that your immediate supervisor is interested in getting your ideas and suggestions?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

66. Does your immediate supervisor give you recognition for work well done?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

67. Do you know how you stand with your immediate supervisor?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

68. If something happens which put your immediate supervisor on the spot, does he take the responsibility himself?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

69. Is your immediate supervisor courteous and friendly to you?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

70. Do you feel promotions in your department are usually based more on ability than on personality?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

71. How well does your immediate supervisor keep you informed about what is going on around the plant?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

72. Do you feel at ease around your immediate supervisor?

/ / / / /  
 Almost Most of Sometimes Very few Nearly  
 always the time times never

RESULTS OF STUDENT QUESTIONNAIRE WITH PERCENTAGE OF  
STUDENTS WHO SELECTED EACH OPTION

*Factor	Almost Always	Most of	Some- time	Very few Times	Nearly Never	No Response
<b>Student Attitude</b>						
<b>Toward Teachers</b>						
1.	56.5	20.1	16.9	3.3	2.9	.3
2.	20.7	24.5	28.7	14.5	11.0	.6
3.	7.7	11.8	36.4	21.6	21.0	1.5
4.	43.8	26.6	18.9	6.8	2.7	1.2
5.	29.6	37.3	22.5	5.0	4.7	.9
<b>Student Attitude</b>						
<b>Toward Administra- tion</b>						
6.	10.9	12.1	21.3	17.8	36.4	1.5
7.	15.7	20.7	25.1	15.4	21.3	1.8
8.	7.7	20.1	34.9	19.5	14.5	3.3
9.	19.5	27.2	27.5	14.5	9.5	1.8
10.	25.4	32.3	27.2	8.0	5.6	1.5
<b>Counseling</b>						
11.	29.0	29.0	19.8	9.2	11.8	1.2
12.	14.2	16.0	19.5	16.6	32.5	1.2
13.	16.9	21.9	26.3	11.2	21.6	2.1
14.	26.3	15.1	16.6	11.5	27.8	2.7
15.	31.7	35.2	20.4	5.3	5.9	1.5
<b>Curriculum Relevancy</b>						
16.	15.4	18.6	26.0	10.7	28.1	1.2
17.	12.4	19.8	33.1	14.6	18.7	1.5
18.	6.5	5.9	14.2	15.1	56.5	1.8
19.	20.4	23.1	26.3	9.2	19.2	1.8
20.	12.4	23.4	33.1	12.8	17.4	.9
21.	2.7	1.2	7.7	12.4	74.5	1.5
22.	15.0	23.1	31.3	14.2	15.3	1.1
23.	11.5	11.8	24.6	19.5	31.1	1.5
<b>Parent Involvement</b>						
24.	33.1	17.2	17.1	10.1	22.6	.9
25.	53.5	22.5	10.1	4.4	8.0	1.5
26.	36.7	19.2	24.0	9.2	10.0	.9
<b>Administrative Organization</b>						
27.	2.7	4.7	17.8	18.6	55.6	.6
28.	19.8	18.6	34.3	9.2	16.0	2.1
29.	66.0	6.5	8.6	3.5	14.8	.6
30.	43.5	20.7	17.8	4.4	12.1	1.5

\*Under each factor are the items associated with that factor.

Factor	Almost Always	Most of The Time	Some-times	Very Few Times	Nearly Never	No Response
Job Satisfaction						
31.	13.3	7.1	33.1	13.9	30.8	1.8
32.	19.8	14.8	41.7	10.4	11.2	2.1
33.	54.4	23.1	11.5	3.0	6.8	2.2
34.	8.9	6.5	20.4	16.9	45.6	1.7
35.	43.5	30.0	17.1	5.6	3.6	1.2
36.	27.8	26.3	21.3	9.2	13.9	1.5
37.	29.3	28.1	25.7	6.2	9.2	1.5
38.	18.1	18.3	19.2	9.5	33.7	1.2
39.	13.0	11.8	21.3	14.8	37.9	1.2
40.	8.3	4.7	18.9	13.3	53.9	.9
41.	4.4	3.6	24.6	12.1	53.8	1.5
42.	7.4	6.2	26.0	14.8	44.7	.9
43.	16.7	15.7	21.3	10.9	34.3	.9
44.	10.1	10.6	16.0	13.6	48.5	1.2
45.	19.2	27.5	31.4	10.6	10.4	.9
46.	21.9	21.6	25.7	12.4	17.8	.6
47.	18.9	15.1	26.1	12.1	25.7	2.1
48.	13.3	6.5	19.2	16.3	43.2	1.5
39.	10.9	8.0	23.7	12.7	43.2	1.5
50.	4.2	5.9	15.7	11.8	60.9	1.5
51.	18.0	17.8	26.9	11.8	24.0	1.5
52.	11.2	13.3	26.6	16.6	29.6	2.7
53.	9.3	5.9	19.8	15.1	48.8	1.2
54.	22.5	23.7	21.6	10.1	17.4	4.7
55.	20.1	21.9	35.5	8.6	11.5	2.4
56.	5.9	4.7	14.2	16.4	58.3	1.5
57.	24.5	21.5	27.5	10.1	14.8	1.8
58.	16.3	18.6	26.6	14.8	21.3	2.4
59.	6.8	8.6	23.7	19.2	38.7	3.0
60.	24.3	23.7	26.3	12.8	17.8	3.4
61.	19.2	23.1	23.7	12.8	17.8	3.4
62.	27.5	25.2	25.7	9.2	11.2	1.2
63.	16.6	22.8	34.6	11.5	12.4	2.1
64.	8.9	11.8	27.2	19.2	31.4	1.5
65.	13.3	16.0	30.2	16.3	22.2	2.0
66.	18.3	22.5	24.0	10.4	23.1	.9
67.	27.8	27.8	20.4	9.2	13.6	1.2
68.	21.0	20.7	26.0	9.8	18.6	3.9
69.	38.7	22.2	21.9	6.5	8.6	2.1
70.	24.3	19.2	26.9	11.3	13.9	4.4
71.	16.6	23.1	19.2	13.9	24.0	3.2
72.	29.9	20.8	24.3	7.3	15.1	2.6



1970-1971

You are reminded that all answers are to be given on the answer sheet. The responses on the answer sheet have the following meaning.

