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ABSTRACT

This report evaluates the operation and effects of a work-study program among high school juniors and seniors following its extension to municipal agencies of the city of New York. The evaluation forms part of a five year program, and constitutes an internal self-examination of the administrative and operational aspects of the institutions. The study examines the program's effects upon students' goals, and its service to the community. Two methods were utilized for coordinating school and work experiences--full-time employment of students on an alternate week or two-week basis, and a daily work-study plan, where students attend school each morning and are employed in the afternoon. Five major schools visited were selected for control studies. Descriptive analyses were made of the administration of the various aspects and departments of the program. Through interview information, the attitudes of supervisory personnel in city departments to the program were assessed; in 1964, this was effected by means of a questionnaire. Student attitudes were evaluated through a questionnaire relating to work experiences and school learning. In general, the school performance of the project students was found to be slightly superior to the comparable performance of their control group peers. Principals were found to be generally favorable toward the program. Student attitudes toward the program were also found to be positive. (RJ)

BOARD OF EDUCATION OF THE CITY OF NEW YORK

Frederick W. Hill, Deputy Superintendent of Schools

ED 041958

AN EVALUATION OF THE MUNICIPAL COOPERATIVE EDUCATION PROGRAM
OF THE HIGH SCHOOLS OF THE CITY OF NEW YORK

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Prepared by

SETH F. WOHL

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EDUCATIONAL PROGRAM RESEARCH AND STATISTICS

Frederick Shaw, Acting Director

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BUREAU OF EDUCATIONAL PROGRAM RESEARCH AND STATISTICS

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PREFACE

This report evaluates the operation and effects of the work-study program among high school juniors and seniors following its extension in the 1961-62 school year to municipal agencies of the City of New York. This evaluation forms part of a five year program, supported by the Ford Foundation until July 1966. It constitutes an internal self-examination of the administrative and operational aspects of the cooperative education program as it has been recently applied to city institutions. The study examines the program's effects upon students' goals and aspirations and its service to the community.

Many grateful thanks are expressed to Miss Grace Brennan, former Director of Cooperative Education, and to Mrs. Renee Sherline, Acting Director of Cooperative Education, as well as to Mr. Marcus Karten, Mrs. Clara Agin, Mr. John Lavary, and Miss Edna Scanlon, Program Coordinators of the Cooperative Education Office, for making possible the gathering of data essential to this evaluation. The efforts of the following teacher coordinators assigned in the major schools visited made possible the collection of data relating to the students and the interviewing of their school supervisors:

Mr. Ronald Bloom	Mrs. A. Patterson
Mr. William F. Doonan	Mrs. Ricca Shelley
Mr. Brian Holihan	Mr. Meyer Smolen
Mrs. Frances McGraw	Miss Catherine Williams
Mr. Herbert Ment	Mr. Alfred Zipper
Mr. Irving Zonana	

For making possible the administration of a questionnaire to Supervisors and visits to students on-the-job in the city agencies, most sincere appreciation is expressed to Mr. Solomon Hoberman, Acting Director of the City's Department of Personnel, and to Mr. Charles J. Setzer, Field Supervisor for the Cooperative Program in city agencies.

* * * * *

TABLE OF CONTENTS

<u>CHAPTER</u>	<u>PAGE</u>
I. BRIEF HISTORICAL SURVEY OF THE COOPERATIVE EDUCATION MOVEMENT . . .	1
A. The Beginnings	1
B. Fifty Years of Growth	5
C. Development of Municipal Cooperative Education	9
II. PURPOSES AND DESIGN OF THE STUDY	14
A. The Problem	14
B. Analysis of the Problem and Procedures Used	14
III. THE ADMINISTRATION OF THE MUNICIPAL COOPERATIVE EDUCATION PROGRAM	22
A. The Work of the Cooperative Education Office	22
B. Administration of the Program at the High School	27
C. Program Administration in Departments of the City Government	32
IV. SCHOOL PERFORMANCE OF COOPERATIVE STUDENTS	36
A. The Study Population	36
B. Procedure in Gathering the Data	38
C. The Findings	38
V. ATTITUDES OF SCHOOL PERSONNEL TOWARD THE COOPERATIVE PROGRAM . .	49
A. Interviews with Principals	49
B. Interviews with Teacher-Coordinators	50
C. Interviews with Guidance Personnel	50
D. Interviews with Department Chairmen	51
E. Interviews with Teachers of Cooperative Classes	52
VI. ATTITUDE OF DEPARTMENT SUPERVISORS TOWARD COOPERATIVE EDUCATION PROGRAM	55
A. Surveys	55
B. The Findings	56
VII. ATTITUDES OF STUDENTS PARTICIPATING IN THE COOPERATIVE PROGRAM .	73
A. Introduction	73
B. The Cooperative Student Surveys	74
C. The Cooperative Student Survey of 1965	75
VIII. FOLLOW-UP STUDY OF GRADUATES OF COOPERATIVE PROGRAM	104
A. Introduction	104
B. The Findings	105

TABLE OF CONTENTS
(Continued)

<u>CHAPTER</u>	<u>PAGE</u>
IX. SUMMARY AND CONCLUSIONS	117
A. Fifty Years of Growth	117
B. Why This Study Was Made	119
C. The Administration of the Cooperative Education Program .	120
D. Summary of the Findings of the 1965 Study	121
E. Attitudes of School Personnel Toward the Cooperative Program	122
F. Attitudes of Supervisors	123
THE FINDINGS	123
G. Students' Attitudes Toward the Municipal Cooperative Program	124
H. Follow-Up Study of Graduates of Cooperative Program . . .	127

LIST OF TABLES

<u>TABLE</u>		<u>PAGE</u>
1	Enrollment in Cooperative Education Programs in New York City . . .	8
2	Study Population for Analysis of Pupil Performance	36
3	Ethnic Composition and Birthplace of Study Population (In Per Cent)	37
4	Standardized Test Results (Pre-Program) of Study Population . . .	38
5	Average of Grades in Major Subjects	39
6	Total Absence and Lateness	40
7	Absence and Lateness on School Weeks and Work Weeks	41
8	Average Character Ratings	42
9	School Performance of Cooperative Students Holding Various Jobs .	43
10	School Performance of Cooperative Students Assigned to Various Departments	45
11	Average Ratings Assigned to Students by Job Supervisors	46
12	Agencies Employing 10 or More Trainee Pairs	57
13	Distribution of Student Trainees by Job Titles	58
14	Kinds of Training Given to Student-Trainees	60
15	Amount of On-The-Job Training Needed by Student Trainees as Compared to Permanent Civil Service Appointees	61
16	Supervisors' Ratings of Personal and Work Characteristics of Trainees	62
17	Major Weaknesses in Skills of Student Trainees as Reported by Supervisors and Agency Coordinators	63
18	Major Deficiencies in Character and Personality Traits of Student Trainees as Reported by Supervisors	64
19	Suggestions for Improvement of Training Program Prior to Placement of Students as Trainees, as Reported by Supervisors and Agency Coordinators	65
20	Suggestions for Improvement of Training Program During Period of Cooperative Placement, as Reported by Supervisors and Agency Coordinators	66

LIST OF TABLES
(Continued)

<u>TABLE</u>		<u>PAGE</u>
21	Reactions of Supervisors and Agency Coordinators to "Cooperative Education Bulletin"	68
22	Number and Per Cent of Supervisors and Coordinators Expressing Given Opinion Concerning Continuation of Program	70
23	Comments Concerning Municipal Cooperative Education Program Made by Supervisors and Coordinators	71
24	1965 Cooperative Student Enrollment by City Departments	75
25	1965 Cooperative Student Enrollment by Job Titles	77
26	Average Length of Municipal Cooperative Service at Current City Agency	79
27	Number of Jobs Held	80
28	Reasons for Transfer Cited by Municipal Cooperative Students (1965)	81
29	Relation Between School and Job Seen by Enrollees in Municipal Cooperative Program	82
30	Frequency of Mention of Given Subject as Most Helpful on Cooperative Job	84
31	Frequency of Mention of Given Subject That Should Have Been Completed	86
32	Post High School Training Plans of Municipal Cooperative Program Students	87
33	Type of Institution Municipal Cooperative Students Plan to Attend After Completing High School	88
34	Attendance at Saturday Civil Service Preparation Course	90
35	Participation and Relative Success of Municipal Cooperative Students in Civil Service Examinations	91
36	Civil Service Examinations Taken and Planned by Municipal Cooperative Students	92
37	Expressed Attitude of Municipal Cooperative Students Toward Their Jobs	93

LIST OF TABLES
(Continued)

<u>TABLE</u>		<u>PAGE</u>
38	Frequency of Mention of Specific Aspect of Job Liked by Municipal Cooperative Students	94
39	Frequency of Mention of Specific Aspect of Job Disliked by Municipal Cooperative Students	95
40	Number of Individuals Responsible for Supervision of Municipal Cooperative Students	96
41	Supervisor's Appraisal and Self Appraisal of Quality of Work Performed, as Reported by Municipal Cooperative Students. .	97
42	Help Needed and Help Received from Supervisors, as Reported by Municipal Cooperative Students	98
43	Willingness of Students to Remain in Current Municipal Cooperative Jobs	99
44	Immediate Post Graduate Plans of Municipal Cooperative Program Students	101
45	General Effect of Work Experience on Post Graduate Plans of Students in Municipal Cooperative Program	102
46	Specific Effect of Work Experience on Post Graduate Plans of Students in Municipal Cooperative Program	103
47	Number and Proportion of Returns to 1965 Municipal Cooperative Education Program Follow-Up Questionnaire	105
48	City Agencies Employing Respondents	106
49	Employment Status of June 1964 Municipal Cooperative Program Graduates	107
50	Participation in Civil Service Examinations by Municipal Cooperative Education Program Graduates (1965 Survey) . . .	109
51	Post High School Education of Municipal Cooperation Education Program Graduates (June 1965 Survey)	111
52	Courses Considered Valuable by Graduates of Municipal Cooperative Education Program (June 1965)	115

CHAPTER I

BRIEF HISTORICAL SURVEY OF THE COOPERATIVE EDUCATION MOVEMENT

A. The Beginnings

1. The Hanus Survey and Dean Schneider's Early Definitions: Cooperative education was first referred to by Paul H. Hanus, Professor of Education at Harvard University, in his Report to the Committee on School Inquiry of the Board of Estimate and Apportionment in 1912.¹ This Committee had been convened in 1911 by the Board of Estimate and Apportionment as one arm (dealing with educational aspects) of a two-fold investigation of the public school system. The other arm of this investigation dealt with financial and administrative aspects of the school system. Both inquiries arose out of a conflict between the Board of Education and the Board of Estimate and Apportionment, the city's budget making body, over calls for additional funds to alleviate overcrowded school conditions. Professor Hanus, as a special consultant to the school system, headed the Committee of eleven experts on School Inquiry, and the establishment of a system of cooperative education was one of their recommendations.

Professor Hanus insisted that "in the interest of industrial and social welfare..." neither industry nor the schools alone could perform the educational responsibility of society to its young workers. Accordingly, he advocated a method of "...education accompanying gainful employment - in the cooperation of industry and education..." utilizing cooperative or part-time vocational schools..." and "continuation schools." His model for these recommendations was the system instituted in Ohio by Herman Schneider a few years earlier.²

In 1914, the President of the Board of Education engaged the part-time services of Dean Herman Schneider of the College of Engineering, University of Cincinnati, to institute a program of "...continuation and cooperative courses in vocational education in New York City..." based upon his previous experiences in such work at his college dating from 1906.³ The term "cooperative," as defined by Dean Schneider, is seen in his 1915 Report to the President of the Board of Education. It reads:

1. Paul H. Hanus, "Report on the Educational Aspects of the Public School System of the City of New York," pp. 101-195 in Report of Committee on School Inquiry, Board of Estimate and Apportionment, City of New York, N. Y. 1911-13, 1, 158-159.
2. Hanus, "Report on the Educational Aspects of the Public School System..." in Report of Committee on School Inquiry, 1, 158-159.
3. Herbert Schneider, A Report on A Plan of Organization for Cooperative and Continuation Courses, Department of Education, City of New York, Aug. 6, 1914, pp. 1-4.

"The cooperative system is based on an agreement between a group of manufacturers and a school system whereby the manufacturers agree to institute and carry on a thorough and comprehensive apprentice course in their particular trades; and in which the school agrees to give both general and specialized instruction to the apprentices..."¹

He introduced the term "Coordinator" for teachers coordinating the work of the shops with the instruction of the schools in the same report. He also recommended that a Bureau of School Cooperation, with a Director in charge, be established. This Bureau, he said, should be semiautonomous in its operation, along the lines of good business management, subject to basic legal requirements.

2. Implementation of Recommendations and Criteria for Cooperative Education: By the spring term of 1915, cooperative courses had been established in 10 high schools, and some 341 students were assigned to cover 168 positions.² An elaborate chart or scheme for the course contained the following salient points:

- 1) Students have finished the first year of high school study.
- 2) Students cover each position in pairs; with one student on the job and the other in school on alternate weeks.
- 3) The work follows a predetermined sequence, so that students may learn all phases of the work in that industry.
- 4) The school courses are related to the work in industry, and this is insured by the position of a teacher-coordinator who follows their work at school, on the job, and deals with their problems.
- 5) The school coordinator visits the students in industry and confers with Company representatives.
- 6) Working conditions for students are standardized to those prevailing for workers in the industry in general.
- 7) Students are paid prevailing wages for beginners' of work during their work weeks by the Company.
- 8) Employment Certificates (working papers) must be held by all students under age 16 in conformity with State Law.³

3. A Period of Consolidation: As cooperative courses were scattered among ten participating high schools, the program tended to become weak and diffused as early as the 1916-17 school year.⁴ Because of the

1. Seventh Annual Report of the City Superintendent of Schools, 1914-1915, Subtitle: "Part-Time Cooperative and Continuation Classes." Department of Education, The City of New York, Nov. 10, 1915, pp. 5-72.
2. Seventeenth Annual Report, pp. 22-23.
3. Seventeenth Annual Report, Organization Chart 2, p. 46, by Assoc. Sup't. John H. Haaren, May 18, 1915.
4. Nineteenth Annual Report of the Superintendent of Schools, 1916-1917. Subtitle: "Continuation and Cooperative Classes." Department of Education, The City of New York, May 22, 1918, pp. 18-19' 42-43.

difficulty of obtaining coordinators and the abnormally low number of students in some cooperative courses, the cost of instruction was regarded as too high. Accordingly, the program and lines of work were consolidated to eight instead of ten schools in 1917. In that same year, cooperative, continuation, vocational and prevocational work were all combined into one Division of Vocational Activities at the Board of Education. However, direction of cooperative education was largely left to individual high schools until the 1925-26 school year. This may be regarded as the first step towards the formation of a separate administrative unit for cooperative education to implement Dean Schneider's recommendations. A second major consolidation was affected in the 1920-21 school year when the cooperative program was confined to three schools.¹

As Dr. Schneider had recommended, syllabi were revised and special course outlines written for students in the alternate week program. Detailed outlines for some of these courses, such as English, industrial math, science, civics, industrial history, commercial law, industrial economics, and shop technology first appeared in the superintendent's 17th Annual Report.² Descriptions of some courses and how they specifically were coordinated with the cooperative jobs were included in the 18th Annual Report.³ This report noted some placements of boys as student trainees from Stuyvesant High School in several City Departments to do blue collar work -- engineers' assistants and field survey in the Topographical Bureau, Queens; chemical, bacteriological, and analytic testing of water and industrial products at the City's Central Testing Laboratory; engineers' maintainer-helpers-mechanical in water pumping stations, electrical power plants, and engine rooms of various Municipal Buildings in Manhattan and, electricians' helpers in the Department of Public Buildings.⁴ In some ways, these unusual instances of placements from this one school anticipated some features of Municipal Cooperative Education to be inaugurated 45 years later, although no reference was made in the report to any arrangements for these apprenticeship positions through the City Civil Service mechanism.

Selection of students for entry into the cooperative courses was far from a haphazard process. Careful selection of students was based upon criteria of "...health, strength, and general ability...to meet the requirements of each position." The primacy of economic need was not mentioned among the criteria cited, but it was readily recognized that these students were vocationally rather than academically inclined, and that this was the most satisfactory way to prepare them for a life of useful work in industry.⁵

1. Frank J. Arnold. A Study of the Cooperative Method of Education in the New York City High Schools. Published Abstract of Ph. D. Thesis, School of Education, N.Y.U., 1932, p. 3.
2. Seventeenth Annual Report of the City Superintendent of Schools, 1914-15, pp. 55-64.
3. Eighteenth Annual Report of the City Superintendent of Schools, 1915-1916. Sub-title "Continuation and Part-Time Cooperative Classes." Department of Education, The City of New York, March 28, 1917, pp. 68 ff.
4. Eighteenth Annual Report of the City Superintendent of Schools, pp. 100-7.
5. Seventeenth Annual Report of the City Superintendent of Schools, pp. 14-15.

4. Promises and Problems of Cooperative Education: The 17th Annual Report for the 1914-1915 school year also detailed both positive aspects of this new program and some major problems encountered in its operation.

On the positive side, it was noted that the students received practical training leading to full-time trade experience sometimes with advanced placement after graduation. It was also observed that students in the program tended to remain in school until they earned their diplomas, while they helped ease family financial burdens. Each student received individualized training more nearly fitted to his own needs in this program and in his later career.¹ Under the heading "The Moral Effect of the Cooperative Plan," the 17th Annual Report refers to the great sense of personal maturity gained by the students; of one's place in life; of commercial and industrial intelligence; and a great gain in citizenship.² These "moral effects" may have constituted the most crucial gains from the program. In modern terminology, these effects might have been referred to as behavioral and attitudinal changes, resulting from experience in the cooperative work-study program.

One of the problems encountered was the prevailing conservative attitude of teachers towards innovations, which made it difficult to obtain coordinators.³ Parents, though further removed from the scene, were found to be generally more receptive to the program. Some employers showed reluctance to train students when they considered the problems involved in evaluation and in checking on students' progress. Others cited hazards in the work to which they felt young people should not be exposed. In some cases, they would only take on a very few students on a trial basis for a long period of time before committing themselves more fully to the program. "Slack-season" in such industries as dress manufacturing for girls created problems when students were laid off and thrown back into full-time school class work in mid-semester. In general, work in industry was frequently subject to the upswings and downswings in the economy. Another major problem on the job grew out of the difficulty in giving the students progressive work experience by shifting them into different departments within the firm. This problem plagued coordinators who constantly had to cajol employers. However, those employers who saw the potentialities of the program as a pool for new workers, quickly grasped the significance of careful training and of progressive work.⁴

As a result of these problems and pressures, the dropout rate for cooperative students in the early years of the program was as high as 20 per cent.⁵ The great majority of these dropouts probably went into full-time work. (Admittedly great difficulty was experienced in obtaining meaningful follow-up data.) They were attracted by higher salaries and the economic needs of their families.

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1. Seventeenth Annual Report of the City Superintendent of Schools, pp. 37-55.
 2. Ibid. p. 55.
 3. Eighteenth Annual Report of the Superintendent of Schools, pp. 50-67.
 4. Nineteenth Annual Report of the Superintendent of Schools, pp. 36-41.
 5. Nineteenth Annual Report of the Superintendent of Schools, p. 36.

An awareness of the need for measuring the effectiveness of this program by its impression upon the lives of cooperative graduates in business life was shown by plans for a "follow-up card" to be sent out regularly to every graduate, in the hopes of keeping a continuous record. In the same breath, as already noted in the last paragraph, the authors of the 19th Annual Report recognized the great difficulty in getting accurate information, since many cooperative graduates never replied to inquiries.¹

B. Fifty Years of Growth

1. Periods of Development in the Administration of Cooperative Education:

Grace Brennan, the only full-time Director of New York City's Cooperative Education Program, has distinguished two periods in the early history of cooperative education.²

- 1) The period of decentralized local autonomy in trying out different cooperative programs and revising courses, and local school control of criteria for selection, student placement, coordination with industry, and general supervision. This period, which lasted from 1915 to 1924 saw the consolidation of the program from 10 high schools in 1915 to one school (the Haaren-Cooperative High School) in 1920, due to problems of obtaining coordinators and the high cost of maintaining a wide-spread program.³
- 2) The centralization of all student placement and primary supervision, which began with the organization of the Central Office of Vocational Investigation, Guidance and Placement in 1925, for the 4 high schools then functioning with alternate week cooperative work-study programs, and all other aspects of vocational guidance and placement.

Charles M. Smith, a former cooperative teacher coordinator at Newtown High School, and later teacher assigned to the Central Office, was appointed the first Director of Vocational Investigation, Guidance and Placement in 1928. Enrollment in the program continued to rise while he helped effect a marked reduction in the school budget for cooperative education by centralizing all job placement with the Central Office.⁴

1. Ibid., pp. 41-42.

2. Grace Brennan. History and Present Status of Cooperative Education in the High Schools of the City of New York. Office of Vocational Investigation, Guidance and Placement, Board of Education, City of New York, 1932.

3. Arnold, A Study of the Cooperative Method of Education in the New York City High Schools, 1932, pp. 1-8.

4. Office of Vocational Investigation, Guidance and Placement, "Annual Report to the Superintendent on Cooperative and Part-Time Placement," 1929. (Typewritten copy on file in Cooperative Education Office).

Miss Grace Brennan was assigned to supervise all the cooperative education functions of the Office of Vocational Investigation, Guidance and Placement in the 1929-30 school year. She was assigned as Assistant Administrative Director in 1943. In 1954, the Board of Education amended its bylaws to create the post of full-time Director of Cooperative Education,¹ to which Miss Brennan was appointed in 1956.²

It will be recalled that Dean Schneider had recommended the establishment of a separate administrative unit for running a cooperative program between the school system and the manufacturers in 1915,³ and that cooperative education had been centralized under Vocational Investigation, Guidance and Placement with other vocational and guidance functions from 1925.⁴ Continued development of cooperative education following World War II, with its spread into more high schools, and modification of the State Education Law made the separation of work-study from other vocational and guidance functions imperative from an administrative point of view.

The year 1946 proved to be a turning point in the history of cooperative education. Two new developments were of major importance:

- 1) The State Education Law of May 10, 1919 was revised to extend state aid in full to students enrolled in part-time school work-study programs in which the work was considered an integral part of the curriculum.⁵ Effective September 1946, this added state aid brought almost an additional \$100,000 to the school system in the first year, and permitted the Superintendent of Schools to provide for special cooperative classes of smaller size and to give extra teacher time for supervision and follow-up.
- 2) A Cooperative Education Commission comprising leaders from business and industry, was formed by the Advisory Board for Vocational Education. The Commission was charged to survey, determine the needs of, and make a recommendation to the Superintendent of Schools regarding the Cooperative Education Program.⁶

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1. Journal of the Board of Education of the City of New York, 1954, pp. 602-604.
 2. Directory of the Board of Education of the City of New York, 1956-1957, p. 57.
 3. Seventeenth Annual Report of the City Superintendent of Schools, pp. 7, 9.
 4. Brennan, History and Present Status of Cooperative Education in the High Schools of the City of New York.
 5. Cooperative Education Office. "Annual Report, Cooperative Education." 1947. (Mimeographed on file in Cooperative Education Office).
 6. Ibid., 1947.

The separation of the Cooperative Education Office from Vocational Guidance in 1947 was a consequence of the development of this program and a fulfillment of one aspect of Dean Schneider's recommendations. From then on, the Cooperative Education Office functioned as an entity completely separate from Vocational Guidance and part-time placement. Cooperative courses thereafter were introduced steadily into a greater number of academic and vocational high schools as the program increased, particularly during the post-war period.

2. Trends in Enrollment: Table 1 presents data for selected years on the number of high school student enrollees in cooperative programs who worked during all or part of that year in alternate week job assignments for which they received compensation. The number of participating academic high schools and vocational high schools offering programs is also given.