1. Almost Always
2. Most of the Time
3. Sometimes
4. Very few Times
5. Nearly Never

For each question be sure that the number on the answer sheet and the number of questions are the same.

1. Teachers in the WSP feel that students are lucky to be in the program.
2. Teachers in the WSP are too strict about minor things such as being in your seat on time, talking in class, etc.
3. How often do teachers in the WSP show preferences for white students over black students?
4. Teachers in the WSP take a greater personal interest in students than teachers in school that I previously attended.
5. If I have a problem, I feel comfortable in discussing it with someone in the front office.
6. The people in the front office really try to find a job that is best suited for me.
7. People in the front office pay serious attention to suggestions made by the students.
8. People in the front office really care about moving matters into better jobs.
9. I like my teachers in the WSP.
10. I am provided with enough information and advice at WSP about how to get along with the people at work.
11. I am provided with enough information about the kind of work that I will best be suited for in the future.
12. I am provided with enough information about job placement agencies which are not directly associated with Boston High School. (For example, the State Employment Service, Manpower, etc.)

13. When I am assigned to a new job my home room teacher tells me what to expect at this job.
14. I am told what promotions to expect in a new job.
15. I am told what pay raises I might get in a new job.
16. I am provided with enough information by the WSP staff about the job market and future job possibilities.
17. I am provided with enough information at WSP about how to handle my money.
18. If I am having trouble with school work my teachers will tell me right away.
19. If I am having trouble with school work my teachers help me.
20. What I learn in school is helpful to me on my job.
21. If I have trouble at work I would feel free to discuss the problem with my teacher.
22. What I learn in school provides me with enough information about racial problems.
23. More time should be devoted in class to discussions of racial issues.
24. There are racial problems among students at WSP.
25. More time should be given to sex education here at WSP.
26. More time should be given to drug education here at WSP.
27. What I learn in school provides me with enough information about the responsibilities of citizenship, voting, etc.
28. What I learn in school provides me with enough information about music and art.
29. What I learn in school provides me with enough information about how to get along with people.
30. What I learn in school provides me with enough information about spending, borrowing, and saving money.
31. The WSP should place more emphasis on extra curricular activities such as clubs, sports, etc.
32. Since some students are faster or slower than others, more learning would take place if these students were transferred to other classes.
33. I would prefer for both boys and girls be in the same classes.

34. Do you think you are getting a better education in the WSP than in the school you previously attended?
35. Students are involved in deciding what extra-curricular activities should be available.
36. Students are involved in deciding what courses should be taught.
37. The WSP council tries to deal with important issues.
38. The teachers at WSP listen to the advice of the student council.
39. The front office staff listen to the advice of the student council.
40. The student council does what it should be doing.
41. Getting job promotions is important to me.
42. My home room teacher is really sincere about helping me get job promotions.
43. Have you been able to get pay increases which you feel you deserve?
44. I would rather get a job promotion than a raise in pay.
45. Have you been able to get job promotions which you feel you deserve?
46. If you lost your job tomorrow, do you feel you could find a new job on your own?
47. Does your present job force you to work with certain individuals whom you dislike?
48. Do you feel that you can always trust the people under whom you work?
49. Do you feel respect for the people under whom you work?
50. Do you feel you are paid a fair salary for the work you do?
51. Do you feel that there is any prejudice toward your age group in your occupations, (e.g. that you are too young)?
52. Do you feel that you are interested in your present job?
53. Is your present job the type of work that you would like to be doing after graduation?
54. If I were paid more for my present job I would not mind doing this type of work after graduation.
55. Are you embarrassed when people ask you what work you do?

56. Is your WSP Supervisor excited about the type of work you do?
57. Are you proud to be working at your present job?
58. Are your parents excited about the type of work you do?
59. Does your supervisor at work spend enough time planning the work that you do?
60. Does your supervisor at work keep his promises to you?
61. If I have to do a new job at work I am taught how to do it.
62. At work do you have a chance to present problems, complaints, or suggestions?
63. Does your supervisor at work give you 'straight answers' when you ask him something?
64. How often are you discriminated against at work because of your race?
65. If something happens which puts your immediate supervisor on the spot, does he take the responsibility himself?
66. Does your supervisor at work give you credit when you do a good job?
67. Where I work people deserve the promotions they get.
68. Do you feel at ease around your immediate supervisor at work?

APPENDIX D

FACULTY'S ATTITUDES TOWARD THE  
WORK-STUDY PROGRAM

FACULTY QUESTIONNAIRES ADMINISTERED

1969-70 ACADEMIC YEAR

1970-71 ACADEMIC YEAR

1969 - 1970

BOSTON HIGH SCHOOL - WORK-STUDY PROGRAM

FACULTY ATTITUDE SCALE AND QUESTIONNAIRE

Please do not sign your name to this questionnaire. No attempt will be made to identify the person completing this form and individual's forms will be read only by members of the evaluation team.

The items listed below were derived from the areas of concern and questions that were raised by faculty members of the Work-Study Program (WSP) in a previously administered questionnaire. Thus, the items reflect program characteristics and issues that the faculty considers to be highly relevant to the operation of the Work-Study Program. Our efforts to evaluate the program will be facilitated if you do not hesitate to comment on any and all items which you believe will assist the evaluators in obtaining a true and honest picture of the program.

1. Communication between classroom teachers and the administration of WSP is:

/ / / / /  
 Excellent Good Fair Poor Completely Absent

2. The degree to which provisions are made for individualized instruction in the WSP can best be described as:

/ / / / /  
 Excellent Good Fair Poor Completely Absent

3. Communication with those persons from cooperating businesses and companies who are responsible for supervising students on the job can best be described as:

/ / / / /  
 Excellent Good Fair Poor Completely Absent

4. The familiarity on the part of the members of the central office staff with problems encountered by teachers in the instructional program can best be described as:

/ / / / /  
 Excellent Good Fair Poor Completely Absent

5. The familiarity on the part of the members of the central office staff with problems encountered by teachers in dealing with the parents of students in the WSP can best be described as:

/ / / / /  
 Excellent Good Fair Poor Completely Absent

6. The familiarity on the part of the members of the central office staff with problems encountered by teachers in supervising students on the job can best be described as:

/ / / / /  
 Excellent Good Fair Poor Completely Absent

7. Efforts to familiarize you with the philosophy, goals and objectives of the work-study program can best be described as:

/ / / / /  
 Excellent Good Fair Poor Completely Absent

8. The availability of supplies and equipment needed for instruction is:

/ / / / /  
 Excellent Good Fair Poor Completely Absent

9. The availability of supportive educational personnel such as psychologists, social workers, etc., for working with students in the WSP is:

/ / / / /  
 Excellent Good Fair Poor Completely Absent

10. The opportunities for communication between parents and teachers are

/ / / / /  
 Excellent Good Fair Poor Completely Absent /

11. The actual communication between parents and teachers is:

/ / / / /  
 Excellent Good Fair Poor Completely Absent /

12. Teachers in the WSP play an important role in the decision-making process.

/ / / / /  
 Excellent Good Fair Poor Completely Absent /

13. Teachers in the WSP take a sufficiently active part in determining the areas or subjects to be included in the curriculum.

/ / / / /  
 Excellent Good Fair Poor Completely Absent /

14. Teachers are provided with sufficient background information about student's personal situation prior to coming to the WSP:

/ / / / /  
 Excellent Good Fair Poor Completely Absent /

15. Teachers are provided with sufficient background information about the student's education situation prior to coming to the Work-Study Program:

/ / / / /  
 Excellent Good Fair Poor Completely Absent /

16. Teachers in the WSP are adequately prepared to fulfill the required role that they play as guidance counselors:

/ / / / /  
 Excellent Good Fair Poor Completely Absent /

17. Are members of the central office staff generally sensitive to the problems of teachers?

/ / / / /  
 Excellent Good Fair Poor Completely Absent /

18. Are members of the central office staff generally sensitive to the problems of students?

/ / / / /  
 Excellent Good Fair Poor Completely Absent /



19. At present, teachers in the WSP take a sufficiently active part in determining the selection of students:

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

20. Teachers in the WSP should take a sufficiently active part in determining the selection of students:

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

21. At present, teachers in the WSP take a sufficiently active part in assigning students to their work-study jobs.

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

22. Teachers in WSP should take a sufficiently active part in assigning students to their work-study jobs.

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

23. At present, teachers in the WSP take a sufficiently active part in determining the appropriate disciplinary action for students.

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

24. Teachers in the WSP should take a sufficiently active part in determining appropriate disciplinary action for students.

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

25. At present, teachers in the WSP take a sufficiently active part in determining the selection of books and other curricular materials:

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

26. Teachers in the WSP should take a sufficiently active part in determining the selection of books and other curricular materials:

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

27. At present, teachers in the WSP take a sufficiently active part in determining the content of the curriculum:

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

28. Teachers in the WSP should take a sufficiently active part in determining the content of the curriculum:

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

29. Are the criteria for promotion of students from one grade to the next sufficiently clear to you?

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

30. Adequate vocational counseling is provided for students after they have graduated from the WSP:

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

31. The curriculum of the WSP should focus entirely on the basic skills of reading, writing, and arithmetic:

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

32. The WSP curriculum should make systematic provisions for dealing with topics of contemporary concern.

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

33. The WSP curriculum should include courses of a cultural nature such as art and music appreciation:

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

34. The WSP should provide greater opportunities for extra-curricular activities such as clubs, intramural sports, and dances:

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

35. The WSP makes sufficient provisions for the in-service training of its teachers:

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

36. Do you think that publicity such as news releases tell the "true story" of the WSP?

Yes \_\_\_\_\_

No \_\_\_\_\_

Comments:

37. Would you prefer to teach in only one content area or in several areas (as in the self-contained classroom)?

Prefer to teach in one content area \_\_\_\_\_

Prefer to teach in several areas \_\_\_\_\_

No preference \_\_\_\_\_

38. Are the jobs that are now available through the WSP realistic approximations of the work that students will perform in later life?

Yes \_\_\_\_\_

No \_\_\_\_\_

Give reasons for your answer:

39. The WSP classes should be coeducational:

All \_\_\_\_\_

Some \_\_\_\_\_

None \_\_\_\_\_

If "some" in what cases?

40. The WSP classes should be homogeneously grouped.

All \_\_\_\_\_

Some \_\_\_\_\_

None \_\_\_\_\_

If "some" in what areas?

41. Self-contained classes are better for students in the WSP than changing from class to class.

Always \_\_\_\_\_

Sometimes \_\_\_\_\_

Never \_\_\_\_\_

If "sometimes" in what areas?

42. Do you feel that teaching in the WSP makes some unique demands upon the teacher that are not ordinarily encountered in a regular school program?

Yes \_\_\_\_\_

No \_\_\_\_\_

Please give reasons for your answer.

43. Do you believe that the homeroom serves a useful function in the WSP?

Yes \_\_\_\_\_

No \_\_\_\_\_

Please give reasons for your answer.

44. In what positive ways, if any, does the course content of the WSP curriculum differ from the content of the curriculum in regular high schools?