Table 1

Enrollment in Cooperative Education Programs in New York City

<u>Year</u>	<u>Number of Students</u>	<u>Number of H.S. Participating</u>
1915	341	10
1920	1,150	10
1925	469	4
1926	556	3
1928	819	5
1930	674	4
1932	912	3
1934	950	3
1936	922	3
1938	1,244	3
1940	2,024	3
1942	1,346	4
1944	1,428	9
1946	1,203	8
1948	2,204	12
1950	1,517	12
1952	2,020	14
1954	2,142	22
1956	2,264	22
1958	2,700	19
1960	2,412	26
1962	1,920 (Commercial) 408 (Municipal)	34
1963	1,611 (Commercial) 820 (Municipal)	31
1964	1,935 (Commercial) 846 (Municipal)	33
1965	1,441 (Commercial) 1,264 (Municipal)	32
1966*	1,699 (Commercial) 1,296 (Municipal)	32

Sources of Data for Table 1 were:

Arnold, A Study of the Cooperative Method of Education in the New York City High Schools, 1932, loc. cit., for the Years 1915 through 1925;

Cooperative Education Office, Annual Reports, Cooperative Education, for the Years 1926 through 1948;

Bureau of Educational Program Research and Statistics, Annual Reports of the Superintendent of Schools, City of New York, Fifty-Sixth through Sixty-Seventh Annual Reports (Statistical Sections), for the Years 1950 through 1965; *Verified estimates from the Cooperative Education Office for the Year 1966, as of April 1966.

Although overall growth in enrollment in a half-century has been almost ninefold, program's sensitivity to trends in the economy during the prosperous twenties, the depression thirties, and the war and post-war forties and fifties is evident.¹ Each dip shown in Table 1 follows a recession in the economy. Thus, the dip for 1930 follows the crash of 1929; the losses for 1942 and 1946 follow the entry into the war and the retooling of industry at its end, respectively. The major cutback of the mid-twenties followed the consolidation of cooperative programs from 10 to 1 central school; when several others were added later, growth was resumed.

The breakdown of student totals, starting with the 1962 figure, into "commercial" and "municipal" cooperative trainees, reflects the extension of the program to city agencies which forms the basis for this report. Beginning with 408 students placed in 18 city agencies by the end of the first year, the program has grown to well over 1,000 enrollees working in over two-thirds of the city's 99 departments at the end of three years.

C. Development of Municipal Cooperative Education

1. The Manpower Utilization Council and the Original Concept: In May 1960, Mayor Robert F. Wagner announced the formation of an 18 member Manpower Utilization Council to help deal with problems arising out of shortages of workers in key areas of city government and industry and to help alleviate unemployment among the low income groups in certain pockets of poverty in the city.² These conditions in New York City were highlighted in data released by the United States Bureau of Labor Statistics. Acute shortages of personnel were noted in professional and clerical occupations. One of the problems put before the Council was to develop programs which would help assimilate future workers into useful, productive, and rewarding employment. The council membership included the Superintendent of Schools, the Commissioner of Welfare, and leaders from industry and labor. Its chairman, Dr. Theodore H. Lang, was then Director of the Department of Personnel and Chairman of the Civil Service Commission.

In a joint proposal to the Ford Foundation in April 1961, the Manpower Utilization Council, the Board of Education, and the Department of Personnel asked for funds to permit the extension of the Cooperative Education Program of part-time employment on an alternating week basis to various agencies of the City Government for 1,000 selected students from low socio-economic groups.³ Like enrollees similarly placed in positions with private firms on

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1. Cooperative Education: Part IV of the Report of the Superintendent of Schools, 1954-1955. Board of Education, City of New York. Grace Brennan, Admin. Dir. (On file in Coop. Ed. Office).
 2. "Wagner to Set Up Manpower Council." New York Times, p. 91, Wed., May 4, 1960; "Labor Council Named, 18 Member Group Will Seek More Workers." New York Times, p. 20, Thurs., May 5, 1960.
 3. "Joint Proposal to the Ford Foundation," Subject: A Municipal Coop. Education Program, April 4, 1961. Letter on file with the Cooperative Education Office.

alternating weeks, employment was to be contingent upon concurrent completion of high school education. The need for such a program was highlighted in the letter of proposal, which described the projected 50 per cent increase in the number of youth reaching 18 from 1960 to 1965, within a projected total population growth that would not exceed 10 per cent. The rise in non-white and Puerto Rican youth with limited skills among this labor force would increase from about 20 to 25 per cent during this period. In citing the national high school dropout rate of 40 per cent for this group of pupils, the value of the proposed program in helping these youth develop marketable skills related to work needs in the community, while at the same time combatting the school dropout problem with its 2 to 3 times higher unemployment rate than for graduates, was highlighted.

2. The Five-Year Pilot Program and the Ford Foundation Grant: To implement this five-year pilot program, a grant of \$572,400 was sought from the Ford Foundation. Funds were requested for salaries of supervising coordinators and field supervisors from the Cooperative Education Office of the Board of Education and the City Department of Personnel respectively, for salaries of teacher-coordinators in the schools released from regular classroom assignments, and for an objective evaluation of the program. In the budget submitted as part of the joint proposal, \$398,250 was to go to the Board of Education for the 5-year period, \$109,150 to the Department of Personnel, and \$65,000 to the Manpower Utilization Council for the evaluation report to the Ford Foundation. The estimated 5.5 million dollars in salaries to be paid out to student-trainees during this period for work performed was to be a regular part of city operating expenses, as was their schooling.

To coordinate the administration of this projected far flung program, a Policy Committee composed of representatives from the three proposing agencies was designated.

Having received approval of the grant from the Ford Foundation, and having readied 138 jobs in 10 City Departments for secretarial and key punch operator trainees and for nurse's aides, public health, and dietary trainees for 276 high school students selected from low socio-economic areas of the city, the Municipal Cooperative Education Program began in September of the 1961-62 school year.¹ An initial grant of \$230,000 was made by the Ford Foundation to the Board of Education for the first two years of administration of the program.

3. Development of the Municipal Cooperative Education Program: The projected development of the program was estimated in July 1961 by the Cooperative Education Office as follows: an enrollment of 250 students for the 1961-62 school year; an additional 500 students for the 1962-63 school year; an added 250 students for the 1963-64 school year; and a maintained

1. Mayor announces Municipal Coop. Education Program. Manpower Utilization Council, 299 Broadway, N.Y.C. 17, Rm. 200, Tues., July 11, 1961. (Letter on file with the Cooperative Education Office).

level of approximately 1,000 student placements for 500 municipal job lines for the balance of the program, to June 1966. Table 1, shown above, gives the number of actual enrollees at the end of each school year to be the following: 408 by Spring 1962; 820 by Spring 1963; 846 by Spring 1964; and 1,264 by Spring 1965. The figures of 408 and 820 cumulative for the first two years represent overfulfillment of student quotas as compared to the planned numbers. The levelling off in the third year to a three per cent growth over the second year represents the beginning of intensive competition from federally assisted anti-poverty programs. The Mayor's call for doubling the Municipal Cooperative Education Program to reach for the 2,000 mark in inaugurating an \$18 million drive on city poverty in March 1964, helped spark a spurt in growth to 1,264 students by the end of the program's fourth year.¹

4. Goals of Municipal Cooperative Education: Three reasons for extending cooperative education to municipal government were stated in the initial letter of proposal to the Ford Foundation:²

- 1) To enable potential dropouts to complete high school.
- 2) To provide income for needy students.
- 3) To provide supervised job training work experience that could prove valuable for future full-time employment.

The Department of Personnel's Bulletin listed recruitment for City Civil Service positions as an important aim, and put more emphasis on the purpose of placement of students from "socially and economically deprived families."³

The Cooperative Education Office listed four goals for the placement of high school juniors and seniors in the Municipal Program in its Golden Anniversary Report as well as in the Annual Report of 1962:

- 1) To aid needy students of low socio-economic backgrounds.
- 2) To help prevent high school dropoutism.
- 3) To upgrade job skills abilities of minority group youth.
- 4) To place students sufficiently socialized to be able to adapt and produce on-the-job.⁴

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1. Clayton, Knowles. "Wagner Opens \$18 Million Attack on City Poverty." New York Times, pp. 1, 40, March 24, 1964.
 2. Joint Proposal to the Ford Foundation. Subject: A Municipal Coop. Education Program. April 14, 1961. Letter on file with the Cooperative Education Office.
 3. Theodore H. Lang, Municipal Cooperative Education Bulletin for Supervisors of Municipal Cooperative Education Trainees. Vol. 11, No. 4, March 1964.
 4. Cooperative Education Office. 50th Anniversary of Cooperative Education 1915-1965. Board of Education, City of New York, pp. 27-31; Cooperative Education Office. Cooperative Education 1960-1962. (Annual Report on file with the Cooperative Education Office), pp. 9-14.

These differences in goals suggest variations in emphasis among the participating agencies from the draft proposals for the five-year program as stated in the joint Proposal to the Ford Foundation.

The Golden Anniversary Report of the Cooperative Education Office stated that in the several years of its operation in city departments, the trainee category has become accepted as a potential pool for future Civil Service employees.¹ That supervisors and workers at the agencies have given willingly of their time and efforts in training student workers and in welcoming them into Civil Service fold, is stated as an established fact. A recent Annual Report indicates the enthusiastic support on the part of participating principals and parents of trainees. Teachers and school guidance personnel have also successfully adjusted their programs to accommodate alternate-week cooperative students on short notice or have expanded existing programs.²

The growth of the municipal program beyond the 1,000 mark in student-trainee enrollment by the fourth year of its operation, has been indicated above (Table 1). The most recent significant call for expansion in the Municipal Cooperative Education Program came from the Mayor's Office in June 1964. In an Executive Order, the Mayor called for each city agency to review all job vacancies with a view to allocating as many to the program as possible, to engage actively in job development, to improve coordination between the employing agencies (the Board of Education and the Bureau of the Budget), and to strengthen training programs for trainees and their supervisors who work with them.³ The stated goal was to achieve 1,000 cooperative positions for 2,000 high school student-trainees per year in all 90 + municipal agencies. In April 1966, the Cooperative Education Office reported an all-time record of 1,296 students working in 74 city agencies.⁴

Following the change in city administration as a result of the mayoralty election of November 1965, a "job freeze," applicable to all City Civil Service positions, was ordered.⁵ Under this "job freeze," a Vacancy Control Board authorized city agencies to continue operation of the Cooperative Education Program at the then current level including necessary replacements,⁶ but no further lines could be opened to the Program without special approval of the Vacancy Control Board, while the Department of Personnel maintained the necessary controls. Only the College Work-Study Program, employing 1,200 enrollees

1. Coop. Ed. Off., 50th Anniv. of Cooperative Education 1915-65, pp. 27-31.
2. Coop. Ed. Off., Cooperative Education 1960-62, pp. 9-14.
3. Executive Order No. 108. To: Heads of All City Departments and Agencies. From: Robert F. Wagner, Mayor. Subject: Expansion of the Municipal Cooperative Education Program for Supervisors of Municipal Cooperative Education Trainees, in Municipal Cooperative Education Bulletin, Dept. of Personnel, 11 (5), June 1964, p. 1.
4. "Cooperative Education in Municipal Government," April 1966. Semi-Annually Mimeographed Data Sheets, (On file with the Cooperative Education Office).
5. Robert Alden: "Lindsay Orders Freeze in Hiring; Seeks Budget Cuts." New York Times, p. 1, Jan. 20, 1966. (on Exec. Order of Jan. 19th: "Budget Policy and Economics)."
6. Solomon Hoberman, Municipal Cooperative Education Bulletin for Supervisors of Municipal Cooperative Education Trainees. Vol. IV, No. 3, March 1966, p. 1.

from 6 higher education institutions in 38 participating city agencies on a part-time basis, was granted a blanket exception from the job freeze by the Vacancy Control Board.¹ It might be noted here that 90 per cent of the college work-study enrollees' weekly salary (\$22.50 for 15 hours of work) is covered through federal anti-poverty funds granted under the Higher Education Act of 1965, Titles III and IV.² The implications of this job freeze, then, are that there can be no anticipation of expanding the present number of positions in the Municipal Cooperative Education Program Program from its present level of 650 positions to the 1,000 job lines anticipated in the Mayor's Executive Order No. 108.³

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1. Hoberman, Municipal Cooperative Education Bulletin, IV (3), March 1966, pp. 3-4.
 2. U. S. Office of Education, U. S. Dept. of Health, Education and Welfare. Higher Education Act of 1965, Section-by-Section Analysis. U. S. Gov't Printing Office Cat. No. FS 5.250:50045. Nov. 1965, pp. 12,22.
 3. Executive Order No.108. From: Robert F. Wagner, May 1964, To: Heads of all City Depts. in Municipal Cooperative Education Bulletin II, (5): p. 1, June 1964.

CHAPTER II

PURPOSES AND DESIGN OF THE STUDY

A. The Problem

The program of cooperative education which was initiated in New York City in 1915 combines classroom instruction with practical training in related employment. Two methods are currently utilized for the coordination of school and work experiences:

- 1) The first provides for full-time employment of students on either an alternate week or alternate two-week basis; an equal period is spent in full-time attendance in school. Thus, a pair of students covers each position in the alternate schedules.
- 2) The other method entails a daily work-study plan, where the students attend school each morning and are employed in the afternoon. Students must be at least 16 years old before they can participate in the program.

All students attend full-time classes during the freshman and sophomore years of a 4-year high school. Alternation between school and work begins in the last two (junior and/or senior) years. Experience with cooperative students placed with private industry has indicated the majority remain with the firms that have trained them after graduation.

During the 1961-1962 school year, a Ford Foundation grant made possible the extension of this work-study program, long in effect with cooperating private business and industrial firms, to the area of Municipal Civil Service Departments, on the alternating weeks basis. It was hoped such a program would encourage high school juniors and seniors who were potential dropouts to remain in high school to develop marketable job skills prior to graduation. The program was looked upon as an effective means of curtailing dropouts as well as a means of developing a higher degree of vocational proficiency and providing economic assistance to disadvantaged students and their families.

The purpose of this study is to appraise the effectiveness of the Municipal Cooperative Education Program in fulfilling its stated objectives.

B. Analysis of the Problem and Procedures Used

The evaluation study that was developed may be analyzed into a series of component subproblems:

Subproblem 1. Operation of the Municipal Cooperative Education Program

Since extension of cooperative work-study to municipal civil service areas is a relatively new departure, a study of the organization of the program as a whole and its operation in the seven project schools taking students from disadvantaged neighborhoods was undertaken. Particular attention was given to:

- 1) criteria for recruitment and selection of student participants;
- 2) curricular experiences at school;
- 3) work experiences or types of jobs performed;
- 4) on-the-job training procedures;
- 5) guidance; and
- 6) articulation between work-experience and the school program.

These aspects of the total study entailed considerable observation of the program in action, both in school and on the job. By means of visits to the 7 selected major study schools, information relating to student recruitment procedures, block programming for cooperative students, course outlines, guidance and counselling procedures, and relations of the cooperative education program to the total school program were obtained. Through selected visits to cooperative classes in session, descriptions of special techniques used in teaching these students were noted. Observations were also made of special curricular offerings closely correlated with special job categories, and of work-study programs employing cooperative student-trainees.

The program in departments of the city government was investigated by means of visits to work locations in city agencies. Interviews were conducted with agency coordinators and local immediate job supervisors; working students were also questioned. Observations were made of the student-trainees in their working environments, and information was obtained of on-the-job training, supervision, civil service opportunities for young workers, and coordination with the Cooperative Education Office at school headquarters.

Subproblem 2. Cooperative Students' Progress in School Performance

1. The Study Population: The Cooperative student enrollees study population consisted of all 11th and 12th year students enrolled in the Municipal Cooperative Education Program for the 7 major study high schools visited for this phase of the study. The seven schools were Benjamin Franklin, Boys, Charles Evans Hughes, DeWitt Clinton, Julia Richman, Morris, and Seward Park. All seven were located in disadvantaged neighborhoods or had substantial populations of minority group youth enrolled in the general course program in general, and in the Municipal Cooperative Education Program in particular.

2. Basic Data: Data were collected for municipal cooperative enrollees, where available, as follows:

- 1) Diploma Program or track
- 2) Age and sex distribution
- 3) Ethnic distribution, based on statements made by home room teachers
- 4) IQ from the Pintner General Abilities Test, Intermediate Form, given in the 8th grade
- 5) Metropolitan Achievement Tests in Reading, Intermediate Form, given in the 9th grade
- 6) New York Arithmetic Computations Test for Grades 7-12, given in the 8th grade
- 7) Composite Score from Parts 1-8 of the Iowa Tests of Educational Development, given in the 9th grade
- 8) Anecdotal entries from students' and Deans' records.

3. The Control Samples: Five of the major study schools visited were selected for control studies. They were Benjamin Franklin, Boys, Julia Richman, Morris, and Seward Park High Schools. All control groups were picked from senior classes. In other words, these were all candidates for graduation at the end of the current school year.

Six criteria were used for selection of control samples, as follows:

- 1) A general diploma program, almost without exception, was a criterion for senior students' acceptance into the control group. In this way, a match was obtained to the general diploma program characteristic for the study population.
- 2) Age and sex distribution for the control group was matched to within a year for birth dates and in a male/female ratio comparable to that of the study population.
- 3) The ethnic distribution reflected that of the study population. It contained large numbers of minority group youth who could benefit from upgrading of work skills among the study population.
- 4) Three standardized test scores were utilized in selecting the controls, matched to within several score points of the comparable study population, and based upon an analysis of student records: (a) The Pintner Test of General Abilities; (b) the Metropolitan Achievement Tests in Reading, Intermediate Form; (c) The New York Arithmetic Computations Test, Mixed Fundamentals for Grades 7-12, Form B.
- 5) Although not used as a matching criterion, the Composite Score for tests 1 through 8 of the Iowa Tests of Educational Development was recorded for the control group as well as for the study population.

- 6) Information on Deans' records and disciplinary and other notations were recorded where available and appropriate to the study.

4. Longitudinal Studies of Cooperative and Control Students: A three-year study of high school performance was made for all senior students, where such records were available, and a corresponding two-year study of high school performance was made for the 10th and 11th years of all junior students.

Following the collection of information on each student for the school year at the 7 major study schools, the data were tabulated and means obtained (where appropriate) for each school according to senior or junior year, sex, and type of cooperative placement. These data are presented in Chapter IV.

For every control student, a complete three year study of his grade achievement for 10th, 11th, and 12th year was made for all subjects counted as full majors.

A similar three year study was made for the absence and lateness record for each of the 10th, 11th, and 12th years in school for these controls.

Finally, a three year study of character ratings of the control group was also made for the three final senior high school years and compared with those of the study population.

Subproblem 3. Descriptive Analysis of the Administration of the Cooperative Education Program in Municipal Government

1. The Work of the Cooperative Education Office and Student Placement: Close observation of all phases of the work of the Cooperative Education Office, examination of all pertinent records, interviews with the Director and personnel working at the office, attendance at municipal cooperative teacher-coordinator conferences held with the office staff, and field visits made with those staff personnel responsible for the conduct of the municipal program made possible a description of the program's operation in terms of the central administrative authority responsible for its execution and on-going operation.

Students were observed in interview situations just prior to placement by the personnel coordinators assigned to the Cooperative Education Office, and student records used in the work of placement and referral were analyzed.

2. Administration of the Program at the High School Level: Observation of administrative aspects of the program in operation at the high school level was undertaken at the same time as visits were made for the purpose of gathering student records. Much of the information was gained through interviews held with various staff personnel; the remainder, through direct observation of the program in action.

Among the administrative aspects studied were the selection and identification of candidates, interviews, preparation for taking jobs, guidance, teacher-time allotments, visits to agencies, and types of reports required. The relation between administration and course organization was also considered.

3. Program Administration in Departments of the City Government: (1) The Office of the Field Supervisor. Several conferences with those staff members of this office which is responsible for the allocation of cooperative positions in city departments for the Cooperative Education and Work Program, were held at the Department of Personnel of the City of New York where the Field Supervisor for the entire working aspect of the program has his office. These conferences helped define pertinent aspects of the functional administration of the program relative to municipal employment. Insights into the degree of coordination with the Board of Education were gleaned from this aspect of the study.

(2) Administrative Aspects of the Program as Seen at Visited Local Units. Visits to given offices of selected city agencies and interviews held with agency coordinators and local supervisors also disclosed some of their functions. Among the activities considered were placement and transfers within departments and sub-divisions, on-the-job training and supervision, and evaluations or ratings made of student-trainees' work and character.

Subproblem 4. Attitudes of Supervisory Personnel in City Departments Towards the Program

1. Information Gathered Through Interviews in Visits to City Departments: In visits to 10 city departments, interviews were conducted with immediate supervisors of cooperative student-trainees, section or department heads, and agency coordinators. As these interviews were held during visits accompanied by a Municipal Cooperative Education Program coordinator from the Cooperative Education Office, it was possible to note some aspects of coordination between the Board of Education and a City Department in terms of the work done, as well as how certain problems with students were handled. Student-trainees were also seen on the job. Some were questioned, and various aspects of their working environment noted. Job descriptions and the types of training the students received were detailed.

Among the kinds of questions asked during these interviews were those dealing with degree of acceptance of the Program, amount of coordination achieved with the school coordinators, principal student strengths and weaknesses shown, and specific recommendations for improvement of the program, particularly in the areas of school training of cooperative candidates and job screening. Some supervisors made their own projections for the future of the program.

2. Data Gathered from Supervisors via Mailed Questionnaires: An instrument surveying attitudes of supervisors was mailed directly from the Board of Education in 1964 to city job locations employing student-trainee pairs. This questionnaire included 5-step rating scales on on-the-job training received, attendance and punctuality, work relationships, job performance, coordination achieved, etc. Questions paralleling those asked on the interview were also included in this printed questionnaire, which covered amount of coordination achieved, student strengths and weaknesses observed, suggestions for improvement, and projections for continuation of the Program. A second questionnaire distributed in 1965 consisted of two forms, one for the overall agency supervisors or coordinators, the other for immediate local supervisors of cooperative students. The five-step rating scales of the original questionnaire were pared down to 3-choice items,

wherever possible, to help force sharper selections in responding. Greater specificity was demanded wherever possible, but the questions sought to gain much the same kinds of information concerning the work experience phase of the program from the supervisory point of view.

Subproblem 5. Attitudes of School Personnel Toward Cooperative Students and the Program.

1. Interview Information from School Staff Visited: The following kinds of interviews were held in the 7 selected major schools visited for the municipal cooperative study:

1) Principals - The initial visit to each of the major study schools for the study of school records included a scheduled conference with the chief executive officer. These conferences were generally informally structured. They dealt with the program in general ways, and always included the presence of the teacher-coordinator for the Municipal Cooperative Education Program.

2) Teacher-Coordinators - These key personnel, who served as guidance counselors to the coop students, were first met at a coordinators group meeting at the Cooperative Education Office, where effective rapport was established. Their work was observed as part of an on-going process during numerous visits for gathering data from school records of coop students. Questions were asked as each phase of their work was observed. Introductions were given by these coordinators to heads of departments, classroom teachers, and students being interviewed about their problems in their school studies, scheduling, or work. Representative cooperative students' program schedules were obtained. Feedback of information from these coordinators to the "home office" at Headquarters helped improve knowledge of the program at the local school level as well as improve communication and coordination.

3) Departmental Chairmen - Interviews with heads of departments, set up through the good offices of the coordinators, proved to be the most formal and structured of the school interviews. Questions asked dealt with attitudes toward the program, courses in the given department relevant to the cooperative students' programs, problems in implementing these courses, educational or other values seen for the program, and suggestions for program improvement. The chairmen interviewed were usually of the English, Social Studies, Business, Accounting, or Secretarial Studies Departments.

4) Teachers of Cooperative Program Classes - Frequently informal interviews with teachers were combined with visits to cooperative classes in action. These meetings tended to be highly course-subject oriented. Questions covered such areas as special problems in teaching students on alternate weeks, retention of students, problems with homework completion, and scheduling. Other problems discussed included the task of running double periods, handling unassigned (unemployed) enrollees in school every week, and teaching the disadvantaged student.

2. Visits to Cooperative Classes: Observations made during these class visits focused on special techniques used in instructing cooperative students, and on curricular innovations used for coop students which were not typically a part of the instruction of full-time students.

Subproblem 6. Attitudes of Participating Students

1. The "Cooperative Student's Surveys:" To get a mass sampling of attitudes of the municipal coops, a written questionnaire was developed, emphasizing the kinds of questions appropriate to the assessment of student attitudes. Questions were designed to fall into two main areas: (1) work experiences, including work inventories and future aspirations; and (2) school learning experiences. Since many aspects of the school program were directly observable in visits made to the study schools, it was felt that it would be more fruitful to concentrate on aspects of the enrollees' work experiences. Accordingly, work oriented questions outnumbered school-oriented items by about 4 or 5 to 1.