45. In what negative way, if any, does the course content of the WSP differ from the content of the curriculum in regular high schools?

46. In what positive ways, if any, do the instructional procedures of the WSP curriculum differ from the instructional procedures used in a regular high school?

47. In what negative ways, if any, do the instructional procedures used in the WSP differ from the instructional procedures used in a regular high school?

48. Briefly describe your reasons for wanting to teach in the WSP rather than in a regular high school?

For each of the following curricular areas mark:

1. If you believe that the area should receive greater coverage.
2. If you believe the area is being appropriately covered.
3. If the area should receive less coverage.
4. If you believe there is no place in the WSP curriculum for this area.

49. \_\_\_\_\_ Developmental Reading
50. \_\_\_\_\_ Remedial Reading
51. \_\_\_\_\_ Physical Education
52. \_\_\_\_\_ Personal and Social Development
53. \_\_\_\_\_ Family Life Education
54. \_\_\_\_\_ Sex Education
55. \_\_\_\_\_ Narcotics Education
56. \_\_\_\_\_ Consumer Education
57. \_\_\_\_\_ Race Relations
58. \_\_\_\_\_ The Role of a Citizen in a Democracy
59. \_\_\_\_\_ Cultural Appreciation
60. \_\_\_\_\_ Arithmetic
61. \_\_\_\_\_ Science
62. \_\_\_\_\_ English
63. \_\_\_\_\_ World History
64. \_\_\_\_\_ U. S. History
65. \_\_\_\_\_ Principles of Democracy
66. \_\_\_\_\_ Economic Geography
67. \_\_\_\_\_ Office Practice
68. \_\_\_\_\_ Typing
69. \_\_\_\_\_ Occupational Information

Please indicate your agreement or disagreement for each of the statements below which you believe represent your opinion toward various aspects of the WSP.

70. I think that too much money is being spent on the WSP for the benefit that is being derived:

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

71. Most people inwardly dislike putting themselves out to help other people:

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

72. The students in the WSP do not appreciate the opportunity that they have in attending this program:

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

73. There is little hope of correcting human defects and social ills.

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

74. It is a privilege for students to be enrolled in the WSP:

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

75. Most of the students in the WSP do not put forth their greatest effort in the classroom:

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

76. Most students in the WSP do not put forth their greatest effort on the job:

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

77. Most persons have a great deal of control over what happens to them in life:

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

78. Most of the students in the WSP take a great deal of pride in being in this program:

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

79. Most educated people would not want their children to associate or develop close friendships with students in the WSP.

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

80. Most of the students in the WSP are genuinely concerned with "getting ahead in life."

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

81. Our social problems are so general and deep that one often doubts that democratic methods can ever solve them.

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

82. Generally speaking, most students in the WSP will not work hard unless they are forced to do so.

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

83. Most teachers in the WSP really understand the problems of young people:

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

84. Most students in the WSP have a cynical attitude toward life.

/ / / / /  
 Strongly agree Agree Uncertain Disagree Strongly Disagree

-----  
 Biographical Information:

Grade (s) that you teach \_\_\_\_\_

Highest Degree \_\_\_\_\_

How many semester hours above highest degree? \_\_\_\_\_

Currently enrolled in a graduate program. Yes \_\_\_ No \_\_\_

Currently enrolled in a course in the area of \_\_\_\_\_

\_\_\_\_\_



1970 - 1971

## BOSTON HIGH SCHOOL - WORK-STUDY PROGRAM

## FACULTY ATTITUDE SCALE AND QUESTIONNAIRE

Please DO NOT sign your name to this questionnaire. No attempt will be made to identify the person completing this form, and individual forms will be read only by members of the evaluation team.

The items listed below were derived from the areas of concern voiced by faculty members of the Work-Study Program (WSP) in interviews, discussions, and by their responses to an administered questionnaire. Thus, the items reflect program characteristics and issues that the faculty considers to be highly relevant to the operation of the WSP. Our efforts to evaluate the program will be facilitated if you will give careful thought to each of the following items. Please do not hesitate to comment on any and all items which you believe will assist the evaluators in obtaining a true and honest picture of the program.

Thank you for your assistance.

For each of the following curricular areas mark:

1. If you believe the area should receive greater coverage.
2. If you believe the area is being appropriately covered.
3. If you believe the area should receive less coverage.
4. If you believe there is no place in the WSP curriculum for this area.

1. \_\_\_\_\_ Developmental Reading
2. \_\_\_\_\_ Remedial Reading
3. \_\_\_\_\_ Physical Education
4. \_\_\_\_\_ Personal and Social Development
5. \_\_\_\_\_ Family Life Education
6. \_\_\_\_\_ Sex Education
7. \_\_\_\_\_ Narcotics Education
8. \_\_\_\_\_ Consumer Education
9. \_\_\_\_\_ Race Relations
10. \_\_\_\_\_ The Role of a Citizen in a Democracy
11. \_\_\_\_\_ Cultural Appreciation
12. \_\_\_\_\_ Arithmetic
13. \_\_\_\_\_ Science
14. \_\_\_\_\_ English
15. \_\_\_\_\_ World History
16. \_\_\_\_\_ U. S. History
17. \_\_\_\_\_ Principles of Democracy
18. \_\_\_\_\_ Economic Geography
19. \_\_\_\_\_ Office Typing
20. \_\_\_\_\_ Typing
21. \_\_\_\_\_ Occupational Information

Listed below are four statements relating to aspects of the WSP teachers role in decision making. With relation to these statements you are asked to perform the following activities:

Activity I: Using the scale: 5 - Excellent

4 - Good

3 - Fair

2 - Poor

1 - Completely absent

Indicate your feelings about the amount of teacher involvement in each area of decision making by entering your estimate (1 - 5) next to the statement in the column headed feelings.