Advice was sought on the form and content of questions in preliminary draft instruments from teachers and coordinators. Individual student try-out by a select small sample was restricted to checking on readability and elimination of ambiguous wordings. Required responses were largely of statement completion or multiple choice variety, followed by short descriptions and a few terminal essay type items. An approved final form was printed and distributed to coordinators of all 31 schools participating in the Municipal Cooperative Education Program. The final 32 question instrument for 1964 was completed by 779 student enrollees.

The 3-page survey was administered to students in such school classes as English, Social Studies, or extended home room periods. Absentees were called to the coordinator's office or some other convenient location to complete the survey as soon as they returned to school. Spot checks of class groups in schools visited in which the tests were administered revealed satisfactory conditions for completing the survey.

On the basis of feedback from the students' responses on the 1964 questionnaire certain changes were made in the 1965 instrument. The content of the two instruments, however, was almost identical. The 30 question instrument for 1965 was completed by 1,136 cooperative student enrollees.

Subproblem 7. Attitudes and Activities of Graduates of the Municipal Cooperative Education Program.

1. The Follow-up Study of Municipal Cooperative Program Graduates, May 1963: The instrument used in this phase of the study consisted of a single page 8-item questionnaire mailed to the graduates at their last known home address. Addresses were provided by the teacher-coordinators for the graduates of each school. However, all mailings were done from the central office at school headquarters. Postage pre-paid addressed return envelopes were provided each graduate in the mailing with his questionnaire. There was no follow-up mailing for non-respondents.

The mailing was conducted in May 1964, near the end of the school year. Returns were received during the summer following. The results of this survey are presented in Chapter VII.

2. The Follow-up Study, May-June 1964: The second follow-up questionnaire was sent to the 495 municipal cooperative graduates for January and June of 1964. The information obtained in the second survey included all that had been included in the first. The questionnaire from which it was derived, however, was refined after study of the information yield from the 1963 respondents. The instrument was lengthened by greater specificity of questions, or subdivision of items, including a greater number of check-listed items.

The second survey was mailed in May and June of 1965. Returns were received during the summer, and the analysis of data was accomplished during the 1965-66 school year. Graduates returning forms specifically requesting aid in seeking employment were referred to local, state, and federal agencies that assist job-seeking youth, particularly as they relate to Civil Service employment.

CHAPTER III

THE ADMINISTRATION OF THE MUNICIPAL COOPERATIVE EDUCATION PROGRAM

A. The Work of the Cooperative Education Office

1. The Role of the Director: Charles H. Smith, the first full-time Director of Vocational Investigation, Guidance and Placement, was appointed in 1929. He and his staff not only administered cooperative education, but also part-time placement, continuation schooling, and some other aspects of vocational education. Coordination of the cooperative education aspects of his office was the responsibility of Miss Grace Brennan, a teacher who was assigned to his staff in 1929. She was promoted to the position of Assistant Administrative Director in 1943.

Complete and formal separation of cooperative education functions from other aspects of vocational guidance and placement was not achieved until 1947 when Miss Brennan was assigned as Acting Director in response to major post World War II growth in the size of the program. By amendment of its by-laws, the Board of Education created the post of full-time Director of Cooperative Education in 1954.

The duties of the Director of Cooperative Education were spelled out by the Board of Education in its creation of the position in 1954.¹

1) To organize cooperative programs in high schools; to hold conferences with the principal and other school staff personnel; to supervise teacher-coordinators in the high schools; to hold monthly coordinators' meetings; to conduct in-service training of teacher-coordinators and Central Office staff; to establish policies and procedures for the program among participating schools; to maintain inter-school, bureau and inter-divisional relationships.

2) To assist with pupil guidance including testing, pupil programs and records; to promote the coop program among students and parents; to screen students in pre-placement conferences following selection by teacher-coordinators; to counsel with coop students with respect to school and job adjustment, promotion, job transfers and general trouble shooting.

3) To contact employing firms to establish cooperative positions for the placement of students, and to maintain follow-up contacts with respect to such placement; to schedule visits to industry by teacher-coordinators accompanied by Central Office Staff; to compile reports on such visits with an eye to improvement of school programs; to coordinate educational activities with business and industry, and to improve the information of school personnel about labor laws, labor relations, and working conditions; and, to conduct periodic meetings with managerial representatives of business and industry and with labor representatives.

1. Journal of the Board of Education of the City of New York. Minutes of February 24, 1954, pp. 602-604.

4) To maintain ongoing contacts with municipal, state and federal agencies as well as with professional and other organizations for the most effective implementation of the program; to function cooperatively with the Advisory Board for Vocational Education and the Cooperative Education Commission; and, to maintain an effective program of public relations including printed materials for industry, parents and students, public addresses and forums, press articles; and programs over mass communication media.

5) To conduct reports (file Annual Reports), surveys, or such other evaluation as directed; to carry on all necessary committee work; and, to undertake necessary revisions of the program.

Since the Cooperative Education Program was applicable only to students in high schools, the Director of Cooperative Education was responsible to the Associate Superintendent for the High School Division. Under the 1965 reorganization, the Director of Cooperative Education reports directly to the Deputy Superintendent for Curriculum and Instruction.

2. The Role of the Cooperative Education Office in Program Administration:
The Municipal Cooperative Education Program with city departments, since its inception in September 1961, was administered separately from the Cooperative Education Program with private industry. This separation was due largely to the pilot nature of the program and its support by the Ford Foundation grant. Following the expiration of the Ford grant in the summer of 1966, the Board of Education and the city's Department of Personnel continued the program as a regular and permanent part of the school curriculum and as a source or reservoir for trained Civil Service manpower. Under these conditions, the administration of all phases of municipal and private cooperative education has been more closely integrated by the Cooperative Education Office.

The Director of Cooperative Education identified four outstanding problems of her office in implementation of the Municipal Cooperative Education Program in a letter to the Superintendent of Schools in May 1962:¹

1) Arranging for the allocation of additional Civil Service positions via the city Department of Personnel to accommodate the yearly quotas of coop students.

2) Extending municipal cooperative programs and instituting the courses necessary to sustain them in additional academic high schools having large numbers of economically and socially deprived students has been consistently met with excessive administrative caution, resistance, and resulting inaction.

3) Getting labor unions controlling certain types of trades in city departments to agree to open their doors to a limited number of cooperative education trainees.

1. Grace Brennan. Letter to John J. Theobald, Superintendent of Schools, May 31, 1962, referring to problems in implementation of program.

4) Convincing certain city departments to hold open for new trainees, those positions at work locations temporarily vacated by graduating senior coops. At times, the department chose to close out jobs in preference to undertaking the responsibility of retraining and supervising a newly placed pair of coops.¹

In the course of this two-year study, the following program was made with respect to these four identified problems:

1) Additional positions were obtained through the cooperation of the city Department of Personnel up to the time of the Mayor's job freeze of 1966 to further expansion in any municipal openings.

2) The Superintendent of Schools after consultation with the Director of Cooperative Education, called upon district superintendents and high school principals to greatly expand cooperative education in a special circular.²

3) A program was started with union agreement for electrical helper trainees in the Transit Authority, and for traffic devices maintainer-helper trainees in the Traffic Department.

4) The Field Supervisor for the city Department of Personnel reported that through improved information services to every department, through favorable publicity about the Municipal Education Program, and in closer cooperation with the Cooperative Education Office at the Board of Education, he was able to cut down on job closeouts when seniors graduated.³

3. The Role of the Program Coordinators: For the school year 1965-66, there were 5 positions for program coordinators allotted to the Cooperative Office. Two and one-half of these positions were given to program coordinators for the Municipal Cooperative Education Program, and the other two and one-half were program coordinators for cooperative education with private industry. For the municipal program, one program coordinator handled all white and blue collar positions for boys under the Business Careers programs. Positions requiring stenographic and typing skills for white collar girls were handled by another. The Health and Hospital Careers students in both municipal hospitals and health centers, and in the voluntary (private) hospitals were handled by one program coordinator whose allowance under the Ford grant was therefore equivalent to one-half of a position.

The specific duties of these program coordinators may be summarized as follows:

1. Grace Brennan. Report Reviewing Municipal Cooperative Education for the Ford Foundation, June 26, 1963, p. 1. (Both letters on file with the Coop Office).
2. Board of Education, Office of the Superintendent of Schools. Special Circular No. 8, 1966-1967. Topic: Expansion of Cooperative Education Program.
3. Personal Interview with Charles J. Setzer, Field Supervisor for the Cooperative Education and Work Program, city Department of Personnel, 1965.

Pre-Placement Interviews. Screening selected applicants sent from the participating schools who have already had preliminary preparation for job placement. Applicants begin making out their yellow forms No. 919 or "Pledge of Employment" (Working Papers) at this time. Students are checked for clothing, cosmetic overload, hair styling, and general deportment and health. General Personality is also observed with a sensitivity to the needs of performing work for the city. Where these features are clearly substandard for the business world, the applicant is criticized and given one chance to correct the deficiency at a subsequent day. Where personality problems appear sufficiently great to be a major stumbling block, the student is returned to full-time schooling. No data are kept on the percentage of rejects or pre-placement interviews. They varied greatly with the student populations from different schools and the abilities of teacher-coordinators to do an effective job of pre-placement screening.

Pre-placement interviews are held in large numbers at the start of each term and before the summer session at the end of June. However, this function is continuous, for additions and replacements throughout the year.

Visits to Municipal Agencies. The attempt is made to visit every city department employing significant numbers every term, and to reach every work location once each year. Agencies employing large numbers of student-trainees or having larger numbers of trainees at one location - hospitals, parks, welfare centers - are, of course, visited more often. Visits are usually made on afternoons with a teacher-coordinator from a sending school accompanying the program coordinator from the Cooperative Office. Trouble shooting may occur when needed at these visits, but their main function is to reinforce the principles of the importance of training for future Civil Service work. At these visits also, suggestions and new ideas for incorporation at school or for improving the working environment were traded back and forth.

Coordination with Participating Schools. Apart from visits to agencies with one or two accompanying teacher-coordinators, the telephone was by far the most frequently used and immediate source of ongoing contact with the program in each school. In this way, information on any given program or student problem could be rapidly transmitted to the Central Office. Similarly, the Cooperative Office could make emergency needs for replacements immediately known to teacher-coordinators who could then top their stand-by lists of students for replacements or for new placement where new job lines were made available. In addition to contact via telephone, coordinators representing over 30 participating schools for the entire Municipal Cooperative Education Program met together each month at the Board of Education.

Coordination with City Agencies. The telephone was also the chief means for maintaining day to day liaison with city agencies, and was used as a means of arranging replacements, obtaining rapid answers to policy questions, and arranging for visits to the agency. Phone calls were not officially made directly between the schools and the agency supervisors, except for some of the special blue collar and Health Careers programs.

This meant that full responsibility for liaison with the city agencies devolved upon the program coordinators at the Cooperative Education Office. At times, some selected city supervisors (usually Program Coordinators from represented City Departments) come to one of the monthly coordinator's meetings at the Board of Education to meet both teachers and Cooperative Office coordinators at a common Cooperative Education and Work meeting chaired by the Director of Cooperative Education.

Maintaining Files and Related Records. The program coordinators maintained files on all student-trainees. The basic file form on each student was a 7" x 5" manilla envelope. Student's name, school organization, birth date, employing city agency, job classification, starting date, and "A" or "B" work week assignment are listed on the face of the envelope. Copies of rating slips, medical slips, and any other notes or special correspondence relating to the enrollee's work, attendance or health, etc. are placed in the envelope. Referrals to more than one agency or transfers to different agencies in the course of his school career, are recorded on the face of the manilla envelope, and any correspondence relating to these matters kept within, as part of his file. When a student trainee is dropped from the program during the academic year and either returned to full-time schooling or discharged from school, his envelope so states, and is maintained for at least a year in a special file.

In addition, the coordinators maintain roster notebooks of student placement by agency and by job category. They are also responsible for biannual statistical summaries of municipal cooperative enrollments by school, by agency, by job trainee classification, and by sex. These are mimeographed for general distribution by the Cooperative Education Office.

4. Coordinators' Monthly Meetings: Detailed information and requests are generally made to teacher coordinator from the participating schools at a monthly meeting. A mimeographed schedule of coordinators' meetings is distributed to the teacher coordinators from the participating schools at the first meeting each term.

Generally, the Director of Cooperative Education introduced the meeting, and spoke about general policies and problems confronting the coop program. After the general program concern, the specific details concerning each of the specialized programs were turned over to the program coordinators from the Cooperative Office.

Usually the final meeting of the year made special reference to awards, based on special recommendations from supervisors for outstanding service by trainees. Those students were usually called in to the Hall of the Board of Education for a special awards assembly. This special assembly would be attended by officials from the city agencies and the Field Supervisor from the City Department of Personnel, and one or more professional educators of assistant superintendent rank. This could be regarded as the Municipal Cooperative Education Program equivalent of the Straus Award Program, long in effect for cooperative students placed with private industry.

B. Administration of the Program at the High School

1. The Role of the Principal: As the chief executor officer for his school organization, the principal is legally responsible for all school aspects of municipal cooperative education, as he is for all other programs conducted on school premises. Observations made during visits to the major study schools indicated that the principal's role was usually that of support. In almost every case, he was found to be quite favorable to the program, but usually not very knowledgeable about details of its operation. In the main, whether the principal gave the program strong support or not, the on-going administrative interactions of the teacher-coordinator were conducted through the guidance counselors, deans of boys and girls, administrative assistants, and program staff, and chairmen of departments. Administrative assistants and guidance staff were generally found to be much more knowledgeable about municipal cooperative education than the principal. In only one of the schools visited did the principal devote much time to the program. There, the program was very large and a model among all of the vocational guidance programs offered to the school's population of culturally handicapped students.

Because of the pressure of his many duties, supervision of staff, and liaison with parents and community, the principal rarely got to talk to his counterparts in the city departments, the Agency Coordinators; he did not visit the students at work; he did not have time to attend coordinator's conferences or even award assemblies at the Board of Education. In a real sense then, program administration by the Cooperative Education Office by-passed the principal as administrator, and made the teacher-coordinator the liaison officer between the Cooperative Office and the program at the school.

Nonetheless, the principal did intervene on occasion when special problems arose which could not be handled by the coordinator. The principal was also directly involved in program initiation or expansion. Thus, the Superintendent of Schools Special Circular of September 1966, asking for expanded Cooperative Education Programs was addressed to the principals.¹ In response, principals sought out the Director of Cooperative Education. In a sense, the principal's role was always crucial.

2. The Role of the Teacher-Coordinator: The central roles played by the teacher-coordinator at the participating high school can be best considered under the following four headings:

- 1) recruitment and selection of students
- 2) general supervision, guidance and administration of the program
- 3) coordination with the Cooperative Education Office; and
- 4) visits to the city agencies.

1. Board of Education, Office of the Superintendent of Schools. Special Circular No. 8, 1966-1967. Topic: Expansion of Cooperative Education Program. Sept. 13, 1966.

Recruitment and Selection of Students. The typical teacher-coordinator in a high school teaches only one class a day. This leaves him four-fifths of his program for guidance, (three-fifths if his one teaching assignment is a double period coop course.) This gives him extended office time for pupil interviews, selection and guidance.

The coordinator usually uses a combination of methods for attracting potential trainees to his desk. These usually include formal notices to teachers of junior and senior (home room) classes. Colorful posters announcing the program are placed on bulletin boards. The coordinator may visit junior or senior home room classes and appeal directly to the students. He may work through regular guidance counselors in channelling students to apply for the program. He may address assemblies and career guidance sessions or place articles in the school newspaper. A very important source of new applicants is student recommendation. In one school, for example, 42 interviewees applied because friends told them about the program.

The coordinator screens students to see if they meet the criteria for entry into the program as set forth by the central office: socio-economic needs; prevention of potential high school dropout; preferential opportunities for minority group youth; and, presumed ability to produce on the job with regular supervision and training.¹

After the student makes out his preliminary application form, the coordinator checks his Cumulative Record and Folder. If the student still meets the criteria and seems a good prospect, a signed parental consent form must be returned to the coordinator, and the student must complete an Application for Employment Certificate before being sent to the Cooperative Education Office at the Board of Education for his second interview.

The Coordinator's Role in General Supervision, Guidance and Program Administration. One of the key guidance functions of the coordinator is the preparation of the student for his Board of Education interview and for his anticipated job interview at the city agency which will follow. The Cooperative Education Office has standardized procedures for preparing students for placement who have been selected and approved by their schools. Among the most important emphases to be transmitted by the coordinator are those dealing with proper dress and personal appearance for interview, the importance of coming prepared with pen in hand to fill out forms, punctuality, proper travel directions, lunch money, etc. Intensive briefing is given applicants by the teacher-coordinator.²

1. Board of Education, The City of New York. Some Salient Facts About Cooperative Education in New York City - 1963. Issued by the Cooperative Education Office, p. 1.
2. Board of Education of the City of New York. Cooperative Education. To All Coordinators: Placement of New Cooperatives. Issued by the Cooperative Education Office. n.d.

A physical examination certifying his fitness for work is given the student at school prior to the interview at the Cooperative Education Office. A successful interview merits the student a referral slip from the Central Office to his prospective employer, and the opportunity for a job interview and final placement at a city agency. Final acceptance is signified by the city agency's completion of his working papers or Pledge of Employment, as it is officially called. The student is notified as to which of the alternate weeks he will report for training and employment, at which point he returns to the Cooperative Education Office to file his acceptance or rejection as a Civil Service trainee. In cases of rejection, the Office may decide whether to send the applicant to another type of city agency, to a cooperative employer in private industry, or to return him to full-time schooling. An official slip of acceptance or of rejection is routinely sent to the teacher-coordinator at the school by mail.

The following list summarizes the minimum number of forms used in connection with student placement in the program:

<u>Forms</u>	<u>Code Numbers</u>
(1) School's Preliminary Application Form for local recruitment of prospective trainees into the Program	Unnumbered
(2) Parents and Students Consent Slips (two signed copies)	Unnumbered
(3) Application for Employment Certificate	Form 903
(4) Certificate of Physical Fitness	Form 941
(5) Application for Employment	Form 442
(6) Referral Slip from Cooperative Education Office to Prospective Employer	Form 860-SS VG4
(7) Pledge of Employment ("Working Papers")	Form 919
(8) Placement Notice from Cooperative Education Office to School Cooperative-Coordinator for those trainees successfully placed. Or, Rejection Slip, in lieu of above	Unnumbered Unnumbered
(9) Cooperative Education Attendance in Industry, a weekly attendance report slip	Form 462
(10) Supervisor's Rating Slip, based on a 5-point rating scale, and given twice a semester	Form 426

The last two Forms are essential for maintenance of school attendance records and for giving student ratings. In addition, individual schools will use further forms for records check, dean's and guidance counselor's check, notification of home room teachers and parents of placement, medical approval, etc.

Once the student is placed with a city employer, the burden of programming the student for his special school courses falls upon the coordinator. The coordinator must also maintain records on each enrollee and carry out ongoing overall guidance functions throughout the year. This means counselling, trouble shooting, encouraging the students, disciplining them when necessary. In effect, then, the teacher-coordinator assumes many of the dean's functions as well as those of the guidance counsellor for his students. The coordinator must pay particular attention to the student's program to insure that they are able to meet the requirements for graduation on schedule. At times, the teacher-coordinator serves as home room teacher of the cooperative student group for his school.

Coordination with the Cooperative Education Office. While selection, initial screening and referral for placement are the immediate functions of the coordinators at the participating schools, the Cooperative Office has had the final responsibility for approval of students for employment as a centralized function since 1925.¹ Thus, the Cooperative Education Office, which is staffed with regular teachers assigned as Program Coordinators, serves as the pivotal center between the parent schools and the employing city agencies. Teacher-coordinators at the schools had relatively convenient and immediate telephone contact with the program coordinators at the Cooperative Education Office for the rapid implementation of policies, for quick transmitting of information on new applicants, transferees, or to help solve daily problems for given students at work as they arise.

To effect its centralized authority, the Director of Cooperative Education holds monthly coordinators conferences at which the teacher-coordinators and Program Coordinator discuss policies and problems. In this way, policies may be reiterated or modified, materials and forms are rapidly distributed and discussed, problems and views are aired, and novice coordinators briefed.

At one of the coordinator's monthly meetings (March 1964) 12 recommendations for good practice by all were developed:

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1. Grace Brenman. History and Present Status of Cooperative Education in the High Schools of the City of New York, Board of Education, City of New York, Office of Vocational Investigation, Guidance and Placement, 1932.

- (1) Call monthly conferences of the teachers of cooperative English, social studies, and business or secretarial classes to better coordinate the instruction among these three departments.
- (2) Hold regular guidance sessions with students and keep complete anecdotal files. Be thoroughly familiar with students' CRC folders.
- (3) Relate student experiences on-the-job during work weeks as an integral part of instruction during school weeks.
- (4) Arrange visits with supervisors of students through the municipal program coordinator at the Central Office.
- (5) Require students to keep accurate notebooks of their class work, and to develop good habits of writing and work organization. Get them used to expecting a regular schedule of work and writing each school Monday.
- (6) Never use homework as punishment.
- (7) Encourage proper dress and appearance among students.
- (8) ~~Let~~ students know when you will be visiting them on the job.
- (9) Integrate preparation for Civil Service Examinations where feasible in courses. Encourage purchase of the Civil Service Workbook¹ for students.
- (10) Where a student has great difficulty in doing effective school work or home study, encourage him to remain in school for an extra hour of study under supervision on an intermittent basis.
- (11) Develop a strong positive relationship to students so that they may be criticized when they step out of line with established school policy. Encourage them at the same time where permitted latitude allows creative choice.
- (12) Coordinate work with the other school guidance personnel, and maintain a pipeline for identification of other students for the program whenever replacements or additions are needed.

Teacher-coordinators are required to submit monthly reports showing changes in their registers to the Central Office. Coordinators also submit attendance reports to the Bureau of Educational Program Research and Statistics, Statistical Section.

1. Arco Civil Service Handbook. New York: Arco Publications, 1965.

Visits to the City Agencies. Such visits are made only through arrangement and appointment by and in the presence of an accompanying Program Coordinator from the Central Office, which serves as the pivotal administrative center between the schools and the agencies. There may be students from several schools at one location, requiring visits from two or three teacher-coordinators; this might unduly interrupt the working day of the local supervisors who already have the burden of training the student-trainees. Thus, a centrally coordinated visit is seen as accomplishing the work of the school, the agency, and the Cooperative Education Office in reviewing the program, and in solving minor problems with students. At times, visits without Central Office participation are made to some of the more specialized programs where the training given by city supervisors is closely integrated with a particular course of study. Such courses include "industrial science," coordinated with the specialized program in the city parks; electrical and machine shop, coordinated with the work of the transit and traffic maintenance and repair shops; the botanical science course coordinated with the quasi-municipal specialized horticulture program at the Bronx Botanical Gardens; and nursing coordinated with 2-week alternating work cycles of student groups of nurse's aides at a city hospital.

Coordinators file a monthly report called "Report of Supervisory Visits to Industry" with the Cooperative Education Office, summarizing specific jobs performed by students observed, any noteworthy details of their performances, any special problems, and remarks about student attitudes. The coordinator lists the student-trainees seen who come from other schools as well as his own in this report.

In all, 163 visits by coordinators to city agencies were listed for the 1963-1964 school year, including those extra visits for the special programs. Thus, the average coordinator could not anticipate more than three to five accompanied visits per term. It is not likely that the number of visits can be greatly increased with the personnel available at the Cooperative Education Office under the existing centralized administrative arrangement for combined visits by school and program coordinators.

C. Program Administration In Departments Of The City Government

1. The Office of the Field Supervisor: The Office of the Field Supervisor of the City Department of Personnel was the center for all the functions of municipal cooperative education and related activities in the Civil Service area. It was to the municipal government what the Cooperative Education Office was to the Board of Education; the Field Supervisor served in an executive position in municipal government analogous to that of the Director of Cooperative Education for the school system.

The Office of the Field Supervisor was created in 1961 by the Director of Personnel Relations to implement the Municipal Cooperative Education Program. The following functions were performed by the Office of the Field Supervisor:

- (1) Allocating the Cooperative Education "trainee" positions for each city department as approved by the Vacancy Control Board.
- (2) Coordinating the standards for job acceptance and placement, on-the-job training, and on-going supervision and guidance at work through the agency coordinator for each city department.
- (3) Conducting regular on-going visits to city agencies where Cooperative Education "trainees" were employed to maintain an effective program and help in minor trouble shooting.
- (4) Conducting training for supervisors of trainees.
- (5) Conducting Saturday Civil Service preparation courses for trainees to further their potential future careers in Civil Service.
- (6) Providing the necessary liaison and information on the program between agencies, city government, the Cooperative Education Office of the Board of Education, and the public.
- (7) Assisting in identifying and recommendation of outstanding students for citation and awards at the end of each school year.
- (8) Giving special assistance to specialized programs.
- (9) Putting out the periodical bulletins: Municipal Cooperative Education Bulletin for Supervisors of Municipal Cooperative Education Trainees, and Work Study Notes for all cooperative trainees, both high school and college youth in the several programs (formerly called Notes for Municipal Cooperative Education trainees).