Activity II: Please rank the statements from the one you consider to be least in need of improvement (1) to most in need of improvement (4) and enter this number in the column headed importance.

	<u>Feeling</u>	<u>Importance</u>	
1.	( )	( )	Selection of students for WSP.
2.	( )	( )	Assignment of students to WSP jobs.
3.	( )	( )	Determination of WSP curriculum.
4.	( )	( )	Determination of appropriate disciplinary action for students.

APPENDIX E

BOSTON HIGH SCHOOL WORK-STUDY PROGRAM

PARENT QUESTIONNAIRE

## BOSTON HIGH SCHOOL - WORK-STUDY PROGRAM

## PARENT QUESTIONNAIRE

DIRECTIONS: We are asking for your cooperation in judging how well the Work-Study Program is providing an education for your child. This information will help us to find out ways in which the program can be improved.

Please read each question carefully and place a check mark in the space that you feel best answers the question. Please return the questionnaire within three days in the stamped self-addressed envelope which is enclosed. Do not sign your name. No attempt will be made to determine the names of parents completing this form. Your cooperation in returning the questionnaire within three days will be greatly appreciated.

1. How many years has your child been enrolled in the Work-Study Program?

\_\_\_\_\_ 1 year \_\_\_\_\_ 2 years \_\_\_\_\_ 3 years \_\_\_\_\_ 4 years \_\_\_\_\_ NA

2. How many times have you visited Boston High School in the last school year?

\_\_\_\_\_ 0 \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ more than 4 \_\_\_\_\_ NA

3. How many times has someone from the Work-Study Program visited you at home this school year?

\_\_\_\_\_ 0 \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ more than 4 \_\_\_\_\_ NA

4. If someone from the Work-Study Program visited your home this year, what were the reasons for the visits? (Check all that apply)

\_\_\_\_\_ my child was absent from school.

\_\_\_\_\_ my child was absent from his or her job.

\_\_\_\_\_ my child was making unsatisfactory progress at school or on the job.

\_\_\_\_\_ to describe the satisfactory progress my child was making.

\_\_\_\_\_ other please tell why \_\_\_\_\_  
 \_\_\_\_\_

5. During the past school year, how many times have you been contacted by a representative from the Work-Study Parent Advisory Council?  
 \_\_\_\_\_ 0 \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ more than 4 \_\_\_\_\_ NA
6. How often do you get information from the Work-Study Staff (other than report cards) about your child's progress in the Program?  
 \_\_\_\_\_ Often \_\_\_\_\_ Sometimes \_\_\_\_\_ Rarely \_\_\_\_\_ Never \_\_\_\_\_ No Response
7. Compared with other schools my child has attended, I think that at Boston High School he or she:  
 \_\_\_\_\_ learns more \_\_\_\_\_ learns about the same \_\_\_\_\_ learns less
8. Compared with teachers in other schools, the teachers at Boston High School show:  
 \_\_\_\_\_ more concern for my child.  
 \_\_\_\_\_ about the same amount of concern as teachers in other schools.  
 \_\_\_\_\_ less concern than teachers in other schools.
9. Do you think that your child is more likely to graduate from high school because he or she went to the Work-Study Program?  
 \_\_\_\_\_ yes \_\_\_\_\_ no \_\_\_\_\_ not sure.
10. Do you think that your child is more likely to get better jobs because he or she went to the Work-Study Program?  
 \_\_\_\_\_ yes \_\_\_\_\_ no \_\_\_\_\_ not sure
11. What do you like best about the Work-Study Program?
12. What parts of the Work-Study Program would you like to see changed?

APPENDIX F

WORK-STUDY PROGRAM JOB PERFORMANCE

INVENTORY

## WORK-STUDY PROGRAM JOB PERFORMANCE INVENTORY

Company \_\_\_\_\_

Student's Name \_\_\_\_\_

We are attempting to evaluate the effectiveness of various aspects of Boston High School Work-Study Program (WSP) and would like to enlist your assistance in obtaining a rating of job performance for the student whose name is listed above. All information derived from this evaluation will be treated as strictly confidential and no attempt will be made to identify the ratings made by individual supervisors. Only averages will be presented in the final evaluation report. This evaluation is being conducted by an independent team that is not employed by the administration of the Work-Study Program; and we hope that your honest response will help us to provide the administration with information that will bring about improvements in the program.

Please read each of the following items carefully and check the rating which best describes the performance of the student listed.

1. This employee shows a genuine interest in his work.

/ \_\_\_\_\_ /  
 Always          Often          Sometimes          Rarely          Never

2. This employee gets along well with his fellow employees.

/ \_\_\_\_\_ /  
 Always          Often          Sometimes          Rarely          Never

3. This employee responds favorably to directions given by his supervisor.

/ \_\_\_\_\_ /  
 Always          Often          Sometimes          Rarely          Never

4. Compared with other employees who are not a part of the Work-Study Program, attendance at work can best be described as:

/ \_\_\_\_\_ /  
 Always          Often          Sometimes          Rarely          Never

5. Compared with other employees who are not a part of the Work-Study Program, this person's promptness in getting to work on time can best be described as:

/ \_\_\_\_\_ /  
 Always          Often          Sometimes          Rarely          Never

6. Compared with other employees who are not a part of the Work-Study Program, the amount of direct supervision which must be provided can best be described:

/ \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ /  
 Above average      Average      Below average

7. Compared with other employees who are not a part of the Work-Study Program, when this person reports for work his physical and mental readiness to do his job can best be described:

/ \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ /  
 Above average      Average      Below average

8. Approximately how many times per month does a supervisor from the high school visit you or the student on the job?

\_\_\_\_\_ visits per month.

9. Does the supervisor from the school take an active interest in getting the student employee promoted to a better job.

/ \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ /  
 Always      Often      Sometimes      Rarely      Never

10. Does the supervisor from the school work closely with you in overcoming problems as poor performance, absenteeism, tardiness, etc.