More recently, the Field Supervisor's unit has been expanded to carry on the administrative functions required for the College Work-Study Program under the Vocational Education Act of 1963, and the In-Service Neighborhood Youth Corps enrolled in municipal government. Correspondingly, this enlarged administrative unit, as of the latter part of 1966, is now called the Work-Study Program Division of the New York City Department of Personnel.

Supervisory Training Conferences are held during regular working hours on seven consecutive Friday mornings, and last two hours each. The course is repeated three times each year.¹ The Office of the Field Supervisor also

1. Department of Personnel, City of New York. "All Aboard for Training," in: Municipal Cooperative Education Bulletin for Supervisors of Municipal Cooperative Education Trainees, Vol. IV., No. 1, October 1965, p. 1.

issues the Municipal Cooperative Education Bulletin for Supervisors of Municipal Cooperative Education Trainees. Through its articles on guidance and occasional special issues, the publication serves an important training function.

The Office of the Field Supervisor also offers to trainees a Civil Service Preparation Course, held on five consecutive Saturday mornings.¹ Other special courses such as remedial typing are conducted, from time to time by licensed teachers. In a sense, some of these courses, however good, represent competition with the educational functions of the Board of Education, at least with respect to cooperative student-trainees.

2. The Agency Coordinator: An agency coordinator is assigned at every city department having trainees to coordinate the location of trainees, the paperwork, and to work with the Cooperative Education and Work Program Office at City Personnel. Each trainee is processed through the Agency Coordinator's Office or its representative on his way to a specific work location. As an example, the Agency Coordinator for the Department of Finance processed placements to 15 work locations in different parts of the city through his office in the Municipal Building. The Agency Coordinator also had his other regular work, often concerned with overall personnel administration for his City Department. Thus, his Civil Service Title varied among the Departments. Personnel Director was perhaps the most common title. From the Agency Coordinator's office, a senior Civil Service person at the work location, perhaps a unit director or section head would be responsible for all students at his unit. From him, local supervisors would take over the actual physical responsibility of giving students on-the-job training and continuous ongoing supervision. Thus accepted, a job applicant would have his working papers filled out by a responsible work unit supervisor, other personnel forms would be completed, and he would then be turned over to his immediate supervisor for the day-to-day work.

3. The Local Supervisor: The supervisor was responsible for orientation of the newly-placed trainee. This includes insuring his acceptance into the new work-oriented surroundings. At the same time, the trainee was informed of general regulations for city employees with emphasis on promptness, fitness, phoning in when ill, and proper dress, department, and appearance. He was apprised of his annual leave which for each member of a student pair accrued at the rate of 1/2 day per month, and of his annual sick leave which amounted to 6 days per position, or 3 days per trainee.

The central work of the immediate supervisor was on-the-job training. The four principal steps in this procedure are:

¹. Ibid., p. 2.

- (1) explanation of the given operation to be performed after adequate preparation has been made;
- (2) demonstration by the supervisor on how this is properly done;
- (3) guided practice by the student in which he follows the supervisor's demonstration step by step, and finally;
- (4) repetitive practice by the student until he has assimilated the procedure into his repertoire of well practiced control with steadily decreased supervision.

Ancillary to these four steps were explaining the purpose of each job, putting the trainee at ease, having the proper tools and materials on hand, emphasizing the crucial importance of safety at all times, questioning the learner at key points, insisting on proper standards of performance by emphasizing quality rather than speed, answering trainee questions properly, and discussing where he goes from each completed point in the production.

CHAPTER IV

SCHOOL PERFORMANCE OF COOPERATIVE STUDENTS

A major aspect of the evaluation of the Municipal Cooperative Education Program centered about a study of the school performance of the participating students during their 10th, 11th, and 12th school years. Among the particular areas to which attention was directed were the following: success in school subjects, absence and lateness, school character ratings, and supervisors' ratings on the job.

This chapter summarizes the major findings of this study for the 1965 Municipal Cooperative Education group.

A. The Study Population

The total study population consisted of all 11th and 12th year boys and girls enrolled in the Municipal Cooperative Education Program on alternating one-or-two-week schedules. For the Spring of 1964, this total group included 846 students; in 1965, the group included 1,264 students. Because such a large number of students would present a formidable problem in data collection, it was deemed advisable to limit the analysis of school performance of the group to those students who attended high schools with relatively large numbers of municipal cooperative program enrollees, and who graduated in June 1965. The participating schools and the number of students in each school is summarized in Table 2. A total of 361 cooperative students was involved.

A control population, consisting of 370 students enrolled in the general course was selected at random from five of the seven schools from which the cooperative study population was drawn. The number of control students from each school is also indicated in Table 2.

Table 2

Study Population for Analysis of Pupil Performance

<u>School</u>	<u>Cooperative</u>	<u>Control</u>
Benjamin Franklin	58	94
Boys	61	77
Charles E. Hughes	32	—
DeWitt Clinton	14	—
Julia Richman	62	63
Morris	79	91
Seward Park	55	45
Total	361	370

1. Comparison of Cooperative and Control Population: The total group of 361 cooperative students included 241 (66.8%) boys and 120 (33.2%) girls; the sex breakdown in the control group was boys - 239 (64.6%), girls - 131 (35.4%). The average age of the cooperative and control boys was 18 years and 6 months; that of the cooperative and control girls 18 years and 4 months. The ethnic composition and the birthplace of the pupils in the two groups is summarized in Table 3.

Table 3

Ethnic Composition and Birthplace of Study Population
(In Per Cent)

	Cooperative		Control	
	<u>Boys</u>	<u>Girls</u>	<u>Boys</u>	<u>Girls</u>
Ethnic Composition				
Negro	36.7	40.8	49.0	44.3
Puerto Rican	41.7	43.3	37.2	42.7
Other	21.6	15.8	13.4	13.0
Birthplace				
NYC	56.3	56.5	45.8	52.7
Cont. U.S.	10.4	10.9	11.7	5.3
Puerto Rico	31.3	27.2	38.3	33.6
Foreign	2.0	5.4	4.2	8.4

Data were also available for a portion of the students on a series of standardized tests administered prior to the entrance into the cooperative students into the program. These data are summarized in Table 4.

Table 4

Standardized Test Results (Pre-Program) of Study Population

<u>Test</u>	Cooperative				Control			
	Boys		Girls		Boys		Girls	
	<u>N</u>	<u>Score</u>	<u>N</u>	<u>Score</u>	<u>N</u>	<u>Score</u>	<u>N</u>	<u>Score</u>
Pintner Intelligence	170	82.8	91	83.7	180	79.7	104	81.1
Metropolitan Reading	191	6.3	107	6.7	221	6.2	124	6.1
New York Arithmetic	186	5.7	103	6.1	207	5.8	105	5.7
ITED-Composite	90	30	48	22	73	23	101	23

Consideration of the data presented to this point indicates that the cooperative and control groups are rather similar. There is a somewhat greater proportion of Negro boys and a somewhat smaller proportion of Other boys in the control group, but the disparity does not appear to be so great as to vitiate such comparisons between the two groups that might be made. Test differences, at least for those portions of contrasted groups for which data were available, also are not large enough to be considered serious. In general, it would appear that comparisons may safely be drawn between the two groups of pupils.

B. Procedure In Gathering The Data

All data used in the analysis reported below were obtained from the students Cumulative Record Cards and from folders for each student maintained in the central records offices of the participating schools. All data were transferred to a special card designed to provide a record of grades, absences, etc. for each student over a three year period.

C. The Findings

1. School Average in Major Subjects: As a first step in analysis of the obtained data, school averages in major subjects were computed for each pupil. A major subject was defined as one that received one-half credit or Carnegie Unit per school term. This included the mark received in the cooperative course in which the student was on the job full-time on alternate weeks, or an alternate two-week periods.

The relevant data for the cooperative students and the control students are summarized in Table 5.

Table 5

Average of Grades in Major Subjects

<u>Group</u>	<u>N</u>	<u>10th</u> <u>Year</u>	<u>11th</u> <u>Year</u>	<u>12th</u> <u>Year</u>
Coop. Boys	241	69.7	71.6	72.5
Coop. Girls	120	72.9	75.5	76.6
Total	361	70.8	72.9	73.9
Control Boys	239	70.3	68.2	68.6
Control Girls	131	70.6	70.3	71.2
Total	370	70.4	68.9	69.5

In general, the school performance of the cooperative students, as measured by average marks in major subjects, tended to be slightly better than that of their control peers. The divergence between cooperative students and controls tends to become greater as the students spend more time in school. It is difficult to interpret this finding, but an interesting phenomenon appears when the data for the individual schools are considered. When this is done, it becomes quite clear that the difference between average grades of cooperative and control students is much greater in those schools where cooperative students have spent two years in the program, rather than one year in the program. This characteristic difference appears when average grades both of boys and girls are considered.

2. Continuation in School of Non-Graduates: Another interesting sidelight develops when those students who failed to graduate in June 1965 were followed over the next six months. The prognosis for the non-graduating cooperative enrollee for receiving a diploma at the end of the summer was much better than that of the non-graduating control. More than one of every four boys and one of every five girls who failed to graduate from cooperative courses in the business area obtained diplomas after attending summer school, as compared to one of every five control boys and one of every five control girls. A larger proportion of the cooperative students also remained in school to obtain diplomas by January of the following year.

It would appear, then, that the cooperative program had greater holding power, in the face of non-graduation, than the conventional school program. Many students with failing grades in the senior year returned for the summer or for a six-month period in the fall, to complete the full high school course of study.

3. School Attendance: The same municipal cooperative education groups and their controls were studied for differences in absences and lateness for the pre-cooperative or 10th year as compared with the junior and/or senior cooperative years, and for differences in absence and lateness between cooperative and control students for any given year.

Data were available for 342 cooperative and 370 senior control students and are presented in Table 6. The absence and lateness figures for all cooperative students include the sum of all absences and tardiness incurred both at school and on the supervised city job.

Table 6

Total Absence and Lateness

<u>Group</u>	<u>N</u>	<u>A b s e n c e</u>			<u>L a t e n e s s</u>		
		<u>10th</u> <u>Year</u>	<u>11th</u> <u>Year</u>	<u>12th</u> <u>Year</u>	<u>10th</u> <u>Year</u>	<u>11th</u> <u>Year</u>	<u>12th</u> <u>Year</u>
Coop. Boys	230	15.3	11.6	11.7	9.1	6.1	3.5
Coop. Girls	112	12.2	12.0	11.0	5.7	7.6	4.6
Total	342	14.3	11.7	11.5	8.0	6.6	3.9
Control Boys	239	13.2	19.6	19.5	11.0	10.3	9.6
Control Girls	131	16.5	20.0	20.7	6.5	9.1	8.9
Total	370	14.4	19.8	20.4	9.4	9.9	9.4

It is evident that the extent of absence and lateness among students in the Municipal Cooperative Program was considerably less than that of their control peers in the 11th and 12th grades, when cooperative students were actually enrolled in the program. In the 10th grade, prior to entrance into the program, differences between the two groups of students in pattern of absence and lateness, was minimal.

It is of interest, too, to determine what differences appear within the group of cooperative students when absence and lateness in school and on the job are compared. The findings of such a study, using a sample of 142 students enrolled in business career positions in four high schools, are summarized in Table 7. Data were gathered for the spring semester only.

Table 7

Absence and Lateness on School Weeks and Work Weeks

	<u>School Weeks</u>	<u>Work Weeks</u>
Days Absent	4.8	1.0
Per Cent of Attendance	89.1	97.3
Days Late	2.1	0.2

Both absence and lateness were considerably lower during those weeks when the cooperative students were on the job. Absence during school weeks was almost five times as high as absences on the job. One must not assume, however, that school week absence was high. As a matter of fact, the per cent of attendance of the cooperative students (89.1%) was higher than that (87.4%) of the total high school population for the same period.

4. Character Ratings: A similar analysis of cooperative and control student character ratings for the 10th, 11th, and 12th years was also undertaken. To obtain a character rating "score" for each pupil, the four character ratings on the Cumulative Record Card were assigned scale values, as follows:

U (Unsatisfactory)	= 1
N (Needs Improvement)	= 2
S (Satisfactory)	= 3
O (Outstanding)	= 4

An average score for each pupil was determined by assigning the above weights to each rating on the students' record card, and dividing by the number of ratings.

The average scores of the cooperative and control students are summarized in Table 8.

Table 8

Average Character Ratings

	<u>N</u>	<u>10th</u> <u>Year</u>	<u>11th</u> <u>Year</u>	<u>12th</u> <u>Year</u>
Coop Boys	241	2.9	3.0	2.9
Coop Girls	120	3.0	3.0	3.3
Total	361	2.9	3.0	3.0
Control Boys	239	2.9	2.9	2.9
Control Girls	131	2.9	2.9	3.0
Total	370	2.9	2.9	2.9

There were no appreciable differences between the two groups of students at any grade level, with one exception - senior girls in the cooperative program obtained a slightly higher mean character rating than their control peers. Differences between sex groups were also small. It is extremely likely that the teachers who made the ratings tended to depart from a "satisfactory" rating in rare instances.

5. School Performance of Cooperative Students, by Job Category: It is also of interest to compare the performance of the students in the Municipal Cooperative Program who held various types of jobs. This analysis is summarized in Table 9.

Table 9

School Performance of Cooperative Students Holding Various Jobs

Job	N	Average Grades		Absence (School+Job)		Lateness		Character Ratings						
		10th	12th	10th	12th	10th	12th	10th	12th					
		Year	Year	Year	Year	Year	Year	Year	Year					
Boys														
Clerk	156	68.9	70.7	71.2	16.0	15.6	11.4	9.4	7.4	4.2	2.9	3.0	2.9	2.9
Asst. Gardener	24	72.1	74.5	75.7	13.7	13.5	13.0	10.7	6.3	0.4	2.9	3.0	2.9	2.8
Maint. Help.	14	71.2	72.7	74.8	15.7	13.0	13.5	5.6	4.9	1.4	3.1	3.0	3.1	3.2
Dietary Aide	10	69.8	72.7	75.4	12.7	14.5	15.2	9.1	1.9	4.5	3.0	3.0	3.0	3.1
Housing Care.	9	55.4	64.2	49.0	35.0	37.3	63.0	17.1	12.6	4.0	3.1	2.9	3.1	3.3
Lunch Help.	8	72.7	69.7	72.6	12.5	13.6	11.4	3.5	7.6	4.0	3.0	3.0	3.0	2.9
Off. Appl. Oper.	7	71.3	73.6	74.9	12.4	10.1	7.1	5.9	5.0	3.1	3.3	3.1	3.3	3.1
Lab. Helper	5	72.8	77.4	77.9	12.6	8.6	6.8	13.2	1.2	1.0	2.8	3.0	2.8	3.0
Misc.	8	72.4	73.6	75.8	12.3	13.6	13.4	2.8	1.8	3.0	3.2	3.1	3.2	3.1
Girls														
Typist	44	71.9	75.6	77.7	13.6	12.4	10.2	7.5	7.3	5.0	3.0	3.1	3.0	3.2
Nurse Aide	43	74.0	76.3	77.3	9.3	9.8	9.3	3.3	5.0	2.9	3.1	3.1	3.1	3.4
Steno.	13	73.6	75.9	76.2	14.8	17.3	12.0	6.4	12.2	5.3	3.0	3.1	3.0	3.1
Laundry	7	69.2	70.5	73.4	11.9	13.1	13.6	6.1	5.3	3.0	3.0	3.1	3.0	3.2
Key Punch	6	74.8	73.9	76.7	6.8	11.2	12.5	0.5	6.0	4.5	3.2	3.3	3.2	3.1
Clerk	5	71.7	73.3	79.0	15.4	9.0	10.6	2.4	15.2	2.4	3.1	3.0	3.1	3.1
Messenger	2	66.8	68.9	65.6	13.0	18.0	30.0	8.0	6.5	15.5	2.9	3.0	2.9	2.7

No clear trends emerge from this analysis. Perhaps the only striking is the relatively poor performance, in every respect, of the 9 boys serving as Housing Caretakers and of the 2 girls serving as Messengers. In general, variations in performance among the other groups of boys and girls were rather erratic, with the best overall performance being shown by the boys functioning as Office Appliance Operators and Laboratory Helpers, and by the girls serving as Nurses' Aides.

6. School Performance of Cooperative Students, by Municipal Department: A similar analysis, in terms of city department, is presented in Table 10. Because of the large number of departments involved, only those with 10 or more student enrollees are listed by name. The other departments, all of which enrolled very small numbers of pupils, are grouped in a Miscellaneous category.

Table 10

School Performance of Cooperative Students Assigned to Various Departments

Department	N	Average Grades		Absence (School and Job)		Lateness		Character Ratings					
		10th Year	11th Year	10th Year	11th Year	10th Year	11th Year	10th Year	11th Year	12th Year			
Boys													
Welfare	26	70.1	70.8	69.7	13.9	17.1	10.3	9.0	8.6	3.8	3.0	3.1	3.0
Parks	25	72.0	74.2	75.7	14.2	14.4	13.0	10.9	6.0	0.4	2.9	3.0	2.8
Hospitals	23	70.3	71.5	71.9	13.1	16.8	14.3	8.9	4.7	4.5	3.0	3.0	2.9
Police	16	69.9	69.2	71.2	16.6	15.9	11.4	13.8	8.1	4.4	3.0	3.0	2.8
Finance	13	66.6	70.1	69.8	16.2	13.5	11.3	5.2	5.8	7.2	3.1	3.3	2.9
Education	13	73.4	70.4	70.0	12.3	13.4	15.1	3.0	5.3	2.9	3.2	3.3	3.0
Housing	11	58.2	65.1	53.9	30.1	32.0	52.3	16.7	11.4	6.3	2.9	3.0	3.3
Public Works	11	69.1	72.7	74.2	15.3	16.6	12.4	4.8	2.4	3.7	3.0	2.9	2.8
Misc.	103	69.2	72.0	74.3	16.7	14.2	10.7	9.0	6.7	3.1	2.9	3.0	3.0
Girls													
Hospitals	63	73.4	75.5	78.4	9.8	11.2	11.0	4.7	5.4	4.0	3.1	3.1	3.2
Welfare	15	72.1	75.1	77.6	17.0	16.7	12.5	5.6	10.3	3.5	3.2	3.0	3.2
Transit	12	71.6	75.5	77.4	13.7	7.9	9.3	3.8	4.3	3.8	3.1	3.1	3.2
Finance	10	73.7	76.9	77.9	9.5	9.6	9.2	9.4	8.0	4.8	3.1	3.2	3.2
Misc.	20	72.0	73.6	77.5	13.9	15.0	11.3	7.8	13.0	6.6	3.0	3.0	3.1

Here, too, no consistent pattern may be discerned. It is apparent that the school performance of the student enrolled in the Municipal Cooperative Program is not related with assignment to a particular department.

7. Ratings of Cooperative Students by On-the-Job Supervisors: Twice each school term the job supervisors of cooperative students submit rating cards for students assigned to their units. These ratings coincide with the close of marking periods 11 and 111 in the high schools.

Ratings are made on a five-point scale, ranging from 1 - extremely poor to 5 - exceptional, for each of the following factors: courtesy, cooperation and loyalty, initiative, appearance, ability to follow instructions and job performance. The supervisor also has the option of making additional "Remarks."

Because a copy of these rating forms is filed at the Cooperative Education Office, it proved to be possible to analyze the ratings assigned to all of the senior students participating in the Municipal Cooperative Program. These data are summarized in Table 11.

Table 11

Average Ratings Assigned to Students by Job Supervisors

<u>Characteristic</u>	<u>Boys (331)</u>	<u>Girls (356)</u>
Courtesy	3.8	3.9
Appearance	3.8	3.9
Cooperative loyalty	3.9	3.9
Ability to follow instructions	3.7	3.7
Initiative	3.6	3.5
Job Performance	3.7	3.7
Average	3.7	3.7

All these ratings range between average and above average. The distribution of ratings tends to be skewed toward the upper end, reflecting the relatively favorable attitude of the supervisors in the field.

Approximately one-third of the cards submitted for the boys and one-half of those submitted for the girls carried remarks. In those instances where comments were made, the ratio of favorable to unfavorable comments was approximately four to one. Some examples of the comments made by the supervisors are given below:

As of February, 1968, the above characteristic scale was revised to include Absence and Lateness.

"....quite capable and an asset to this division."
"Good worker - willing to learn.... good potentialities...."
"Young man is a credit to the Program."
"Displays interest in his work and willingness to learn."
"Dependable. Works quickly and accurately. Has good work habits."
"....it would be to the advantage of the department to retain his services."
"Excellent employee. Should do well, when he graduates, in the business world."
"An extremely fine worker. We would be happy to have him working for us full time."
"Exceptional worker. This boy is outstanding; deserves every consideration."

"Performance erratic at times - needs supervision - has tendency to dream."
"Immature. Shows little interest. Requires too much supervision."
"Interest level (initiative) doesn't improve."
"Rather depressed - can't seem to draw him out of his shell."
"....work would improve if she had a better command of the English language."
"Slow to grasp names. Has difficulty with telephone messages."
"Limited understanding. No evidence of maturity in a business sense."
"Clumsy, immature; not ready to assume adult responsibilities."
"....'s performance has deteriorated. He is indifferent and fond of loafing."

Favorable remarks ranged from luke warm approbation of just barely acceptable work through recognition of a fair amount of initiative, industry, and willingness to learn all the way to acceptability expressed as a desire for retention as a permanent Civil Service employee following graduation, or to recommendation for special programs. Strong approval of some students led to remarks anticipating success in any undertaking in or out of the business world in general.

Unfavorable remarks ranged from criticisms of immaturity and the need for excessive supervision all the way to references to instability, deteriorated work, absenteeism, and generally unsatisfactory performance. These unfavorable remarks, while tending to be general in nature, referred to more or less specific aspects of job performance, initiative, and various facets of trainees' personalities.

8. Students Who Leave the Program: As soon as work is received at the central Cooperative Education Office that a student was no longer working at the city agency to which he had been assigned, follow-up through teacher-coordinators at the student's school is initiated. This procedure made it possible to maintain complete statistics on students who left the program during the course of the 1964-65 school year.

During that year, a total of 773 eleventh and twelfth grade boys and 500 eleventh and twelfth grade girls were enrolled in the Municipal Cooperative Program. During the course of the year, 213 (27.6%) of the boys, and 80 (16.0%) of the girls, withdrew from the program. It should be noted, however, that only a small proportion of the students who leave the program drop out of school. During the year under consideration, only 45 of the boys and 17 of the girls participating in the program were

school dropouts. These school-leavers constituted 5.8 per cent of the boys and 3.4 per cent of the girls who were enrolled in the program, and 21.1 per cent of the boys and 21.3 per cent of the girls who withdrew from the program. To put this another way, while one in every five of the students who enroll in the Municipal Cooperative Program leave before completion of their course of study, only one out of every twenty becomes a school dropout.

It is of interest to note the reasons given for leaving the program. Of the 213 such boys, 64 (30.0%) resigned at their own request to return to full schooling. The same reason was given by 8 (10.0%) of the 80 girls.

In the case of 39 boys and 8 girls, constituting 18.3 and 10.0 per cent, respectively, of the total students who left the program, termination was effected by the school. Failures in school, excessive absence, and disciplinary problems at school were the main reasons given for such termination. In such instances, students were obligated to vacate their Civil Service positions, following guidelines set down when the program was established.

Participation in the program was terminated by the agency in the case of 45 (21.1%) of the boys and 32 (40.0%) of the girls. As one would expect, such terminations were due to unsatisfactory performance on the job.

The remainder of the pupils left the program for a variety of reasons. Thirteen students moved from New York City; an additional 10 students joined the Armed Forces; 11 others were given medical discharges; and six left school following marriage. All of these students would be classified in the dropout group.

CHAPTER V

ATTITUDES OF SCHOOL PERSONNEL TOWARD THE COOPERATIVE PROGRAM

In large measure, the observations summarized below are based on interviews with school personnel and on visits to the participating classes. While, of necessity, there is a large element of subjectivity in this appraisal, an attempt has been made to be as objective as possible in summarizing data collected in these interviews and visits.

A. Interviews With Principals

The initial visit to each of the major study schools was made to the principal's office with a letter of introduction from the Director of Cooperative Education. The interviewer was accompanied by a program coordinator from the cooperative office and the local teacher-coordinator at the school.

The overall picture given by the remarks made by seven principals in these interviews brought out the following salient points:

(1) Principals were generally favorable to the idea of the program, but they tended to be academically oriented in their thinking about the student body. As a result, preference was given to programs with an academic bent, and the general diploma candidates with their vocational orientation were left somewhat in the background.

(2) The principals did not seem too well informed on the details of the operation of the program. While they usually seemed to have a general concept of the functioning of alternating weeks of work and study, they seemed to be a bit unclear about the mechanisms of operation of the Civil Service apparatus. Without exception, the principals had no direct point of contact with the municipal agencies or their representatives where student-trainees in municipal cooperative education worked half of their school year.

(3) These details were left to an administrative assistant and to the teacher-coordinator for cooperative education, who were well versed in the detailed operation of the Municipal Cooperative Education Program, and commanded the confidence of the principal for the smooth operation of the program. This confidence was an important prop for effective program operation, even where the principal was non-committal about the program's long-range effectiveness, or when he had elected to maintain a very limited rather than an expanding program.

(4) Administrative problems gave some principals reservations about program expansion. These included (a) scheduling additional teachers to handle split "A" and "B" week classes as they increased in size;

(b) difficulties in rescheduling applicants who are not yet placed by opening week of the term, or in returning program leavers to regular classes in mid-semester; (c) opposition by some chairmen to programming for cooperative classes; (d) concern that some students might be missing important schooling when they missed school every other week.

There were other salient concerns mentioned by some of the principals. Most common was the question of what happens upon graduation, when the trainee must vacate his Civil Service job in favor of a new applicant. Because of the Civil Service Examination procedure and long waiting periods they expressed the fear that the program was leaving graduates high and dry in two interviews. A desire to see an improvement in the capacity of city agencies to absorb cooperative graduates in provisional or other placement was evident. Another concern was the possibility that students switched from the academic or commercial track into the general track in order to get the job while still in school.

Some principals praised the program's effect in upgrading skills of students giving the financial help to students and to their families, and guaranteeing graduation of almost all enrollees. Very strong approbation of the work of the Cooperative Education Office was expressed by a majority of the principals. In general, the larger the proportion of disadvantaged students in a given school, the more favorable and appreciative the principal was to Municipal Cooperative Education.

B. Interviews With Teacher-Coordinaors

The teacher-coordinators were well aware of the key roles they played in administration and coordination of the program. While they were aware of some resentment on the part of some fellow teachers for their special status, they did not regard themselves as occupying a privileged sinecure as a means of escaping the usual teaching assignment. They were particularly cognizant of their position as a special school guidance person, although they generally complained that they felt considerable pressure to expand the total cooperative program register at their schools.

Teacher-coordinators were observed to handle their guidance functions with students very effectively.

C. Interviews With Guidance Personnel

In general, these personnel were found to be very favorable to the Municipal Cooperative Education Program. Professionalism in attitude dominated the relationships of guidance counselors to the teacher assigned as cooperative coordinator. The guidance counselors wholeheartedly coordinated their work with that of the teacher-coordinator in the work of counselling students and in helping to identify subjects for recruitment. In short, the teacher-coordinator was always treated as a full-fledged member of the guidance staff.

However, there were some instances where the guidance counselor had reservations about some aspects of the program. For example, at one high school, the director of the guidance program persistently refused to permit a substantial increase in the cooperative program. In particular, no support was offered to the suggestion that the program reach downward into the junior year. The head of guidance instead insisted that juniors were simply too immature to participate meaningfully in such a program.

At one other school, one of the several guidance counselors expressed the opinion that a number of the related courses Business Careers students in while collar office-clerical employment were wholly inadequate. Her impression was that the curriculum for cooperative student-trainees could use some drastic overhauling.

At still another school, the vocational guidance counselor reported that, in sharp contrast to the guidance program for academic students under the direction of the College Advisor, the vocational counselling program primarily for general and commercial diploma candidates, was being "short-changed." It should be noted, however, that Vocational Guidance occupied a much larger sphere at all other visited schools, and was quite helpful in identifying student interests, and in fostering their enrollment in technical and trade schools and institutes, business schools and colleges and hospital training schools after graduation.

Deans and school psychologists were all most favorable to the program, largely because part of their work was shared by the coordinator through the latter's guidance and disciplining functions. Deans in particular stated that cooperative enrollees showed a remarkable decrease in school infractions that brought them into confrontation in their offices, following entry into the program.

D. Interviews With Department Chairmen

Chairmen varied more widely in their attitudes toward the program than guidance personnel. Of 20 formal interviews conducted with departmental chairmen in the 7 schools visited, only 11 (55%) were rated as favorable to the program in terms of overall view. Another 5 (25%) were found to be essentially neutral or uncommitted, and 4 (20%) were noted as decidedly unfavorable to the Municipal Cooperative Education Program.

To minimize subjectivity in reaching these judgments about chairmen's overall attitudes towards the program, criteria for ratings were based on their statements concerning what benefits the program had for students, and for how broad a range of students. These decisions for classifying chairmen's statements was also based on their attitudes towards having personnel in their departments teach classes in the program, on their flexibility in permitting these teachers to implement curricular change, and on the number and kinds of problems they saw in the program and their recommendations for improvement.

Chairmen rated as favorable to the program were not merely positive to the program in some vague general way, but saw particular positive benefits both financially and in learning opportunities to the students. Such chairmen saw no unresolvable problems in the program's operation, minimized administrative difficulties, and gave their teachers a rather free reign in handling their classes.

Chairmen rated as unfavorable may have paid lip service to the program, but always were quick to point out how few students Municipal Cooperative Education could reach and benefit. These attitudes may have resulted from the Chairmen's obstruction to recruitment of students in their own schools for this program. Constant reference was also made to the extremely limited capabilities of the students. In addition, they saw many problems in program operation, with heavy emphasis on the administrative ones.

The present Acting Director of New York City's Cooperative Education Program, Mrs. Renee C. Sherline is a former Chairman of Secretarial Studies. As a result of her personal contacts with former colleagues more Chairmen are adopting positive attitudes toward the program. Much time and effort are being devoted to improving and strengthening relationships between schools and headquarters staff.

The overriding sense conveyed by the hostile chairman was that he had "lost" a good teacher to a "full" program of "regular" classes, even if he was doing a "good job" with his cooperative subject class.

Where the chairman knew very little about the program and, while not hostile, allowed the coop teacher to run the group, and had few or no specific problems to refer to or no suggested improvements to make in program operation, he was rated as essentially neutral. For the most part, he had not informed himself deeply enough about the program to be concerned, and his interests lay in other areas -- usually academic programs.

E. Interviews With Teachers of Cooperative Classes

These interviews were conducted on an informal basis. Some meetings were three-way discussions with the teacher-coordinator who always made the introductions sitting in. Some of these meetings were conducted in the teacher's cafeteria over cups of coffee. More typically, informal meetings were combined with visits to cooperative classes in action.

After teachers were assured these survey observations were in no way supervision reports, they spoke rather freely. They emphasized references to the subject matter assigned to them to be taught. They discussed problems in teaching students on alternate weeks, knowledge retention, homework completion and scheduling, teaching the disadvantaged student, etc.

In general, the informal interviews held with teachers of cooperative classes, were replete with anecdotal details about student performance and class course routines. Details were given about the much

more mature attitudes and seriousness toward school work of the students, about their limitations in verbal and cognitive knowledge skills, about their poor retention of knowledge over the 9-day work weeks gap, about their taking an extra day (Monday) to get back into the routines of school work, about difficulties in getting them to complete homework and bring in assignments, about their better class attendance, attentiveness and behavior as compared to other non-program general students, etc.

Teachers of cooperative classes tended to fall into two categories: those who looked upon working with general track students as a required and not too popular task, and those who approached their specially employed students with creative energy, even zeal. The latter category who constituted a majority, tended to remain with the cooperative courses over a period of several years, and did not rotate back to teaching classes of mostly academic track students.

Although extremely limited in materials and equipment, attempts at innovative types of class experiences were observed and discussed with these teachers. Some were conducted with full departmental approval; others were bootlegged into the classroom. Some of these approaches may be of interest.

In a discussion on means of implementing innovation into instructional process to upgrade the concurrent cooperative course in nursing care problems for Health Careers student-trainees, the teachers stressed that the keynote to success was to be found in individualization of instruction to meet the wide variation in background and interests among the subgroups of students found within the single class.

At one high school, a non-graded core type class of overage dropout-returnees used individual study materials of a self-instructional nature in a major subject.

Contingency programming, in which individual coop students completed assigned tasks or "contracts," was observed at another school. The work was superbly organized. After initial orientation, girls prepared workbooks and received "Task Number" assignments to work individually on various types of business. Such individualized work occupied the great bulk of the term, and each girl's progress was registered on an allocation chart kept before the entire class. Motivation for this group through the individualized "contract" or contingency approach appeared to be very high.

In another instance the teacher of a double period metals shop class assigned each student his own shop project, so that students worked mostly individually at metal cutting and drilling, sawing, lathe or other machines, or at the kiln. This class was observed at work, and appeared to be an effective, efficient, and highly motivated school group.

It must be pointed out, however, that various conditions mitigated against any widespread daily use of individually prescribed instruction, or even small group instruction on an extensive or daily basis for the great bulk of observed classes. These conditions included standard curricular requirements for major subject courses, lack of available materials, limitations in teacher time or talent or available teacher strategies within the physical setup, requirements for developmental lesson

plans, and various other factors. This was reported repeatedly by the teachers interviewed when the subject of individualization was raised.

A modified team teaching approach was observed in only one school.

CHAPTER VI

ATTITUDE OF DEPARTMENT SUPERVISORS TOWARD COOPERATIVE EDUCATION PROGRAM

In order to assess the attitudes of supervisors in the City Departments toward Cooperative pupils and toward the program, two questionnaire studies were conducted, the first in May 1964 and the second in May 1965.

A. Surveys

1. The May 1964 Survey: A two page questionnaire was sent to 128 Supervisors in 54 City Departments representing all the municipal locations participating in the program.

Routine introductory questions dealt with the number of jobs in each Department filled by Cooperative trainees, job titles, and personnel responsible for supervision. The main section of the questionnaire contained two main types of questions: (1) five-point rating scale items asking respondents to rate trainees on attendance record, job performance, appearance, personality characteristics, and need for on-the-job training; and (2) open-end questions assessing major job strengths and deficiencies shown by trainees, and asking for specific suggestions for improvement of training. Terminal questions dealt with the possibility of retaining students after graduation and overall estimates of the program.

Of the 128 questionnaires that were mailed to City Departments, 105 (82.0%) were returned. Because the questionnaire was anonymous both with respect to name and Department, it was not possible to determine which of the locations within the 54 City Departments failed to return completed questionnaires.

When analysis of the responses was undertaken, it soon became evident that the questionnaire had several major shortcomings. Although the questionnaire supposedly was to be completed by the agency Coordinator, there was no way of determining whether he had done so, or had instructed one of his subordinates to provide the data requested. Moreover, it was noted that approximately three out of four respondents (74.0%) stated that direct supervision of the on-the-job training and work of the student-trainees was delegated to their subordinates in the chain of command. As a matter of fact, the 105 returns listed 116 individuals in the 54 Departments that exercised immediate supervision of the students. It would appear, then, that many of the questions calling for rating of student performance were answered by individuals relatively far removed from direct supervision of the trainees, while other questions, calling for an evaluation of City Department-Board of Education coordination were answered by individuals who did not participate in administration of the program.

Although all of the returns to the questionnaire were analyzed, it was felt that a detailed presentation of the findings, in the light of the limitations noted above, would be unwise. Accordingly, plans were made to repeat the questionnaire study in the following school year, making certain that the design of the instrument would eliminate the weaknesses that appeared in the 1964 survey.

2. The May 1965 Survey: The instrument used in the 1965 survey really comprised two questionnaires. The first was directed to immediate supervisors of cooperative students on the job locations; the second was directed to the agency coordinator administratively in charge of the work study program for an entire City Department. The questionnaires were developed cooperatively by the Bureau of Educational Program Research and Statistics and the Office of Personnel Relations of the Department of Personnel, and field tested at the Finance Department.

For the 1965 survey, a cover letter was prepared and sent, with a packet of questionnaires, to the agency coordinator at each City Department. He was instructed to complete his own Coordinator's Questionnaire, and to distribute the Supervisor's Questionnaire to those local supervisors of student-trainees within his agency.

In large measure, the 1965 Supervisor's Questionnaire paralleled that used in 1964. Two new items of information were requested: (1) degree of assistance supervisors received from other agencies and (2) effectiveness of training programs and printed materials as an aid to supervision.

The questionnaire to agency coordinators also derived from that used in the 1964 survey. More emphasis was placed, however, on aspects of coordination as seen through the eyes of an agency coordinator. In addition, the request for suggestions concerning improvement of the program was broadened to include reference to training of local supervisors in dealing with high school trainees.

Packets of questionnaires were sent to 66 City Departments. Returns were received from 53 (80.3%). A total of 47 (71.2%) of the 66 agency coordinators returned completed questionnaires. In addition, 310 completed Supervisor's Questionnaires were returned.

The number of student-trainees that were supervised by the persons returning Supervisor's Questionnaires totalled 1,056; this represents 83.5 per cent of the 1,264 such trainees enrolled in the program in the Spring of 1965.

B. The Findings:

1. Participating Students: The total number of cooperative student-trainees reported by the 310 supervisors returning questionnaires was 1,056. Those agencies having 10 or more positions allocated to student pairs (20 or more students) are listed in Table 12.

Table 12

Agencies Employing 10 or More Trainee Pairs

<u>Agency</u>	<u>No. of Trainees</u>
Department of Hospitals	241
Welfare Department	116
Finance Department	79
Transit Authority	46
Bronx Botanical Garden	46
Department of Health	41
Police Department	40
School Lunch Program - JHS	38
Department of Public Works	29
Board of Education	28
Department of Highways	27
Housing and Redevelopment Board	23
Housing Authority	20
Department of Parks	20
Department of Purchase	20
Department of Sanitation	20
<hr/>	
Total	804

These 16 agencies (30.2% of the 53 replying agencies) employed 802 (63.4%) of the 1,264 student trainees; the bulk of those in the program.

The average number of students employed per job location for all replying supervisors was 3.4 (something under 2 positions per location); the average number for the 16 agencies in Table 1 was slightly higher, 3.7. In this latter group some supervisors were in charge of very large groups of students. For example, one general foreman in the Parks Department was in charge of 10 pairs of assistant gardener trainees, while the horticulturist-foreman at the Bronx Botanical Garden was in charge of 23 pairs of horticulture-trainees. This larger number of student-trainees per supervisor was characteristic of "blue collar" types of employment and certain job categories in the hospital aid program (nurse's aide, dietary aide, and laundry worker trainee). This was in direct contrast with the one, two or three pairs of office-clerical student trainees found working under a "white collar" supervisor in a typical office location.

2. Job Titles of Student Trainees: Table 13 lists the numbers of trainees working in 18 job categories. Students in white collar office positions constituted the bulk of the reported employment.

Table 13

Distribution of Student Trainees by Job Titles

<u>Category</u>	<u>Number</u>
"White Collar"	
Clerk	351
Typist	162
Stenotypist	110
Engineering Aide	49
Office Appliance Operator	33
Key Punch Operator	24
Messenger	23
Assistant Stockboy	3
Switchboard Receptionist	2
	—
Sub-Total	757 (74.2%)
"Blue Collar"	
Assistant Gardener	20
Shop Maintenance-helper	13
Buildings and Grounds Maintainer	12
	—
Sub-Total	45 (4.4%)
Hospital and Dietary Aides	
Nurses' Aide	68
Dietary Aide	58
School Lunch Helper	36
Public Health Aide	20
Laundry Aide	18
Laboratory Aide	10
	—
Sub-Total	212 (20.8%)
Unclassified	6 (0.6%)
Total	1,020 (100.0%)

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The clerk trainee category was the largest employed group found in the program. Most clerical trainees were boys. Typists and stenographers, most of whom were girls, comprised the second largest group. Boys performed the work of engineering aides, office appliance operators and stockmen. Positions as key punch operators and switchboard receptionists were held by girls. Altogether, "white collar" workers accounted for almost three-fourths of the 1,020 reported positions for the survey.

"Blue collar" positions accounted for only 4.4 per cent of the enrollees, and were all boys. Although these figures are incomplete, owing to incompleteness of returns from some supervisors, this was by far the smallest group of students in the program.

The hospital and dietary aide positions accounted for 20.8 per cent of the trainees. Hospital central supply laundry workers and dietary workers in the school lunch program were included in this category.

3. Supervision of Student Trainees: A total of 310 immediate supervisors of student-trainees gave their Civil Service job titles; 53 Civil Service categories were cited.

As the greatest number of students were employed as clerks, it is not surprising that the greatest number of supervisors (169) held clerical and office administrative titles. Of the reporting supervisors, 62 (20%) had lower echelon clerical positions; an approximately equal number (56 or 16.1%) held specialized supervisory positions such as heads or assistant heads of departments or sections. Administrative assistants constituted the largest single job title in the program, accounting for 70 (22.6%) of reporting supervisors. In all, white collar supervisors totalled 225 (72.6%), the bulk of those in charge of cooperative trainees. This correlates very closely with the finding that 74.2 per cent of trainees reported on, held white collar positions.

Only 6 job titles were used to account for supervisors of blue collar trainees. Blue collar students constituted a mere 4.4 per cent of the program; supervisors of these blue collar students were found to number only 6.5 per cent of the supervisors in the program. The job titles of those supervisors also distinguished itself sharply from those held by supervisors of white collar positions in offices as did their duties. The blue collar supervisors were laborer-maintainers, inspectors, superintendents of buildings and grounds, shop and parks foremen, etc.

The number of supervisors of the hospital aide, health and related programs also correlated closely in number with their student charges on the job. Hospital, public health and dietary aides, laundry workers, and school lunch helpers made up approximately one-fifth of the trainees in the program. Supervisors of these employees numbered 62 out of 310 reporting, again one-fifth of the supervisory group. Twenty-two of these supervisors were Registered Nurses in various supervisory roles, 25 were lunch room managers in junior high schools, and the remaining 15 occupied various posts as supervisors of medical records, medical library, hospital supplies, and hospital laundry. A very small subgroup of highly skilled persons were included in this last group - a bacteriologist, a chemist, an electro-encephalography technician, and a psychiatrist.

Two supervisors were not in Civil Service. These were in the New York Public Library and in the American Museum of Natural History, both operating as quasi-municipal agencies outside the framework of Civil Service.

4. On-the-job Training Given to the Students: Two questions asked the supervisors to describe the kind and amount of on-the-job training given to the student-trainee. Table 14 indicates the nature of the training that was given.

Table 14

Kinds of Training Given to Student Trainees

<u>Kinds of Training</u>	<u>Supervisors</u> <u>No.</u>	<u>Reporting</u> <u>Per Cent</u>	<u>Agency Coord.</u> <u>No.</u>	<u>Reporting</u> <u>Per Cent</u>
Orientation to the job	273	87.8	24	51.1
Instruction on tasks	290	93.2	45	95.7
Work-skills improvement	155	49.8	13	27.7
Work-safety instruction	110	35.4	6	12.8
Personal guidance	146	46.9	36	76.6
Miscellaneous	13	4.2	1	2.1
	-----	-----	-----	-----
Total	987		125	

As might be expected, specific instruction on the tasks to be performed and orientation to the job were the two types of on-the-job training most frequently cited by supervisors. Approximately one-half of this group of respondents also reported that specific training to improve work skills was needed; approximately one-third cited the need for training in safety on the job.

When the responses of agency coordinators were examined, it was noted that approximately three-fourths of this group of respondents indicated that they provided personal guidance to the trainees. Evidently the agency coordinator, who interviewed trainees initially and placed them in specific jobs, served as a source of guidance in managing such personal problems as they may have encountered in their work. It is difficult to see, however, why so large a proportion of this group, 95.7 per cent, reported that they also provided instruction on the specific tasks to be performed.

The supervisors were also asked to indicate the amount of on-the-job training required by student trainees as compared to permanent Civil Service Employees. Their responses are summarized in Table 15.

Table 15

Amount of On-The-Job Training Needed by Student Trainees as Compared to Permanent Civil Service Appointees

<u>Training Needed</u>	<u>Supervisors Reporting</u>	
	<u>No.</u>	<u>Per Cent</u>
Very much more	71	22.9
Somewhat more	122	39.4
No more	108	34.8
No response	9	2.9
	-----	-----
Total	310	100.0

Approximately one-third (34.8%) of the respondents felt that the student-trainees constituted no more of a burden with respect to on-the-job training than permanent appointees to Civil Service positions. The remainder of the respondents, with the exception of a few (2.9%) did not respond to the question, felt that the trainees needed "somewhat more" or "very much more" training. Approximately 2 of every 3 supervisors, then, felt that the program imposed a greater burden upon them.

5. Ratings of Personal and Work Characteristics of Trainees: Supervisors were asked to rate ten personal and work characteristics of the trainees under their charge. In order to minimize the amount of labor involved in rating each trainee individually, the supervisor was requested to indicate how many of the trainees he supervised would be considered (a) very good to excellent, (b) satisfactory, or (c) unsatisfactory in each of the ten characteristics. The obtained results of this rating procedure are summarized in Table 16. A total of 1,010 students were rated.

Table 16

Supervisors' Ratings of Personal and Work Characteristics of Trainees

<u>Characteristics</u>	<u>V.G. to Excell.</u>		<u>Satisfac.</u>		<u>Unsatisfac.</u>		<u>NoResponse</u>	
	<u>No.</u>	<u>PerCent</u>	<u>No.</u>	<u>PerCent</u>	<u>No.</u>	<u>PerCent</u>	<u>No.</u>	<u>PerCent</u>
A. Relations with other trainees	560	55.4	388	38.4	10	1.0	52	5.1
B. Relation with Civil Service Employees	584	57.8	409	40.5	16	1.6	1	0.1
C. Ability to follow Instructions	388	38.4	560	55.4	59	5.8	3	0.3
D. Job Performance	344	34.1	591	58.5	69	6.8	6	0.6
E. Initiative; self-reliance	285	28.2	598	59.2	116	11.5	11	1.1
F. Dependability; cooperation	434	43.0	416	41.2	144	14.3	16	1.6
G. Courtesy	619	61.2	357	35.3	29	2.9	5	0.5
H. Personal Appearance; Hygiene	542	53.7	430	42.6	16	1.6	22	2.2
I. Punctuality	478	47.3	450	44.6	30	7.9	2	0.2
J. Attendance	351	34.8	529	52.4	103	10.2	27	2.7
Total	4,585	45.4	4,728	46.8	642	6.4	145	1.4

More than one-half of the trainees were rated as "very good to excellent" in the following characteristics: courtesy (61.2%), relations with Civil Service Employees (57.8%), relations with other trainees (55.4%), and personal appearance and hygiene (53.7%).

The items in which the number of unsatisfactory ratings were relatively high included the following: dependability and cooperation (14.3%), initiative and self-reliance (11.5%), and attendance (10.2%).

In general, the ratings are indicative of a high level of functioning on the part of the trainee group. Of the 10,100 ratings assigned, only 42 (6.4%) were "unsatisfactory," while 9,313 (92.2%) were "satisfactory" or "very good to excellent."

6. Weaknesses in Skills Shown by Student Trainees: In the light of the very favorable ratings assigned to the student trainees, it is of interest to note their major weaknesses as identified by supervisors and agency coordinators. These data are summarized in Table 17.