/ \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ /  
 Always      Often      Sometimes      Rarely      Never

11. If it were up to you would you like to see more students from the Work-Study Program employed by your company?

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

12. What suggestions would you offer for making the Work-Study Program more effective for the students?

13. In what ways do students from the Work-Study Program differ from employees of approximately the same age who perform similar jobs?



APPENDIX G

INTERVIEW GUIDE  
FOR  
CENTRAL OFFICE ADMINISTRATORS  
AND  
TEACHER/COORDINATORS

## INTERVIEW GUIDE FOR CENTRAL OFFICE ADMINISTRATORS

1. What are your views on the nature, scope, and value of the program?
2. In what ways is the program effective in reducing school failure and the rate of student drop-outs, in your program?
3. In your judgement, what are the program's values in preparing students for employment?
4. Do you believe the program can be expanded? If so, in what ways?
5. What is your opinion of the program's teacher-training program?
6. In what ways could the Work-Study Program be improved, in your judgement?

INTERVIEW GUIDE FOR ADMINISTRATORS  
AND  
TEACHER-COORDINATORS

1. In your opinion, is the number of students involved in the Work-Study Program appropriate in relation to the facilities, materials, staff and opportunities for employment? What would be your reasons for increasing or decreasing the number of students involved?
  
2. Do you believe that the number of occupations available to the students is sufficient to provide adequate and broad training for employment?
  
3. What problems, if any, have been caused by changes in the availability of employment opportunities?
  
4. Approximately what percentage of your students are employed during each month of the year?
 

Sept. _____	Dec. _____	March _____	June _____
Oct. _____	Jan. _____	April _____	July _____
Nov. _____	Feb. _____	May _____	Aug. _____
  
5. What, if any, are the reasons for non-employment of students?
  
6. Would you alter the manner of selecting students for the program? If so, how and why?
  
7. In your judgement, what are the strengths and weaknesses of the curriculum in meeting the needs of the students? What major changes do you believe are now needed?
  
8. From your viewpoint, what are the program responsibilities of each of the following:
  - (a) Supervisors
  - (b) Coordinators
  - (c) Teachers
  - (d) Industrial business management
  
9. In what ways, if any, could the teaching and student load be adjusted to provide for an improved program of instruction?

10. In what ways do the attitudes of management of business and industry toward the Work-Study Program appear to promote or encourage program participation?
11. What changes in the program or additions to it would you suggest?
12. Additional comments, if any.

APPENDIX H

TEACHER/COORDINATOR QUESTIONNAIRE

## TEACHER-COORDINATOR QUESTIONNAIRE

The Psychological Corporation of New York is responsible for the evaluation of the Boston High School Work-Study Program. Your responses to this questionnaire are needed for this evaluation. Full consideration will be given to your answers in making recommendations for modifications and improvements in this program. PLEASE ANSWER ALL QUESTIONS.

Name \_\_\_\_\_ School \_\_\_\_\_

1. Including this year, for how many years have you been involved in the Work-Study Program?

1 13    2 7    3 9    4 11    5 6

2. How many students do you deal with directly as a coordinator or job supervisor?

1 0 1-5    2 3 6-10    3 23 11-15  
4 10 16-20    5 2 More than 20    5 - No response

3. What is the total number of occupations represented in the current job assignment of your students?

1 0 1-5    2 3 6-10    3 25 11-15  
4 11 15-20    5 3 More than 20

4. Are places of employment readily available for your students?

1 21 Yes    2 16 Sometimes  
3 6 Not very often    4 1 No    2 - No response

5. If you counseled graduating students last year, what percentage of those who graduated in June, 1971 do you believe are currently employed?

1 2 100%    2 2 90-99%    3 2 80-89%  
4 0 70-79%    5 1 50-69%    6 2 Less than 50%  
7 0 Do not know    8 0 Does not apply

6. In your opinion, is the curriculum geared to meet the needs of the students?

1 25 Very much so                      2 20 To some degree  
3 0 Not at all

7. Do you believe that a change in the curriculum content is needed?

1 22 Yes                      2 24 No

If your answer is "Yes", please state your reasons briefly.

---



---

8. What is the average enrollment in your classes?

Overall average - 15

9. In your opinion, what is the attitude of management in business and industry toward this program?

1 39 Very favorable                      2 6 Somewhat favorable  
3 0 Slightly favorable                      4 0 Not at all favorable  
5 0 No opinion                                      1 - No Response

10. Does the availability of student employees meet the needs of management?

1 33 Very much so                      2 12 To some degree  
3 0 Not quite                                      4 0 Not at all

11. Please state briefly the reasons for students' non-employment (if any)?

- . Lack of preparation for the work.
- . Misunderstanding of their roles.
- . Immature and irresponsible attitudes.
- . Poor attendance and tardiness.
- . Lack of jobs because of national inflation and economic pressures.
- . Inappropriate job placement.
- . Dissatisfaction with the type of work offered.

12. Do you believe that changes or improvements are needed in the procedure for selecting and placing Work-Study students for job opportunities? If so, please state them briefly.

. Changes in the methods of selection and screening for job placement.

. Apprenticeships.

. Added counseling to inform students about career opportunities and to strengthen the job-training program.

13. What other improvements in the program, or additions to it, would you suggest?

Better career guidance; addition of bi-lingual counselor to faculty;

Introduction of apprenticeship scheme; larger classes; wider range of student admissions.

14. Please state briefly your professional responsibilities and functions as a teacher-coordinator in the program.

Language Arts	14	History	2
Math	3	Science	2
Social Studies	2	Photography	2
Business	2		
		Counseling	37

15. In your judgement, how helpful has the in-service training been this year?

1 13 Very helpful

2 27 Helpful to some degree

3 5 Not very helpful

4 0 Not helpful at all



Please evaluate how the school's procedures have helped you to attain each of the following goals. Indicate your answer for each by putting a check mark or "X" in the appropriate box.