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Table 17

Major Weaknesses in Skills of Student Trainees as Reported by Supervisors and Agency Coordinators

<u>Weaknesses</u>	<u>Supervisor</u>	<u>Coordinator</u>
A. General Basic Skills		
Lack of experience	18	2
Lack of basic work skills	13	3
Lack of basic education	4	
Sub-Total	35	5
B. Specific Communication Skills		
Poor spelling	43	8
Poor English	30	5
Poor handwriting	10	2
Poor reading	9	3
Poor speech	9	
Sub-Total	101	18
C. Specific Office Skills		
Poor typing (format)	28	2
Errors in practice (esp. filing)	26	6
Poor telephone procedure	12	
Poor stenotyping	8	
Miscellaneous	5	2
Sub-Total	79	10
D. General Work Characteristics		
Slowness to learn	13	2
Lack of accuracy	8	5
Miscellaneous	15	13
Sub-Total	36	20
E. Subject Weaknesses		
Arithmetic	9	3
Other	2	
Sub-Total	11	3
Total	266	64
No Weakness	80	9
No Response	47	7

Of the 310 supervisors from whom responses were obtained, 80 (25.8%) reported that they had observed "No weaknesses" or "None." An additional 47 (15.2%) did not reply to the question. The 184 supervisors that did report inadequacies cited a total of 266 weaknesses. More than one-third (101-38.0%) of the weaknesses noted by the supervisors were in the area of communication skills, with poor spelling and poor English being referred to most frequently. The next most frequently mentioned area of weakness was that of office skills, which was cited in 79 instances. In particular, the supervisors referred to poor typing, particularly in letter format, and poor office procedure, especially in filing.

In general, criticisms advanced by the agency coordinators paralleled those made by the supervisors. The coordinators did tend to note particular weaknesses that were not mentioned by supervisors, generally in the work characteristics shown by the trainee. It would appear that only the most serious limitations came to the attention of the agency coordinator.

It should be noted, too, that some of the criticisms advanced by the supervisors and coordinators were not well taken. One can hardly complain that a student-trainee showed lack of experience, yet this was cited as a weakness by 20 of the respondents.

In general, the impression one gathers from these data is that student performance was highly satisfactory.

7. Deficiencies in Character and Personality Traits Shown by Student Trainees: In addition to weaknesses in skills, information was sought concerning deficiencies in character and personality traits shown by the student trainees. This data was gathered only from the immediate supervisors, since it was felt that agency coordinators did not work closely enough with the students to evaluate them in these areas.

The responses of the supervisors are summarized in Table 18.

Table 18
Major Deficiencies in Character and Personality Traits of
Student Trainees as Reported by Supervisors

<u>Deficiency</u>	<u>Number of Supervisors Reporting</u>
Lack of maturity	25
Lack of responsibility	23
Lack of interest	17
Lack of initiative	16
Shyness	16
Poor attendance and punctuality	11
Resentfulness to criticism	8
Inability to follow instructions	7
Lack of confidence	7
Need for constant supervision	6
Miscellaneous	23
Total	159
No deficiencies noted	135
No response	57

Of the 310 supervisors to whom questionnaires were sent, 57 (18.4%) did not reply. Of the remaining 253 supervisors, 135 (53.4%) indicated that they found no deficiencies that merited reporting; the other 118 supervisors cited a total of 159 weaknesses in personality and character traits.

Lack of maturity and associated lack of responsibility were cited most frequently in deficiencies, followed by lack of interest, lack of initiative, and shyness. It must be emphasized, however, that these weaknesses were characteristic of a very small proportion of the total group of student-trainees. Thus, lack of maturity, the most frequently noted deficiency, was cited by only 25 of the supervisors, less than 10 per cent of those returning completed questionnaires, or 8.1 per cent of the total group to whom the questionnaire was sent.

8. Suggestions for Improving the Training Program for Cooperative Students:
Two questions, directed to both supervisors and agency coordinators, sought to obtain their suggestions concerning needed improvements in the training program for cooperative students. The first of these two questions asked for suggestions with regard to the program for students prior to their placement as trainees. Responses of the supervisors and agency coordinators are summarized in Table 19.

Table 19

Suggestions for Improvement of Training Program Prior to Placement of Students as Trainees, as Reported by Supervisors and Agency Coordinators

Suggestions		Number Making Suggestions	
		Supervisors	Coordinators
A.	Need for improvement in specific office skills		
	1. Greater stress on office practice	38	11
	2. Greater stress on typing and stenotyping	34	6
	3. Greater stress on telephone skills	9	2
	4. Greater stress on business machines, appliances	8	3
	5. Greater stress on business mathematics	8	6
	6. Miscellaneous	5	
B.	Need for improvement in work skills		
	1. Greater stress on general job orientation	33	4
	2. Greater stress on good work habits	29	14
	3. Better orientation to specify agency	14	4
	4. Miscellaneous	16	
C.	Need for improvement in communication skills		
	1. Greater stress on spelling	20	7
	2. Greater stress on grammar, vocabulary, etc.	20	10
	3. Improve reading comprehension	14	2
	4. Greater stress on penmanship	10	3
	5. Miscellaneous	7	2
D.	Other suggestions	25	6
E.	No improvement needed	31	1
F.	No response	74	15

Of the 310 supervisors to whom questionnaires were sent, 74 (23.9%) did not respond to this question. Of the 236 who did respond, 31 (13.1%) felt that no improvement in the preplacement program was needed; the remaining 205 respondents cited 290 needs.

As one would imagine, the suggestions for improving training prior to placement made by the supervisors closely paralleled the specific weaknesses they had cited. By far the major complaint noted centered about the need for greater stress on the improvement of specific office skills. Of the 290 suggestions that were made 102 (35.2%) were in this category. An additional 92 suggestions, 31.7 per cent of the total, cited needs in the area of work skills, with particular emphasis on general orientation to the world of work. Need for improvement of communication skills was mentioned 71 times; this represented 24.5 per cent of the suggestions that were made.

The responses of the coordinators were very similar to those made by the supervisors. The questionnaire was sent to 48 coordinators; replies were received from 33 (68.8%). Of this group of 33, one person felt that no improvement was necessary; the remaining 32 advanced 83 suggestions.

Here, too, the suggestions stressed need for improvement in specific office skills (28-33.7%), work skills (22-26.5%), and communication skills (24-28.9%).

The second question concerning possible improvements in the program asked the respondents to suggest needed changes in training while the students were functioning on the job. The response of the supervisors and agency coordinators are summarized in Table 20.

Table 20

Suggestions for Improvement of Training Program During Period of Cooperative Placement, as Reported by Supervisors and Agency Coordinators

<u>Suggestion</u>	<u>Number Making Suggestions Supervisors</u>	<u>Coordinators</u>
A. Need for greater coordination		
1. Greater stress on coordination	31	4
2. Provide for review of work week while in school	9	3
3. Miscellaneous	9	3
B. Provide additional training in specific skills	51	12
C. Provide additional training in general work skills	36	6
D. Provide additional training in communication skills	24	20
E. Miscellaneous	26	10
F. No improvement needed	39	4
G. No response	135	19

A total of 135 (43.5%) of the 310 supervisors failed to respond to this question. Of the 175 who did respond, 39 (22.3%) indicated that no improvement was needed. Evidently, the supervisors were much more prone to criticize preplacement training than training that was carried on during the placement period.

For the most part, the supervisors cited the same deficiencies in response to both questions - additional training in specific office skills, in general work skills, and in communication skills was cited as needed during the placement period as well as the preplacement period. However, one additional category of need was cited; in 49 instances, specific mention was made of the need for greater coordination during the placement period. In general, this need was expressed in general terms; in nine instances, the supervisors called for specific review of the details of the work accomplished on the job in the following school weeks.

Review of the responses to this question by the agency coordinators left much the same impression. A total of 29 (60.4%) of the 48 coordinators submitted answers; 4 (14.3%) of the respondents felt no improvement was necessary. The pattern of responses paralleled that of the supervisors in adding need for greater coordination to other areas in additional training was needed during the placement period.

In general, the responses of the supervisors and coordinators reinforce the general picture of competent student functioning that emerged when the respondents were asked to cite pupil weaknesses. Both the citations of weaknesses and the calls for improvement represent inadequate performance on the part of a small proportion of the cooperative trainees.

9. The Training Program for Supervisors of Trainees and the "Cooperative Education Bulletin:" In the fall of 1964, the Director of the City Department of Personnel issued a circular calling upon agency coordinators to nominate supervisors to participate in a series of 7 sessions of a "special supervisory training program."¹ This special training course was designed to help supervisors with techniques and in solving problems that may arise in working with student-trainees. The course was repeated in the spring, fall, and winter of 1965.²

Forty-five supervisors, 14.5 per cent of the total, attended the supervisory training program by the end of the first year of its operation. Of these 45 who had attended, 43 (95.6%) considered the program helped them in their supervision of trainees. Twenty-one (43.8%) of the 48 agencies were represented in the program at the date of this survey. While the number of attending supervisors was modest, nearly half of the participating agencies had been represented in the supervisors' training program by the end of its first year of operation. Of the 21 agency coordinators who had nominated supervisors for the training program, 19 (90.5%) reported that it had been helpful to these supervisors.

1. Department of Personnel, Theodore H. Lang, Director. Unnumbered Circular, September 1964.
2. Municipal Cooperative Education Bulletin for Supervisors of Municipal Cooperative Education Trainees. III (4). June 1965; IV (1). p. 1, Oct. 1965.

Only 5 (10.4%) of the coordinators had suggestions for improvement of this supervisory training program. Those coordinators who commented called for more meetings between teachers and supervisors to compare student progress on performance and attitudes.

It would thus appear that where exposure was effected, the supervisory training program was favorably received.

The Cooperative Education Bulletin for Supervisors of Municipal Cooperative Education Trainees, a typewritten, offset press, in-house organ that the Director's Office of the City Department of Personnel issues, was sent to agency coordinators for distribution to the supervisors where cooperative student-trainees are employed. The Bulletin was designed to keep the recipients abreast of the latest developments in the municipal work-study program. These fact sheets report on program growth in various departments; report on special new programs gives hints on how supervisors can best work with trainees; announces supervisors' training courses, Civil Service exam preparation and other additional training courses for enrolled students; reports on follow-up of successful graduates; etc.

The line supervisors and the coordinators were asked whether the Cooperative Education Bulletin had been useful. Their responses are summarized in Table 21.

Table 21

Reactions of Supervisors and Agency Coordinators to
"Cooperative Education Bulletin"

Rating of "Usefulness"	Supervisors		Coordinators	
	No.	Per Cent	No.	Per Cent
Great	44	14.2	14	29.2
Moderate	154	49.7	30	62.5
Little or None	58	18.7	3	6.3
Not Received	31	10.0	-	-
No Response	23	7.4	1	2.1
	-----	-----	-----	-----
Total	310	100.0	48	100.0

It is evident that attitude of the coordinators was much more favorable than that of the supervisors. Of the 48 coordinators, 44 (91.7%) found the Bulletin of value, as compared to 198 (63.9%) of the supervisors.

Only 6 of the coordinators offered suggestions for improvement of the Bulletin. These generally dealt with problems of distribution and format.

10. Attitude to Retention of Student Trainees: Supervisors and coordinators were asked the theoretical question of how many (if any) of their currently working cooperative students they would like to retain in their departments in Civil Service lines as either provisional or permanent workers after the student graduated. Analysis of the responses of the supervisors indicated that, given the opportunity, they would retain 647 (61.3%) of the student trainees that they supervised; the coordinators, however, indicated that they would retain 266 (35.4%) of the student trainees under their jurisdiction.

The difference in attitude of coordinators and supervisors may lie, perhaps, in the degree to which the two groups come into direct contact with the trainees. Coordinators did not work directly with students as did the immediate supervisors. They would, therefore, be expected to know few of the trainees personally. In contrast, the immediate supervisors not only knew well the relatively small number of coops employed at any typical work unit, but they had put a considerable investment in time and effort in on-the-job training and personal guidance to each of their charges. Many supervisors have expressed opinions on interviews that they were loathe to make this investment in manpower training and talent, and then see it drift away outside the agency at graduation time to private industry or to state and federal Civil Service or to the military. This would help prompt many supervisors to select at least one or two coops from their work force to fill the theoretical vacancy by this question.

As one would expect, because of the varying number of student trainees in each agency, the number of trainees that supervisors indicated that they would wish to retain varied considerably from agency to agency. Approximately 90 per cent of the supervisors indicated that they would retain one or more of their trainees; only 10 per cent indicated that they would not ask for the retention of at least one cooperative student. Here, however, the coordinators were more favorably disposed than supervisors, in that only 8.5 per cent indicated that they would not retain any cooperative students, if given the choice to do so.

11. Attitude Toward Continuation of the Program: Supervisors and coordinators were both asked to respond to a 4-point set of general statements about the Program's future. (1) abolish the Program; (2) reduce the Program; (3) continue the Program at the present level; and, (4) enlarge the Program. In addition, coordinators were asked to explain briefly why they would choose whichever of the four dispositions they had selected.

Their expressed opinions about program disposition are summarized in Table 22.

Table 22

Number and Per Cent of Supervisors and Coordinators Expressing Given Opinion Concerning Continuation of Program

<u>Opinion</u>	<u>Supervisors</u>		<u>Coordinators</u>	
	<u>No.</u>	<u>Per Cent</u>	<u>No.</u>	<u>Per Cent</u>
Enlarge Program	103	33.2	16	33.3
Continue Program at present level	149	48.1	26	54.2
Reduce Program	18	5.8	3	6.3
Abolish Program	26	8.4		
No Answer	14	4.5	3	6.2
	—	—	—	—
Total	310	100.0	48	100.0

A high degree of similarity is shown in expressed opinions of supervisors and coordinators. About one-third of both groups favored enlarging the Program, and about one-half of both groups favored continuation of the Program at the current level of operation. This "status quo" group by far represents the largest frequency of expressed opinion.

On the negative side of the ledger, only about 6 per cent of the supervisors and coordinators favored some reduction in size of the Program. The only difference noted is shown in the expressed wish of some 26 supervisors (8.4% of the total supervisory group) to abolish the Program. None of the coordinators expressed this point of view.

Fifteen of the 16 coordinators who voted to enlarge the Program gave supporting reasons for their opinions. Five of these comments cited resulting benefits to both the student and the Civil Service agency; the remaining 10 cited benefits to the student alone.

Thirteen of the 26 coordinators who voted to maintain the Program at its present level also gave reasons for wishing to keep the status quo. Eight of these comments reflected satisfaction with the existing organization; the remaining five spoke of benefits to the pupil.

The three coordinators who indicated that the Program should be reduced cited six reasons for their attitude. In general, they felt that there was a lack of need for trainees, that the students were not equipped to participate in the Program, and that there was insufficient time for supervision.

12. Additional Comments Made as Terminal Statements: The questionnaire made minimal provisions for some additional or terminal comments by supervisors or coordinators who wished to do so. A great many respondents chose not to comment. About two-fifths of the supervisors and three-fifths of the coordinators made remarks. In some cases, these represented expansions of specific comments made about earlier questions. Others were more generalized statements about the Program as a whole.

All comments were coded as either positive if complimentary, favorable, or fairly neutral; or as critical if negative, critical, unfavorable, or hostile to the Program, and are summarized in Table 23.

Table 23

Comments Concerning Municipal Cooperative Education Program
Made by Supervisors and Coordinators

<u>Nature of Comment</u>	<u>No.</u>	<u>Per Cent</u>	<u>No.</u>	<u>Per Cent</u>
Positive	60	19.4	22	45.8
Critical	62	20.0	6	12.5
	---	---	---	---
Sub-Total	122	39.4	28	58.3
No Comment	188	60.6	20	41.7
	---	---	---	---
Total	310	100.0	48	100.0

Positively and critically coded remarks were very evenly distributed among the commenting supervisors. However, among coordinators who expressed views, positively coded remarks outweighed critically coded ones by a margin of almost 4 to 1.

The majority of the positive remarks made by supervisors generally noted that: the Program was excellent or highly worthwhile; many trainees were above average or of excellent caliber; they did a good job, etc. Other specific positive remarks were made along the following lines: excellent transition to the responsibilities of adult work; trainees develop useful work-skills for the job market; valuable supplement to the work of the regular Civil Service staff, etc.

Some specific recommendations made along with these positive remarks included such ideas as: enlarge the Program to contain more juniors; retain senior coop graduates through the summer pending the arrival of fall replacements; improve guidance and counselling procedures; improve coordination between school coordinators and supervisors.

The majority of the critical or negative remarks made by supervisors generally noted that: trainees were of poor caliber and did not measure up to needed or expected standards of performance as practiced by regular Civil Service workers; some trainees came with poor attitudes toward their work; an inordinate amount of supervision, time and effort was required to be spent on trainees. Some specific critical remarks were made along the following lines: trainees have problems with motivation, particularly where the work is repetitive; usefulness of trainees often limited to routine, low echelon, or menial tasks; results are unsatisfactory where two trainees share one position; loss of trainees upon graduation required retraining of newcomers.

Recommendations made as a result of the above criticisms included: better orientation to the job or working in city departments before placement; better screening of students before placement; improve the coordination between the sending schools and the agencies where their students are working; abolish cooperative programs for jobs that offer little or no future to youngsters; provide more assistance in the form of time, personnel, materials and guidance to help supervisors in their work of training student workers; revert to part-time daily work-study programs where costly errors cannot be tolerated by having two students share one position; find ways to conserve time invested in training more of them in departments after graduation.

Twenty-two coordinators made positive comments about the Program. In general, they spoke in broad generalities and did not add any new categories to those already indicated for the supervisors, nor did they make specific recommendations. Only 6 critical remarks were made by coordinators who ventured to make terminal comments.

CHAPTER VII

ATTITUDES OF STUDENTS PARTICIPATING IN THE COOPERATIVE PROGRAM

A. Introduction

Although quotations of a favorable sort from individual students working in private industry on a cooperative work-study basis appear in one of the earlier Annual Reports of the Superintendent of Schools,¹ no survey of student attitudes was found in the literature prior to the institution of Municipal Cooperative Education in the fall of 1961.

Motivated by their work-study experience at city housing developments and by their English teacher, a small group of cooperative students developed a short questionnaire through a series of class exercises at Charles Evans Hughes High School at the end of the 1962-63 school year. The questionnaire was the outgrowth of an end-term project of self-inquiry into their recent municipal work-study experience.

Although limited by the size of the group (N = 30) who took it, the results showed that student reaction was generally favorable to the program as a whole, and especially appreciative of the friendly attitude of adults on the job, and of the guidance and assistance of the foremen. There was considerable dissatisfaction, however, with the salary received, particularly in comparison to that of regular employees on the job doing the same level of work. The boys felt that the program was a good antidote to the potential drop-out, and that their school work had not suffered, and that there had been no interference with non-class school activities or peer group relationships. The students reported that, thanks to the program, school as a whole loomed more important in their lives. Parental reaction to the Cooperative Program was seen by the boys in a very favorable light. Despite the favorable aura generated by their work-study experiences, the students viewed this type of job as an interim one, categorically rejecting it as a career after high school.

Although limited in scope, and perhaps failing to ask enough specific questions on job features, career directions, and aspirations, feedback from this self-evaluation project led to schedule reorganization and to a decision to abandon seasonal caretaker-trainee at the New York City Housing Authority in favor of year-round cooperative work-study placement for the following school year.

1. Board of Education, City of New York, Nineteenth Annual Report of the City Superintendent of Schools, 1916-1917. Continuation and Cooperative Classes. (pp. 31-32)

B. The Cooperative Student Surveys

In general, the objectives of the larger evaluation study, which also utilized a questionnaire approach, were similar to this student self analysis. Two studies of student attitudes were undertaken, one in May 1964 and the other in May 1965. The studies sought to ascertain pupil attitudes in two main areas: (1) work experiences and future employment aspirations; and (2) school learning experiences, including plans for further education and training. Required responses were made mainly by checking choices, or by completing a statement with a word or phrase. Essay type items occupied a small minority of questions asked, were restricted to brief statements of a fairly specific nature.

The Cooperative Students' Survey for 1964, was completed and returned by 762 students out of the 846 enrolled as of April 1964, and represented a response yield of 90.1 per cent.

On the basis of feedback from students' responses to the 1964 survey, minor changes were made in the 1965 instrument. In the pages which follow, The Cooperative Students' Survey for 1965 has been analyzed in detail as the more complete appraisal of student attitudes to the program.

C. The Cooperative Student Survey of 1965

1. City Departments in Which Municipal Cooperative-Trainees Were Placed:
 Table 24 presents the breakdown of cooperative student enrollment by city departments for the Business Careers and for the Health Careers cooperative students, according to grade and sex.

Table 24
 1965 Cooperative Student Enrollment by City Departments

<u>City Departments</u>	<u>Senior Boys</u>	<u>Senior Girls</u>	<u>Junior Boys</u>	<u>Junior Girls</u>	<u>Total</u>
Business Careers					
Buildings	4		11		15
Ex Botanic. Gardens	16		18		34
Criminal Court	4	2	4	3	13
City Register	8		4		12
Education	8	12	19	7	46
Employee Retirement	7		4		11
Finance	15	20	8	5	48
Fire	4	2	7	3	16
Highways	10	7	8	4	29
Health	4	4	5		13
Hospitals	15	40	23	13	91
Housing Authority	15	1	3	1	20
Housing Redevelopment	6	5	6	6	23
Law	2	3	5	5	15
Parks	24		13		37
Police	16	9	7		32
Probation	1	9	1	4	15
Personnel	3	3	4	1	11
Public Works	13	4	11	5	33
Purchase	7		3	9	19
Relocation	1	5	2	5	13
Rent Rehab.	5		5		10
Sanitation	11	1	6	1	19
Traffic	9		3		12
Transit Authority	8	17	17	2	44
Welfare	39	67	38	14	158
DWSG&E	3	7	1	8	19
All Others	69	39	42	16	166
Total	327	257	278	112	974
Health Careers					
Health	5	20	5		30
Hospitals	11	82	22		115
School Lunches	15		14		29
Total	31	102	41		174

The two largest employers were the Welfare Department and the Department of Hospitals, with 158 respondents for Welfare and 91 respondents for hospital administrative units and an additional 115 responding for the hospital aide programs. Altogether 29 city departments were represented with returns from 10 or more students, out of 64 departments from which replies were received in 1965. The remaining 35 departments, which employed 9 or fewer student-trainees have all been classified under the heading "Others," and constitute only 166 respondents representing only 83 coop positions.

2. Job Titles Held by Students: Table 25 presents a breakdown of cooperative student enrollment by job titles at time of assignment to the various city departments. In all, 25 job titles were utilized in the 64 departments to which students were assigned.

Table 25
1965 Cooperative Student Enrollment by Job Titles

<u>Job Title</u>	<u>Senior Boys</u>	<u>Senior Girls</u>	<u>Junior Boys</u>	<u>Junior Girls</u>	<u>Total</u>
Business Careers					
Clerk	206	33	171	17	427
Typist	8	117	3	72	200
Steno-typist		102		23	125
Office appliance operator	26	1	19		46
Junior draftsman or engineering aide	22		13		35
Messenger or page	14	1	17		32
Key punch operator		16		7	23
Assistant stockboy	4		11		15
Bookkeeper		2	1	1	4
Dictaphone or trans- cribing typist				2	2
Audio-visual aide			2		2
Photostat operator			1		1
Fingerprint technician	1				1
Assistant gardener	25		12		37
Horticulturist	16		18		34
Shop maintainer-helper	13		10		23
Buildings maintainer- helper			7		7
Housing caretaker	7				7
Airport grounds maintainer-helper			4		4
Total	342	272	289	122	1,025
Health Careers					
Nurse's aide	1	70	1		72
Dietary aide	9	3	21		33
School lunch helper	14		14		28
Public health aide		20			20
Laboratory helper	5	1	7		13
Laundry worker	1	8			9
Total	30	102	43	-	175

The apparently higher number of respondents in given titles of the departments as compared to the number assigned to city departments (Table 1) is due to multiple listings of job titles by about 5 per cent of the respondents.

The most frequently occurring positions for the Business Careers boys was clerical employment, followed by employment as an office appliance operator and junior draftsman-engineering aide. Only 11 boys listed themselves as typists, and none were stenos. For Business Careers girls, the position of typist ranked far out in front with 189 respondents, followed by 125 steno-typists and 50 clerks. Key punch operators and a few book-keepers rounded out the picture for the young woman. For Health Careers coops, boys worked primarily as dietary aides and school lunch helpers, or as laboratory aides. Seventy girls were placed as health trainees in nurse's aides positions in city hospitals, followed by 20 working in Health Centers as public health assistant-trainees.

A careful check of the stated employment of the 1965 respondents was made by comparing job-titles listings from rating slips with job-titles checked off the Cooperative Student Survey. Accuracy well in excess of 95 per cent for student responses on this item was established.