	Excellent	Good	Fair	Poor
16. Development of ability to devise and use instructional materials.	23	21	0	0
17. Improvement of the Work-Study Program and its philosophy.	15	26	2	3
18. Development of techniques of guidance and counseling.	14	19	10	3
19. Establishment of procedures for coordinating activities with business and industry.	20	15	8	3
20. Development of forms and check-lists for use in evaluation of students' work, attitudes, activities and in-school followup	15	22	5	2
21. Development of procedures for home visits and liasion with the Department of Labor.	19	21	3	2
22. Recognition of need for more extensive involvement of parents and the community in the Work-Study Program.	25	16	3	2

## APPENDIX I

QUESTIONNAIRE SURVEY OF MANAGEMENT OF COOPERATING  
BUSINESS AND INDUSTRY IN THE BOSTON HIGH SCHOOL  
WORK-STUDY PROGRAM AND INTERVIEW GUIDE  
FOR  
STUDENTS AT JOB SITES

QUESTIONNAIRE SURVEY OF MANAGEMENT OF COOPERATING  
BUSINESS AND INDUSTRY IN THE  
BOSTON HIGH SCHOOL  
WORK-STUDY  
PROGRAM

The Psychological Corporation of New York is responsible for evaluating the Boston High School Work-Study Program. Your responses to this questionnaire are needed for this evaluation. Full consideration will be given to your answers in making recommendations for modifications and improvements in this program.

PLEASE ANSWER ALL QUESTIONS.

PLEASE CHECK ONE TO INDICATE YOUR TITLE OR POSITION:

1        Manager

2        Supervisor

1. How many years has your company employed work-study students?

  0   1 year

  0   2 years

  3   3 years

  4   4 years

  5   5 years

2. How many years have you personally been involved with Work-Study students?

  1   1 year

  1   2 years

  4   3 years

  3   4 years

  3   5 years

3. In your opinion, do the Work-Study students demonstrate that they have had adequate preparation for the work they are doing?

1   3   Very much so

2   8   Moderately

3        Not at all

1 No response

4. In the main, what is the quality of the students' attitudes toward their jobs?

1   3   Very favorable

2   8   Satisfactory

3   1   Not quite up to par

4   0   Unsatisfactory

5. What is your rating of the work habits of the students?

1   1   Excellent            2   6   Good            3   4   Average  
 5   1   Below Average    5   0   Poor

6. What is your rating of the degree of employability of the students?

1   2   Excellent            2   4   Good            3   2   Average  
 4   3   Below Average    5   0   Poor            1 No response

7. In your opinion, what is the nature of the students' attitudes toward the Work-Study Program?

1   6   Very Favorable            2   5   Satisfactory  
 3   0   Not quite up to par    4   0   Unsatisfactory

8. Please state any suggestions you might have for the improvement or extension of the program.

All participants in the program were very satisfactory; students lacked ability to communicate, had meager knowledge of English, and in most cases, could not remember elementary math; A course in techniques for being interviewed or communicating in general should be instituted, since most of the students had never been exposed to the business world environment; Courses such as biology and language should be instituted to give students a better chance to go on to higher education; formal programs in basic industrial development, structured as part of the curriculum, with management specialists as leaders should be incorporated.

INTERVIEW GUIDE  
FOR  
STUDENTS AT JOB SITES

1. How long have you been working at this job?
2. What kind of work do you do? Do you enjoy your work?
3. How were you taught to do the work you are doing?
4. Do you think you have learned anything here that will help you in getting or keeping a job later on?
5. What type of work would you like to do after you graduate?
6. What are the things that you like and dislike (if any) in working here?
7. How has your teacher-coordinator helped you in connection with this job?
8. If you had your choice, would you rather go to school full time? Why or why not?

## APPENDIX J

INTERVIEW GUIDE  
FOR  
EMPLOYERS OF WORK-STUDY STUDENTS  
AND  
INTERVIEW GUIDE  
FOR  
STUDENTS IN THE SCHOOL SETTING

INTERVIEW GUIDE  
FOR  
EMPLOYERS OF WORK-STUDY STUDENTS

1. How did you find out about the Work-Study program?
2. What procedures, if any, do you use to screen work-study job applicants?
3. What steps did you follow in hiring your work-study employees?
4. In what way, if any, could the hiring procedures for these students be made easier?
5. What personal or skill qualifications, if any, are work-study employees required to meet?
6. Have you been satisfied with the performance of work-study program employees?
7. To what extent, if any, have student employees presented problems of poor attendance or lateness?
8. To what extent, if any, have student employees had personnel problems (behavior, appearance, responsibility, performance, etc.)?
9. What procedures have you used to remedy problems (if any existed)?
10. Do you use a work-performance rating form of any kind in evaluating the work of student employees (if so, may we have a sample)?
11. How often and by what procedure do you rate student employees?
12. In what ways, if any, have your student-employees changed in any of the following ways since you hired them?
  1. personality
  2. behavior
  3. work habits and skills

13. What types of activities do your student employees usually perform?

- |    |     |
|----|-----|
| 1. | 6.  |
| 2. | 7.  |
| 3. | 8.  |
| 4. | 9.  |
| 5. | 10. |

14. What activities are being performed by students now in your employ?

<u>Student A</u>	<u>Student B</u>	<u>Student C</u>
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.

15. What types of jobs will your work-study employees be qualified to fill at the end of their student employees status?

- |    |    |
|----|----|
| 1. | 4. |
| 2. | 5. |
| 3. |    |

16. Would you re-hire, on a regular basis, the student employees you now have when they complete their student status?

Yes \_\_\_\_\_ No \_\_\_\_\_ With Reservations \_\_\_\_\_

17. If you believe you would have reservations, what might they be?

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



18. How often does the work-study student coordinator visit you or observe your student employees at work?
19. What services have been rendered by the work-study teacher-coordinator?
20. In your opinion, what are the major strengths of the program?