3. Length of Time Enrolled in the Program: The normal period of service for newly appointed first year cooperative student-trainee placed in September of 1964 and serving a full school year on alternate weeks at the city agency through June of 1965 would be 10 months. However, not all students are placed in September. Many students are placed in city work units at later dates, new openings were allocated to city departments, or as some students left the program or transferred to different departments. Indeed, some candidates are not placed until the spring term opens in February. On the other hand, some students moving into their senior or junior year were placed late in June to begin working in city agencies during the 5-week July or August cycle of the summer recess before entering their regular coop courses in September. These summer placements had a 12 month average placement period by the end of the school year. In addition, some seniors had started as juniors at some point in the preceding year, so that a few individuals had up to 24 months of city service.

Thus, from the point of view of the city agencies, the training period had no formal beginning or end. The average length of time respondents to the survey served in city agencies is summarized in Table 26.

Table 26

Average Length of Municipal Cooperative Service at Current City Agency

<u>Category</u>	<u>N</u>	<u>Average</u>
Business Careers		
Senior Boys	327	12
Senior Girls	257	13
Junior Boys	278	8
Junior Girls	112	7
Total	974	10.5
Health Careers		
Senior Boys	23	16
Senior Girls	102	10
Junior Boys	37	9
Total	162	10.6

Among Business Careers students, seniors served an average of 12 and 13 months; 4 to 5 months longer than the 7 average service of the juniors. Junior placements were generally made in late fall in anticipation of a continued full year of senior cooperative work-study for the following school year.

Boys in the Health Careers area showed the longest municipal coop service time of any of the employment categories, 16 months. Generally, they represented spring placements of the preceding school year. In part, this group was made up of students who had not maintained normal school progress in grades, and had taken 2-1/2 years to complete the junior and senior high school years. The senior Health Careers girls, on the other hand, showed a placement average of 10 months. These senior girls generally had been enrolled in special intensive school training programs during their junior year, and had been assigned by late June to specific hospitals in large class groups for September. Junior health coop boys served for 9 months on the average, somewhat longer than their junior Business Careers counterparts.

4. Number of Jobs Held and Reasons for Transfer: The survey instrument sought information concerning the number of jobs held, and the reason for transfer from one job to another. It must be emphasized that these data were reported by the student, and that reasons for transfer may not have been reported objectively. Data reflecting the number of jobs held are presented in Table 27.

Table 27

Number of Jobs Held					
<u>Category</u>	<u>N</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>Not Given</u>
Business Careers					
Senior Boys	327	293	33	1	
Senior Girls	257	230	23	4	
Junior Boys	278	260	16	1	1
Junior Girls	112	105	5	1	1
Total	974	888	77	7	2
Health Careers					
Senior Boys	23	22	1		
Senior Girls	102	93	9		
Junior Boys	37	37			
Total	102	152	10		

Fully 91.2 per cent of the Business Careers students held only one job and were currently at that job at the time of the survey. For the Health Careers student, the figure was even higher, 93.8 per cent. Of those who indicated that they had worked on more than one job, practically all checked 2.

Job transfers were much more prevalent among seniors than juniors in the Business Careers area. Of course, these seniors had more time in which to change; some of these changes may have occurred when they were juniors.

Table 28 summarizes the reasons given by the students for transferring or leaving the agency to which they were assigned. In some cases, following the termination of the earlier assignment, the students were returned to full-time schooling for a time pending the availability and desirability of reassignment.

Table 28

Reasons for Transfer Cited by Municipal Cooperative Students (1965)

<u>Reasons</u>	<u>Senior Boys</u>	<u>Senior Girls</u>	<u>Junior Boys</u>	<u>Junior Girls</u>	<u>Total</u>
Business Careers					
Not given or not known	1	5	5		11
Layoffs	2	3		1	6
Return of Reg. Employee or temporary assignm't		2	1	1	4
Seasonal work	18	3	2		23
"Fired"	7	1	3	3	14
Unsatisfactory job performance	1	4			5
Too slow in coordination	1				1
Work too difficult		1		1	2
Disliked work	1	3	2		6
Not enough work given	1	5			6
Travel too far	1		3		4
Pay too low	1		1		2
Total	34	27	17	6	84
Health Careers					
Return of Reg. employee or temporary assignment		6			6
"Fired"	1	1			2
Travel too far		2			2
Total	1	9			10

The reasons given varied widely among the different categories. Thus, for senior business coop boys, only 2 reasons ranked as highly important: (1) the end of seasonal work from summer placements at the New York World's Fair Corporation's grounds and general maintenance work at Flushing Meadows Park, and the end of outdoor work on the grounds of various low income housing projects of the New York City Housing Authority; (2) being "fired" for various reasons. For the senior girls, not receiving enough steno or typing was the principal reason given for job leaving, followed by the admission of unsatisfactory job performance.

One final point must be made. The fact that there were only 8.3 per cent of multiple job holders and that, in many instances, transfers were mandated by job conditions is a positive finding. However, it should be noted that there were other students who resigned to return to full-time school, who were terminated involuntarily, or who were drop-outs. These students do not appear in Table 4 since they were not re-assigned to other city agencies.

5. Attitude towards Relation of Employment to School Program: One item on the questionnaire asked the respondents to evaluate the relation of the school's program with what they had been doing on the job at the city agencies.

The responses to this question have been summarized in Table 29.

Table 29

Relation between School and Job Seen by Enrollees
in Municipal Cooperative Program

<u>Expressed Attitude</u>	<u>Sr. Boys</u>		<u>Sr. Girls</u>		<u>Jr. Boys</u>		<u>Jr. Girls</u>		<u>Total</u>	
	<u>N</u>	<u>Per Cent</u>	<u>N</u>	<u>Per Cent</u>	<u>N</u>	<u>Per Cent</u>	<u>N</u>	<u>Per Cent</u>	<u>N</u>	<u>Per Cent</u>
Business Careers										
Closely connected	161	49.2	163	63.4	169	60.8	85	75.9	578	59.3
Separate	166	50.8	93	36.2	102	36.7	27	24.1	388	39.8
No Response			1	0.4	7	2.5			8	0.8
Health Careers										
Closely connected	10	43.5	89	87.3	25	67.6			124	76.5
Separate	13	56.5	12	11.8	11	29.7			36	22.2
No Response			1	0.9	1	2.7			2	1.2

It is clear that many students found little relation between their school program and the work they did at the city agencies. In the Business Careers area, 39.8 per cent of the respondents cited a lack of connection between the cooperative work situation and the cooperative course program in school. In the case of senior boys, both in the Business and Health programs, this feeling was expressed by more than half of the respondents. The responses of girls tended to be more favorable, but even here 39.8 per cent of Business Careers girls and 22.2 per cent of the Health Careers girls felt that the school and work situation were not closely connected.

The high incidence of unfavorable responses to this item is readily understandable. Boys in Business Careers assigned to offices of city government generally performed a wide variety of clerical, messenger and stock work chores requiring limited entry skills. Courses offered in school, such as Clerical Practice ordinarily lack specificity with respect to the officer-clerical duties performed on the job, and probably helped contribute to the widespread feeling of a lack of connectedness. In sharp contrast, most of the girls in business offices of city agencies performed typing and stenographic skills requiring a higher order of training. In fact, courses these girls completed did not differ materially from those offered to commercial diploma candidates.

Most boys in the hospital aide program usually functioned as kitchen or lab helpers, or performed low-level labor in the School Lunch Program. Even if they completed courses in Hospital Training, Hospital Practice, Foods, etc., they generally failed to see the connection between their cooperative training and their daily chores in the kitchens and laboratories. Girls in the Health Careers area, who usually served as nurse's aides, were given

very specific courses in hospital practice and basic nursing procedures, including double-period laboratory practice. The teacher of nursing accompanied the groups of girls to the two or three hospitals to which they were assigned in groups, and helped work with them and their supervising nurses during the 2-week work cycles. These girls more readily saw the connection between the two phases of their cooperative education and training.

It would appear that the degree of relatedness between course work in the Municipal Cooperative Program and on-the-job requirements merits close examination.

6. Helpfulness on the Job of Subjects Studies in High School: Respondents were asked to list those subjects that they thought had helped them most with their city jobs. Most students listed between 2 and 3 subjects; some said "none," others listed as many as 5 or 6 subjects. A summary of their responses is presented in Table 30. Only those subjects which were cited by at least 20 respondents are listed.

Table 30

Frequency of Mention of Given Subject as Most Helpful on
Cooperative Job

<u>Subject</u>	Business Careers					Health Careers			
	<u>Senior Boys</u>	<u>Senior Girls</u>	<u>Junior Boys</u>	<u>Junior Girls</u>	<u>Total</u>	<u>Senior Boys</u>	<u>Senior Girls</u>	<u>Junior Boys</u>	<u>Total</u>
Academic Subj's									
English	132	159	99	61	451	12	35	13	60
Math	22	6	17	1	46	1	4	5	10
Speech	7	15	14	10	46	1	4		5
Biology	5		3		8	6	16	5	27
Botany	16		18		34				
Economics	21	4	4		29				
Ind. Science	17		5		22				
Business Subj's									
Cler. Pract.	98	66	65	31	260				
Bus. Mach.	22	18	32	6	78	1			1
Record. Keep.	24	4	16	2	46	1			1
Secret. Subj's									
Typing	37	197	33	93	360		1		1
Steno.		85		25	110				
Steno. Trans.		27		7	34				
Voc. Subjects									
Shop	13		18		31				
Nursing Subj's									
Nursing						4	46	13	63
Nurs. Skills							29	2	31
Physiol.							24		24
Reg. Nurs.							22		22
"None"	33	3	29		65	1	2	3	6
No Answer	20	2	29	2	53	4	3	4	11

Among Business Careers boys, academic subjects were chosen most frequently as helpful with English mentioned more often than the sum of all other academic subjects added together. Mathematics was the second ranking in frequency within the academic subject category, followed by economics. Science courses that related specifically to "blue collar" programs were also mentioned as most helpful. These were Industrial Science, a course specifically geared and coordinated with the work of assistant gardener-trainees in Central Park, Botany, a course coordinated with the work of horticulture-trainees at the Bronx Botanical Gardens. In both cases, the cooperative teachers had worked directly with the agency supervisors in course planning and coordination.

Business subjects also figured prominently in the responses of Business Careers coop boys, with Clerical Practice cited most frequently. This apparently stems from the fact that the majority of these boys worked as clerk-trainees, and Clerical Practice was the closest approximation to a "shop" subject for them. Business Machines ranked second among business subjects chosen. Many boys worked as office appliance operators, and most clerk-trainees were occasionally called upon to operate mimeograph, spirit duplicator machines, and photocopiers.

A total of 31 boys cited various shop courses as helpful, generally Electric Shop and Metals Shop. These were special shop courses for mechanical maintainer-helper-trainees in the Traffic and Transit repair shops or for electrical maintainer-helper-trainees in hospitals.

Business Careers girls did not select English as their most helpful school subject. Rather, they selected the three secretarial subjects, Typing, Stenography, and Steno-transcription as among the most helpful. Many girls who worked as clerical-trainees and many secretarial trainees who often performed clerical chores as regular part of their jobs selected Clerical Practice as a most helpful subject. Business Machines was also a subject deemed important. Business coop girls selected speech as important compared to the senior boys.

Among the Health Careers group, which was largely made up of girls, courses called Nursing were mentioned most frequently and English took second place. Even among junior Health Careers boys, Nursing vied with English for first place. Only among senior boys did English outrank other subjects as most helpful in frequency.

7. Subjects Enrollees Felt They Should Have Completed: The questionnaire also asked respondents to list those subjects that they felt they should have completed in school to function effectively on their cooperative job assignment during or before their current coop year. Here, too, the typical respondent who answered the question, again selected 2 or 3 subjects to match the three places for responses. These results have been summarized in Table 31.

Table 31

Frequency of Mention of Given Subject That Should Have Been Completed

<u>Subject</u>	<u>Business Careers</u>					<u>Health Careers</u>			
	<u>Senior Boys</u>	<u>Senior Girls</u>	<u>Junior Boys</u>	<u>Junior Girls</u>	<u>Total</u>	<u>Senior Boys</u>	<u>Senior Girls</u>	<u>Junior Boys</u>	<u>Total</u>
Academic Subjects									
Math	15	3	8	1	27	3	20	7	30
English	15	5	3		23		2		2
Chem.	2		1		3	6	18	11	35
Biology	3				3	7	11	15	33
Business Subjects									
Cler. Pract.	23	20	20	4	67		2		2
Bkk.-Rec.Keep.	4	9	11	2	26				
Bus. Mach.	25	15	19	8	67				
Secret. Subjects									
Typing	29	6	23	2	60		1		1
Steno.	1	38	3	17	59		2		2
"None"	48	50	38	22	158	1	9	3	13
No Answer	154	121	164	58	497	12	47	9	68

It was often noted, when a subject was enumerated, that the word "more"- preceded the named subject. These subjects included chemistry, and biology especially for Health Careers students, bookkeeping and record-keeping for Business Careers students, and stenography, particularly for Business Careers boys.

Other subjects for which students indicated a need included Mathematics for Business Careers boys and Health Careers girls, Business Machines for all groups of Business Careers students, and stenography for girls who had only typing or not enough concurrent stenography during their cooperative year.

8. Plans for Post-High School Study or Training: Two items on the questionnaire dealt with post-high school training. Respondents were asked to indicate whether they had any definite study or training plans for post-high school, and to check which of 7 types of study or training institutions they planned to enter. The checklist encompassed most broad categories of study or training available to the general student.

A summary of the responses is presented in Tables 32 and 33.

Table 32

Post High School Training Plans of Municipal Cooperative Program Students

<u>Group</u>	<u>N</u>	<u>Definite Plan</u>		<u>No Plan</u>		<u>No Response</u>	
		<u>N</u>	<u>Per Cent</u>	<u>N</u>	<u>Per Cent</u>	<u>N</u>	<u>Per Cent</u>
Business Careers							
Senior Boys	327	152	46.5	173	52.9	2	0.6
Senior Girls	257	119	46.3	137	53.3	1	0.4
Jr. Boys	278	149	53.6	124	44.6	5	1.8
Jr. Girls	112	48	42.9	63	56.3	1	0.9
Total	974	468	48.0	497	51.0	9	0.9
Health Careers							
Senior Boys	23	13	56.5	10	43.5		
Senior Girls	102	67	65.7	35	34.3		
Jr. Boys	37	24	64.9	13	35.1		
Total	162	104	64.2	58	35.8		

Of the approximately one-half of the respondents who did indicate definite plans for further study or training, prospective attendance at a Community College by far led all the rest. This category included 2-year college programs at 4-year institutions, terminating in the Associate of Arts diploma, as well as general non-matriculated college students.

Table 33

Type of Institution Municipal Cooperative Students Plan to Attend After Completing High School.

Type of Institution	Senior Boys	Senior Girls	Junior Boys	Junior Girls	Total	Senior Boys	Senior Girls	Junior Boys	Total
Commun. Coll.									
Number	56	54	43	11	121	4	16	5	25
Per Cent	17.1	21.0	15.5	9.8	12.4	17.4	15.7	13.5	15.4
Business Sch.									
Number	18	49	13	30	110		7	3	10
Per Cent	5.5	19.1	4.7	26.8	11.3		6.9	8.1	6.2
Tech. or Trade Sch.									
Number	34	3	27	2	66	2		4	6
Per Cent	10.4	1.2	9.7	1.8	6.8	8.7		10.8	3.7
Military Sch.									
Number	24	2	27	1	54	4	3	4	11
Per Cent	7.3	0.8	9.7	0.9	5.5	17.4	2.9	10.8	6.8
Police Acad.									
Number	20	1	29		50	1		4	5
Per Cent	6.1	0.4	10.4		5.1	4.3		10.8	3.1
4-Yr. Coll.									
Number	8	8	17		33	2		2	4
Per Cent	2.4	3.1	6.1		3.4	8.7		5.4	2.5
Hospital or Nursing Sch.									
Number	1	3	3	4	11	1	41	4	46
Per Cent	0.3	1.2	1.1	3.6	9.8	4.3	40.2	10.8	28.4
Miscellaneous									
Number		3	1	4					
Per Cent		1.2	0.4	3.6					

Business Schools were the second largest category, obtaining 110 choice among Business Careers students. This choice of business administration, bookkeeping, merchandising (distributive education) and accounting for boys; and advanced secretarial studies for girls was not unexpected. As a matter of fact, Business Schools received proportionately more choices from Business coop girls (79) than did the Community College category (65).

Technical Institutes or Trade Schools received the highest proportionate selection from "blue collar" boys who looked for further technical training in mechanical drafting, architecture, machine and metal trades, printing trades, automotive and airplane mechanics, marine engineering, etc. Of special local interest was the large number of Business Careers students who planned to receive training in the New York Police Academy.

Very few students anticipated entrance into 4-year liberal arts college programs. This was expected from this group of general diploma graduates.

Among the Health Careers students, the heaviest choice among the 102 girls was not for Community Colleges, but for Hospital Training or Nursing Schools. Included in this category were Practical Nurse's training programs of community and junior colleges and of 4-year colleges. Health Careers boys more evenly divided their preferences among Community College, Specialized Military Training Schools, Police Academy and Technical Institutes.

9. Attendance at Civil Service Preparation Courses: A number of items on the questionnaire dealt with aspects of New York City's Municipal Service system. The first of these questions asked respondents whether they had attended the 10 hour Saturday Morning Civil Service Preparation Course given by the Department of Personnel over a period of 5 consecutive Saturday mornings. Job opportunities with City, State, and Federal Civil Service were detailed and trainees were coached in how to take Civil Service Examinations. Remedial work in specific subjects such as typing was incorporated in some of these courses.

Table 34 summarizes the responses of the students.

Table 34

Attendance at Saturday Civil Service Preparation Course

<u>Category</u>	<u>Attended</u>		<u>No Attendance</u>		<u>No Response</u>	
	<u>No.</u>	<u>Per Cent</u>	<u>No.</u>	<u>Per Cent</u>	<u>No.</u>	<u>Per Cent</u>
Business Careers						
Senior Boys	163	49.9	160	48.9	4	1.2
Senior Girls	101	39.3	154	59.9	2	0.8
Junior Boys	49	17.6	221	79.5	8	2.9
Junior Girls	3	2.7	109	97.3	-	-
Total	316	32.4	644	66.1	14	1.4
Health Careers						
Senior Boys	7	30.4	16	69.6		
Senior Girls	37	36.3	65	63.7		
Junior Boys	0	-	37	100.0		
Total	44	27.2	118	72.8		

A much smaller proportion of Health Careers took the Civil Service Preparation Courses than did their Business Careers peers. The more specialized nature of hospital training and the fact that nursing exams come under state-wide control, evidently reduced attendance at Saturday morning Preparation Courses for the work of the municipal Health coops.

10. Participation and Planned Participation in Civil Service Examinations: The survey also sought information concerning the respondents' participation and relative success on Civil Service examinations, in those instances in which examinations had already been taken, and an indication of plans for such participation in future examinations. These data are summarized in Tables 35 and 36.

Table 35

Participation and Relative Success of Municipal Cooperative Students in Civil Service Examinations

<u>Group</u>	<u>N</u>	<u>Taken</u>		<u>Passed</u>		<u>Planned</u>		<u>No Response</u>	
		<u>N</u>	<u>Per Cent</u>	<u>N</u>	<u>Per Cent</u>	<u>N</u>	<u>Per Cent</u>	<u>N</u>	<u>Per Cent</u>
Business Careers									
Sr. Boys	327	176	53.8	10	5.7	227	69.4	17	5.2
Sr. Girls	257	204	79.4	62	30.4	188	73.2	8	3.1
Jr. Boys	278	28	10.1	2	7.1	171	61.5	11	4.0
Jr. Girls	112	7	6.3	2	28.6	65	58.0	9	8.0
Total	974	415	57.2	76	18.3	651	66.8	45	4.6
Health Careers									
Sr. Boys	19	4	17.4			11	47.8	2	10.5
Sr. Girls	85	17	16.7			37	36.3	2	2.4
Jr. Boys	35	2	5.4			18	48.6	3	8.6
Total	139	23	14.2			66	40.7	7	5.0

At the time the questionnaire was administered, a much higher percentage of Business Careers students had already taken some Civil Service Examinations than their Health Careers peers. More than half of the senior Business boys and more than three-fourths of the senior Business girls reported participation. Only one-sixth of Health boys and girls, on the other hand, had already taken tests. Relatively few of the juniors had taken Civil Service tests.

Of those who took tests, only a very small number had received notice of passing by the time of the survey. For the Business Careers group, 35.7 per cent had not yet been notified. The corresponding proportion in the Health Careers group was 14.4 per cent. Many of these tests had been given only a few months earlier that winter or in early spring.

The senior Business girls showed by far the highest passing rate, among those who had been notified. Sixty-two or 30.4 per cent of them had been notified of passing ratings.

Table 36
Civil Service Examinations Taken and Planned by Municipal
Cooperative Students

<u>Examination</u>	Business Careers							
	Senior Boys		Senior Girls		Junior Boys		Junior Girls	
	<u>Taken</u>	<u>Planned</u>	<u>Taken</u>	<u>Planned</u>	<u>Taken</u>	<u>Planned</u>	<u>Taken</u>	<u>Planned</u>
Steno-typist			95	42			2	11
Stenographer			18	43				11
Typist	9	6	69	76	2	3	8	20
Clerk	81	64	24	4	19	40	1	7
Postal Clerk	4	39				10		
Clerk (Transit)		9						
Office Appl. Oper.	55	20	26	2	3	11		
Engineer Aide	3	3			1	4		
Key Punch Oper.			5	6				1
Bookkeeper	2	2				2		2
Police Trainee	31	32		1	2	25		
Fireman	1	4			1	4		
Traffic Device Maint.	8	8						
Maint.-Helper (TA)	4	5				7		
Ass't Gardener	4	19				7		
Housing Caretaker		4				4		
Miscellaneous	1	10				3		
Not Specified	20	39	14	12	8	57	2	19
	Health Careers							
Clerk	1	2	7	5	2	2		
Postal		1				3		
Clerk (Transit)				7				
Office Appl. Opera.	1	1	7	1				
Police Trainee	2	2				4		
Public Health Ass't				13				
Miscellaneous		1		2		1		
Not Specified		4	2	6		8		

Turning now to a consideration of which examinations the students had taken or planned to take, it is evident that tests for clerical positions led the list among senior Business boys, with 81 seniors having taken them, and 64 planning to do so. Interestingly enough, examinations for state and federal clerical posts tended to be more popular than examinations for city posts. A surprisingly large number of senior boys (55) had competed for positions as office appliance operators and 20 others planned to do so. The examination for police trainee attracted 31 boys, and 32 others planned to take it. Few junior boys had taken examinations; where they had, clerical followed by office appliance operator examinations for "white collar" and police trainee for "blue collar" led the list.

Among senior Business girls, stenotypist examinations and stenography examinations had been completed by 113 respondents, typists exams by 69, and clerical by 24. About one-fifth of these secretarial competitions were for state or federal positions. A number of girls (26) had taken competitive tests for office appliance operator.

Many of the typists among the senior Business girls indicated that they planned to sit for stenotyping and stenography exams; girls who had made the stenography lists at the entrant level planned to take on promotional examinations for senior stenographer.

It is notable that the Health Careers coops had already taken or planned to take few examinations. Most of those few exams that were enumerated represented positions not in health fields, but in the Business Careers fields of City Civil Service, largely "white collar" in character. It would appear that only 13 Health Career students planned to remain in the Health field through Civil Service competition, according to their responses. All of them planned to compete for public health assistant.

11. Expressed Attitudes of Municipal Cooperative Students towards Job: Students were asked to check on a 3-point forced choice scale whether they liked their employment at the city agencies. The three choices on the scale were: 1) like; 2) neither like nor dislike; 3) dislike. These data are summarized in Table 37.

Table 37
Expressed Attitude of Municipal Cooperative Students toward their Jobs

<u>Coop Students</u>	Liked	<u>Per Cent of Total</u>	Degree of Acceptance			<u>Per Cent of Total</u>	No Response
			Neutral	<u>Per Cent of Total</u>	<u>Disliked</u>		
Business Careers							
Senior Boys	227	69.4	81	24.8	18	5.5	1
Senior Girls	200	77.8	44	17.1	13	5.1	-
Junior Boys	209	75.2	53	19.1	14	5.0	2
Junior Girls	99	88.4	12	10.7	1	0.9	-
Total	735	75.5	190	19.5	46	4.7	3
Health Careers							
Senior Boys	9	39.1	11	47.8	3	13.0	
Senior Girls	87	85.3	10	9.8	5	4.9	
Junior Boys	20	54.1	7	18.9	10	27.0	
Total	116	71.6	28	17.3	18	11.1	

The attitude of the responding students was overwhelmingly favorable. Girls were more strongly favorable to their city jobs than boys; junior boys and girls expressed a more favorable attitude than seniors. The latter included a much larger proportion of respondents who checked the non-committal second choice, indicating that they neither liked nor disliked their city employment.