Weaknesses?

21. In your judgement, what are the principle accomplishments of the program this year, in terms of the benefits that the pupils and community received from it?
22. What recommendations, if any, do you have to offer for improving the program now or in the future? Which of these recommendations do you consider to be most important?
23. Have you any additional information or comments to offer for this evaluation study?

INTERVIEW GUIDE  
FOR  
STUDENTS IN THE SCHOOL SETTING

1. What caused you to join the Boston High School Work-Study Program?
2. As you see it, is the school program at Boston High School different from that in other schools? If so, in what ways?
3. What do you think is good and bad about the program?
4. Do you think this program is preparing you to get a job and to hold it when you graduate?
5. What kind of work would you like to do after graduation?
6. In what ways do you think your teacher-coordinator has helped you to prepare for getting and holding a job later on?
7. If you could make improvements in the program, what improvements would you make first?

Listed below are seven statements relating to various aspects of "communication" in the WSP. With relation to these statements you are asked to perform the following distinct activities:

- Activity I: Using the Scale.
- 5 - Excellent
  - 4 - Good
  - 3 - Fair
  - 2 - Poor
  - 1 - Completely absent

Indicate your feelings about the quality of communication by entering your estimate (1 - 5) next to each statement in the column headed feelings.

- Activity II: Please rank the statements from the one you consider to be the least in need of improvement (1) to most in need of improvement (7) and enter this number next to the objectives in the column headed importance.

<u>Feelings</u>	<u>Importance</u>	
1. ( )	( )	Communication between classroom teachers and the Administration* of WSP.
2. ( )	( )	Communication with "Line Supervisors" from cooperating businesses and companies.
3. ( )	( )	Communication between classroom teachers and the Administration* about problems encountered in the instructional portion of the program.
4. ( )	( )	Communication between classroom teachers and the Administration* about problems encountered in dealing with parents of students in WSP.
5. ( )	( )	Communication between classroom teachers and the Administration* about problems encountered when dealing with students on the job.
6. ( )	( )	Communication between parents and teachers.
7. ( )	( )	Communication between Administration* and students.

\*Include both Joe Ippolito and the five job Supervisors.

Listed below are eleven behavioral objectives of the WSP which appear in the proposal for funds submitted to the ESEA Title I Office. For each objective you are asked to perform the following distinct activities.

Activity I: Estimate the number of classroom hours per week that should be devoted to each objective. Enter this estimate for each objective in the appropriate space in the column headed time.

- (5) Strongly in favor of objective
- (4) In favor of objective
- (3) Neutral toward objective
- (2) Opposed to objective
- (1) Strongly opposed to objective

Enter this estimate (1 - 5) for each objective in the appropriate space in the column headed feelings.

Activity III: Rank the objectives from what you consider to be the most important (1) to the least important (11) and enter the ranks next to the appropriate objective in the column headed importance.

<u>Time</u>	<u>Feelings</u>	<u>Importance</u>	
1. ( )	( )	( )	Work-Study Program students will show a decrease in incidents of absenteeism.
2. ( )	( )	( )	Work-Study Program students will show a decrease in incidents of tardiness.
3. ( )	( )	( )	When compared to other potential drop-outs the students in the Work-Study Program will exhibit fewer incidents of tardiness.
4. ( )	( )	( )	When compared to other potential drop-outs the students in the Work-Study Program will exhibit fewer incidents of absenteeism.
5. ( )	( )	( )	The drop-out rate for students selected for the Work-Study Program will be lower than the drop-out rate of comparable students who have not had Work-Study Program exposure.
6. ( )	( )	( )	Work-Study Program students will evidence a greater than expected increase in reading achievement for the interval between measurements.

<u>Time</u>	<u>Feelings</u>	<u>Importance</u>	
7. ( )	( )	( )	Work-Study Program students will evidence a greater than expected increase in mathematics achievement for the interval between measurements.
8. ( )	( )	( )	There will be a greater than expected increase in the English Usage achievement of students for the interval between measurements.
9. ( )	( )	( )	There will be a positive change in attitudes toward school and teachers on the part of Work-Study Program students.
10. ( )	( )	( )	Work-Study Program students will exhibit and maintain an acceptable level of work attendance.
11. ( )	( )	( )	Work-Study Program students will average higher earnings than normally expected of part-time student employees.

---

1. Do you feel that teachers in the WSP are adequately prepared to fulfill the required role that they play as guidance counselors:

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

2. Do you feel that teachers in the WSP should function as guidance counselors?

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

3. Do you feel that the WSP should provide vocational counseling to its graduates?

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

(If yes, please indicate any specific suggestions you may have for such a program)

4. What would you consider to be the major academic weakness(es) of students in WSP?
5. What would you consider to be the major job-related weakness(es) of WSP students?
6. What would you consider to be the three most important changes in WSP during the school year? (Please rank them in decreasing order of importance.)
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
7. It has been said that the major WSP agency for internal change is the Faculty Senate. Who are the members of the Faculty Senate?
8. On the average, how many times per year (excluding the summer) do you visit the homes of each student for whom you have direct responsibility?
- \_\_\_\_\_ 0 \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ more than 4
9. Below are a number of reasons for visiting students' homes. For each reason indicate the percent of visits which would be associated with each different reason. (The total should equal 100 percent.)
- \_\_\_\_\_ Student absent from school.
- \_\_\_\_\_ Student absent from job.
- \_\_\_\_\_ Trouble on the job.
- \_\_\_\_\_ To inform parents of student's progress.
- \_\_\_\_\_ Other (please specify).
10. If you saw the necessity for a major change (e.g. curriculum changes) in the Work-Study effort, what steps would you follow to implement this change.