The only group in which less than one-half of the respondents indicated that they had liked their coop work was the senior Health boys' group. This group showed the largest percentage of non-committal student responses also (47.8%).

Only a small minority of respondents stated that they disliked their cooperative work assignments. For Business Careers students, it approached the 5 per cent level. Among the Health Careers students, where most girls were enrolled in special hospital aide programs closely correlated with courses in hospital practice or nursing at school, the level of dislike was again near the 5 per cent level. For the Health Careers boys, however, most of whom were working on alternate weeks in jobs requiring the performance of many menial tasks, the dislike level was much higher.

The students enrolled in the Municipal Cooperative Education Program were also asked to list two or three things which they "liked best" or "liked least" about their cooperative work-study assignments.

Those aspects of their jobs which were mentioned most frequently as likes and dislikes are summarized in Tables 38 and 39.

Table 38

Frequency of Mention of Specific Aspect of Job Liked by
Municipal Cooperative Students

Aspect Liked	Business Careers				Total	Health Careers			Total
	Senior Boys	Senior Girls	Junior Boys	Junior Girls		Senior Boys	Senior Girls	Junior Boys	
Co-workers	137	127	106	73	443	8	48	9	65
Work involved	139	147	127	114	527	4	88	10	102
Running office									
Machines	30	7	9	2	48				
Supervisors	26	23	17	6	72	3		1	4
Work conditions	19	45	2		66				
Work hours	15	5	20	1	41			1	1
Outdoors work	28		26		54				
Training		25			25		1		1
Others	40	34	35	8	127	1	14	3	18

Table 39

Frequency of Mention of Specific Aspect of Job Disliked by
Municipal Cooperative Students

Aspect <u>Disliked</u>	Business Careers				Health Careers				<u>Total</u>
	Senior <u>Boys</u>	Senior <u>Girls</u>	Junior <u>Boys</u>	Junior <u>Girls</u>	Senior <u>Boys</u>	Senior <u>Girls</u>	Junior <u>Boys</u>	<u>Total</u>	
Co-workers	8	14	7	7	36		7	5	12
Work involved	101	76	91	28	296	16	26	20	62
Supervisors	17	13	10	4	44	1	4		5
Work conditions	31	39	33	9	112	1	9	1	11
Work hours	7	2	7	2	18		3	2	5
Training	3		1		4				
Salary	19	11	21	3	54		4	4	8
"Everything"	61	51	29	31	172	1	22	3	26
Others	18	22	9	14	63			2	2

The most frequently cited reason for liking the job mentioned some aspect of the work the students were called upon to do; referred to in general or specific terms. This held true for Health as well as for Business Careers students. The second most frequently mentioned area was the broad spectrum of approbation of "everything." Frequently, the same respondents reinforced this general statement of approval of the work by giving "none" or "nothing" as their response to the question calling for dislike.

Good working conditions, liking co-workers, good hours, and salary were also mentioned frequently. In office work, boys were especially fond of running duplicators and copying machines, many girls spoke favorably of performing their skills of typing and stenography. Blue collar workers spoke favorably of working out of doors or of working mechanically in a repair shop. Health Career girls spoke most favorably of general care and working with patients, of assisting doctors, or of working with babies and young children.

On the negative side of the ledger, the most frequently mentioned things were: dull, boring or repetitive work; the "low" salary checks or infrequent pay; and, general, poor working conditions due to run down or dirty old buildings that were too hot and uncomfortable in summer, or in a bad neighborhood, or inadequately equipped with run down old office machines and typewriters. In the personnel side, some respondents apparently felt some resentment toward their supervisors. Getting down to job specifics, Business Careers boys and girls objected to too much continuous filing on the job; girls to too much typing and/or not enough stenography or dictation. Inter-office messenger running and outside deliveries also ranked low in the esteem of many student trainees. Among Health Careers students, menial cleanup chores were most frequently a source of dislike.

12. Some Aspects of the Student-Job Supervisor Relationship: A series of items on the questionnaire sought to clarify student attitudes towards supervisors with whom they came in contact on their municipal job. The first of these questions sought information concerning the number of individuals who were responsible for the supervision of the student. The results are summarized in Table 40.

Table 40

Number of Individuals Responsible for Supervision of
Municipal Cooperative Students

<u>Group</u>	Number of Supervisors							
	<u>No.</u>	<u>One</u> <u>Per Cent</u>	<u>No.</u>	<u>Two</u> <u>Per Cent</u>	<u>No.</u>	<u>Three</u> <u>Per Cent</u>	<u>No.</u>	<u>More Than Three</u> <u>Per Cent</u>
Business Careers								
Senior Boys	65	19.9	110	33.6	148	45.3	1	0.3
Senior Girls	78	30.4	93	36.2	84	32.7	1	0.4
Junior Boys	62	22.3	104	37.4	103	37.1	5	1.9
Junior Girls	32	28.6	41	36.6	32	28.6	1	0.9
Total	237	24.3	348	35.7	367	37.7	8	0.8
Health Careers								
Senior Boys	7	30.4	4	17.4	12	52.2		
Senior Girls	16	15.7	29	28.4	13	35.1	1	1.0
Junior Boys	6	16.2	13	35.1	18	48.6		
Total	29	17.9	46	28.4	85	52.5	1	0.6

It is clear that the majority of coops worked in the city agencies under two or three supervisors much more frequently than under one supervisor. For the Business Careers coops, slightly over 35 per cent reported they worked under two supervisors; another comparably large group reported working under three supervisors. Only about one fourth of the Business coops (24.3%) reported working under only one supervisor. Less than 1 per cent of the 974 Business Careers students reported having more than three supervisors. Only 1.4 per cent were non-respondents.

For the Health Careers students, more than half (52.5%) reported working under three supervisors, particularly in the hospital aide programs. Two persons were cited as direct supervisors by over one quarter of the Health Careers groups. There were relatively few working under only one supervisor, ranging from 30.4 per cent for senior boys to 15.7 per cent for senior girls.

Two questions were asked about how good was the quality of work the cooperative student trainees performed. The first asked how the students thought the immediate supervisors felt about their work, and the second asked how the students themselves felt about the quality of their work. In each case, students were requested to check one quality term from among a scale of six ranging from "excellent" through "fair" to "very poor."

The summary of these data is presented in Table 41.

Table 41

Supervisor's Appraisal and Self Appraisal of Quality of Work Performed,
As Reported by Municipal Cooperative Students

Group	Excellent or Good		Fair or Needs Improvement		Poor or Very Poor		No Response	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Business Careers								
Senior Boys								
Supervisor	286	87.4	37	11.3	1	0.3	3	0.9
Self	267	81.7	52	15.9			8	2.4
Senior Girls								
Supervisor	231	89.9	24	9.3			2	0.8
Self	230	89.5	26	10.1			1	0.4
Junior Boys								
Supervisor	239	85.9	34	12.2	2	0.8	3	1.1
Self	233	83.8	41	14.8			4	1.4
Junior Girls								
Supervisor	104	92.8	7	6.5			1	0.9
Self	97	86.6	13	11.6			2	1.8
Total								
Supervisor	860	88.3	102	10.4	3	0.4	9	0.9
Self	837	84.9	132	13.6			15	1.5
Health Careers								
Senior Boys								
Supervisor	22	95.6	1	4.3				
Self	20	87.0	2	8.6			1	4.3
Senior Girls								
Supervisor	94	92.1	8	7.9				
Self	91	89.2	10	9.8			1	1.0
Junior Boys								
Supervisor	31	83.8	3	8.1	1	2.7	1	2.7
Self	31	83.8	5	13.5			1	2.7
Total								
Supervisor	147	90.8	12	7.4			3	1.8
Self	142	87.6	16	9.9			1	0.6

There was little difference in the students evaluation of their own work and in their perception of their supervisors' evaluation of the quality of their performance. All but a small proportion of the students felt that their work should be rated "good" or "excellent," and an equally large proportion indicated that they felt that their supervisors would assign equally high ratings to the quality of the work that they performed. Health Careers students tended to rate themselves slightly higher than Business Careers trainees, and girls tended to rate themselves slightly higher than boys in both self-appraisals and perception of supervisors' appraisals.

An additional item on the questionnaire asked the students how much training or help they felt they had received from their supervisor(s) on their municipal jobs. Their responses were checked on a 4-point scale ranging as follows: 1) a great amount, 2) a moderate amount, 3) a small amount, and 4) no training at all.

A parallel question asked how much training the trainees thought they should have been given relative to what they received. Here, a 3-point scale was used: 1) I could have been given less on-the-job training than I received
2) The amount of on-the-job training I received was just about right
3) I should have been given more on-the-job training than I received.

The obtained data are summarized in Table 42.

Table 42
Help Needed and Help Received from Supervisors, as Reported by
Municipal Cooperative Students

Business Careers	Senior Boys		Senior Girls		Junior Boys		Junior Girls		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Help Needed										
Less	11	3.4	2	0.8	12	4.3	2	1.8	27	2.8
Just Right	233	71.3	210	81.7	201	72.3	97	86.6	741	76.1
More	78	23.9	44	17.1	55	19.8	12	10.7	189	19.4
No Response	5	1.5	1	0.4	10	3.6	1	0.9	17	1.7
Help Given										
Great	100	30.6	76	29.6	88	31.7	50	44.6	314	32.2
Moderate	143	43.7	132	51.4	119	42.8	43	38.4	437	44.9
Small	70	21.4	35	13.6	56	20.1	14	12.5	175	18.0
None	12	3.7	13	5.1	10	3.6	4	3.6	39	4.0
No Response	2	0.6	1	0.4	5	1.8	1	0.9	9	0.9
Health Careers										
Help Needed										
Less	3	13.0	6	5.9	6	16.2			15	9.3
Just Right	18	78.3	81	79.4	21	56.8			120	74.1
More	2	8.7	13	12.7	8	21.6			23	14.2
No Response			2	2.0	2	5.4			4	2.5
Help Given										
Great	6	26.1	37	36.3	8	21.6			51	31.5
Moderate	7	30.4	42	41.2	11	29.7			60	37.0
Small	7	30.4	11	10.8	12	32.4			30	18.5
None	3	13.0	9	8.8	5	13.5			17	10.5
No Response			3	2.9	1	2.7			4	2.5

Most of the Business Careers students who responded felt that they had received a moderate amount of on-the-job training; this feeling was expressed by 44.9 per cent of the respondents. An additional 32.2 per cent indicated that they had been helped a great deal by their supervisors. Only 2.8 per cent of the Business Careers students felt their training had been over-solicitous of their needs and that they should have been given less training. Approximately three out of every four of these students expressed the opinion that the training they had received was just about right for them. The overwhelming majority of those who felt the amount of training received had been right for them had indicated that they had received either a moderate or a great amount of this training.

Only 22.0 per cent of Business Careers respondents stated they had received only a small amount of training or no training at all. Most of these students also indicated that they should have been given more training.

The responses of the Health Careers students were similar to those of their Business Careers classmates. Proportionately, more Health Careers students stated they had received "no training at all" than did their Business Careers peers. This was more probably true for the senior Health boys who served as kitchen helpers, where the ratio who checked this negative fourth choice numbered 13.0 per cent for senior and 13.5 per cent for junior Health boys.

13. Future Plans of Municipal Cooperative Students: A number of questions to which the students were asked to respond called for an expression of their future plans. The first of this series of questions was a hypothetical one. The student was asked whether, given a free choice and freedom from the necessity of passing a Civil Service examination, he would stay at his present job after graduation.

Student responses are summarized in Table 43.

Table 43
Willingness of Students to Remain in Current Municipal Cooperative Jobs

Group	Senior Boys		Senior Girls		Junior Boys		Junior Girls		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Business Careers										
Would stay	151	46.2	152	59.1	98	35.3	61	54.5	462	47.4
Would not stay	82	25.1	50	19.5	80	28.8	18	16.1	230	23.6
Not sure	88	26.9	53	20.6	95	34.2	31	27.7	267	27.4
No Response	6	1.8	2	0.8	5	1.8	2	1.8	15	1.5
Health Careers										
Would stay	2	8.7	51	50.0	8	21.6			61	37.7
Would not stay	15	65.2	28	27.5	14	37.8			57	35.2
Not sure	6	26.1	19	18.6	15	40.5			40	24.7
No Response			4	3.9					4	2.5

Approximately one-half (47.4%) of the Business Careers students said they would like to stay on their jobs following graduation. This figure was generally higher for the girls than for boys. Senior Business boys stated they would remain on the job in 46.2 per cent of the cases; junior boys in only 35.3 per cent.

The proportion of student trainees responding negatively and that saying they were not sure was much the same, being in the neighborhood of one-fourth for each category. As the figure for girls desiring to remain on in their Civil Service cooperative trainee posts was larger than for boys, so it was correspondingly smaller for choosing not to remain in these jobs (19.5% for senior girls and 16.1% for junior girls, compared with 25.1% for senior boys and 28.8% for junior girls).

Among the Health Careers coops, fewer student-trainees (37.7%) desired to remain on in these jobs following graduation, and correspondingly more (35.2%) chose not to remain. The proportion who were not sure was about the same as that for Business coops (24.7% Health; 27.4% Business). The proportion of girls wishing to remain was much greater (50%) than that for boys.

In a second question, the student-trainees were asked to check as many of the items from among a list of eight as applied to them. This list dealt with general categories of what they would like to do immediately after graduation. To "continue my education" was primary and headed the list. The other items included:

- (2) working for City Civil Service
- (3) working for federal or state Civil Service
- (4) working for private industry
- (5) enlisting in the armed forces
- (6) joining the New York City Police Force
- (7) helping out in the family's business or running one's own small private enterprise
- (8) not sure

The results are summarized in Table 44.

Table 44

Immediate Post Graduate Plans of Municipal Cooperative Program Students

Group	Senior Boys		Senior Girls		Junior Boys		Junior Girls		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Business Careers										
Continue educ.	114	23.8	117	30.5	90	23.7	41	27.5	362	26.0
City Civil Service	128	26.7	114	36.7	86	22.6	61	40.9	416	29.9
Other Civil Service	56	11.7	27	7.0	30	7.9	10	6.7	123	8.8
Private Industry	43	9.0	68	17.7	16	4.2	16	10.7	143	10.3
Armed Forces	65	13.6	5	1.3	62	16.3	3	2.0	135	9.7
Police Force	36	7.5	5	1.3	48	12.6	1	0.7	90	6.5
Business	9	1.9	3	0.8	7	1.8	1	0.7	20	1.4
Not sure	25	5.2	17	4.4	36	9.5	15	10.1	93	6.7
Health Careers										
Continue educ.	10	31.3	78	60.0	18	33.3			106	49.1
City Civil Service	5	15.6	21	16.2	9	16.7			35	16.2
Other Civil Service	5	15.6	7	5.4	5	9.3			17	7.9
Private Industry			3	2.3	1	1.9			4	1.9
Armed Forces	8	25.0	10	7.7	11	20.4			29	13.4
Police Force	2	6.3	1	0.8	3	5.6			6	2.7
Business	1	3.1	1	0.8	1	1.9			3	1.4
Not sure	1	3.1	7	5.4	6	11.1			14	6.5

The two activities students were currently engaged in, namely: school, and civil service trainee work, were most frequently mentioned as immediate post graduate plans, with each selected by more than one-fourth of the Business Careers respondents. More girls than boys expressed these preferences. Working in state or federal Civil Service, however, was selected by a larger proportion of boys than girls. A substantial proportion of the boys expressed a desire to join the armed forces or the city's Police Force after graduation (13.6% of seniors and 16.3% of juniors - armed forces; 7.5% of seniors and 12.6% of juniors - Police Force). One hundred forty-three enrollees (about 10%) hoped to work in private industry. The ratio of girls, almost all of whom wished to become private secretaries or typists, to boys for this category was about 2.1. Ninety-three respondents (6.7%) were unsure of what they might do following graduation.

Among Health Careers students, plans to continue education were expressed by approximately one-half of the group. Sixty per cent of the senior hospital aide girls planned to enroll in schools for practical nursing. City Civil Service was the expressed plan of 16.2 per cent of this group. A large proportion of the boys planned to enter the armed forces. A small group of girls (7.7%) planned to enlist in the armed forces, where opportunities for military nursing abounded.

An additional item in this area asked the respondents to indicate whether their experiences in the Municipal Cooperative Program had had any effect in changing their plans concerning work after graduation. They were also asked to note the specific change that they had made. Responses to these two questions are summarized in Tables 45 and 46.

Table 45

General Effect of Work Experience on Post Graduate Plans of Students in Municipal Cooperative Program

Group	Senior Boys		Senior Girls		Junior Boys		Junior Girls		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Business Careers										
Plans changed	148	45.3	132	51.4	122	43.9	49	43.8	451	46.3
Plans unchanged	136	41.6	104	40.5	119	42.8	54	48.2	413	42.4
No Response	43	13.1	21	8.2	37	13.3	9	8.0	110	11.3
Health Careers										
Plans changed	4	17.4	38	37.3	13	35.1			55	34.0
Plans unchanged	18	78.3	59	57.8	21	56.8			98	60.5
No Response	1	4.3	5	4.9	3	8.9			9	5.6

The split between those Business Careers students who replied that their plans had changed and those whose plans had not changed was pretty even (46.3% - plans have changed; 42.4% have not changed). Moreover, the variation between boys and girls was not great, generally well under 6 per cent. The remaining 11.3 per cent failed to respond to the question.

The picture for Health Careers students was somewhat different with well over half (60.5%) feeling their plans had not changed. Only 34.0 per cent checked that their cooperative experiences had helped them to change their plans. In fact, among the small subgroup of senior Health coop boys, 78.3 per cent said their plans had not changed, and only 4 boys (17.4%) stated they had changed. These data suggest that a larger number of Health than Business students had made plans to enter the "business world" or to enter the nursing or para-medical field prior to their enrollment in the Municipal Cooperative Education Program, and that their experiences in health areas or in hospital aide programs failed to alter their immediate career plans. This seems to be borne out by student statements on the second part of this question which are summarized in Table 46.

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Table 46

Specific Effect of Work Experience on Post Graduate Plans of
Students in Municipal Cooperative Program

Group	Senior Boys		Senior Girls		Junior Boys		Junior Girls		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Business Careers										
Further education	32	21.6	37	28.0	24	19.7	14	28.6	107	23.7
Enter industry	13	8.8	20	15.2	8	6.6	11	22.4	52	11.5
Enter Civil Service	36	24.3	52	39.4	35	28.7	15	30.6	138	30.6
Enter armed forces	12	8.1			7	5.7			19	4.2
Enter police force	7	4.7			4	3.3			11	2.4
Not given	4	2.7	2	1.5	21	17.1	1	2.0	28	6.2
Health Careers										
Further education	1	25.0	9	23.7	6	46.2			16	29.1
Enter industry			12	31.6	2	15.4			14	25.5
Enter Civil Service			7	18.4	2	15.4			9	16.4
Not given	1	25.0	2	5.3	3	23.1			6	10.9

Business Careers students who had been brought by their cooperative experiences to the point of changing their minds were most frequently influenced to try to seek full-time employment in Civil Service, followed by being influenced to continue with their formal education or training. Furthering one's education was most frequently mentioned by Health Careers students as a plan change precipitated by their coop experiences. Desire to work full time in Civil Service took third place to interest in nursing, hospital and other para-medical work. The pile up of frequencies for the kind of statements mentioned, leads to the inference that one of the primary effects of the program was the clarification of short range goals. In many cases, the cooperative program appeared to provide students with a career outlet or plans for more specialized further study toward such a career where there had been a vacuum before, or where they had resigned themselves as young men only to serving in the armed forces or New York City Police Force. These broadening and working aspects of municipal cooperative work-study were readily apparent in many of the coops' remarks.

CHAPTER VIII

FOLLOW-UP STUDY OF GRADUATES OF COOPERATIVE PROGRAM

A. Introduction

Numerous follow-up studies of graduates have been made. These studies may be categorized as being of two main types: (1) general or broad spectrum, and (2) specific area or narrow front studies. The five-year follow-up study of graduates of the Tulsa Public Schools instituted in 1960, is typical of most studies of the general type, which seek a wide spectrum of data on continuing education and vocational training, full and part-time employment, marital status and family rearing, military service, etc.¹ Information from such studies is usually designed to assist in evaluation of total programs of instruction with a view to strengthening specific curricular areas.

Other studies follow graduates relative to specified areas of the curriculum, such as the follow-up study of the relation of type of diploma received to entry into the business-commercial world by the Director of Business Education for the New York City Public Schools.² Feedback from this specific area study indicated the need for preparation of students in commercial subjects prior to entry into business and office work.

The studies made in 1964 and 1965 of the graduates of the Municipal Cooperative Education Program were of the latter type, and were specifically addressed to the problem of what proportion of these graduates had succeeded in gaining entry into Civil Service careers, as well as to the more general question of their success in finding other kinds of employment and/or of continuing their education and training. Questions on further schooling were focused on specific kinds of full and part-time schooling and specific courses of study as related to current employment and career plans. Based on experience of the first year, the wording of the 1965 instrument was revised considerably to avoid ambiguities, reduce essay type responses, and to obtain specific answers to subcategories of employment, and Civil Service preparation. Only the data for the 1965 questionnaire are summarized here.

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1. Roy James Lewis, Research Department. Follow-up Study, Class of 1960. "The Tulsa Public Schools Look at the High School Graduates." Tulsa, Oklahoma, 1964.
 2. Joseph Gruber. The Educational and Occupational Progress of the New York High School Graduate. Twenty-third Yearbook (1959-60) of the Commercial Education Association. 1961, pp. 106-136.

B. The Findings

Table 47 presents a summary of the 1965 data concerning questionnaires sent to graduates and returns received.

Table 47

Number and Proportion of Returns to 1965 Municipal Cooperative Education Program Follow-Up Questionnaire

<u>Coop Group Responding</u>	<u>Questionnaires Sent</u>	<u>Questionnaires Returned</u>	
		<u>No.</u>	<u>Per Cent</u>
Business Careers Grads			
Boys	170	55	32.4
Girls	214	97	45.3
Total	384	152	39.6
Health Careers Grads			
Boys	31	8	25.8
Girls	80	29	36.3
Total	111	37	33.3
Total Group			
Boys	201	63	31.3
Girls	294	126	42.9
Total	495	189	38.2

A total of 189 returns were received; this represents a 38.2 per cent return of the 495 questionnaires that were mailed. Business Careers graduates returned 39.6 per cent of their questionnaires, as contrasted with a 33.3 per cent return from Health Career graduates. Both Business Careers and Health Careers girls show a higher proportion of returns than boys in these two programs.

1. City Agencies to Which Respondents Were Assigned: Table 48 summarizes the data concerning the city agencies to which the respondents to the 1965 questionnaire was assigned. Thirty-four agencies employed cooperative students in the Business Careers area; three employed students in the Health Careers program.

Table 48

City Agencies Employing Respondents

<u>City Agency</u>	<u>Business Careers</u>			<u>Health Careers</u>		
	<u>Boys</u>	<u>Girls</u>	<u>Total</u>	<u>Boys</u>	<u>Girls</u>	<u>Total</u>
Welfare	13	34	47			
Hospitals		20	20	4	21	25
Health				3	8	11
Finance	4	5	9			
Education		7	7	1		1
Highways	4	2	6			
Civil Defense	1	5	6			
Transit		6	6			
Parks	3	1	4			
Assessors	3		3			
Labor	1	2	3			
Police	2	1	3			
Relocation		3	3			
Water Supply	1	2	3			
Others	23	9	32			
Total	55	97	152	8	29	37

The Welfare Department employed the greatest number of Business Careers students, followed by the Department of Hospitals, where 20 girls worked in administrative offices in secretarial and clerical positions. Among Health Careers students, all but one respondent was employed in the Department of Hospitals or the Department of Health.

The young men responding in 1965 in Business Careers programs had worked in a wide variety of city offices, usually as clerk-trainees. In fact, clerical positions outnumbered all other job titles for boys combined by a factor of better than 2 to 1. This may be a reflection of the growth and expansion of clerical opportunities in the program for boys during the second year of this study. Among the girls who had graduated from Business Careers programs, the 1965 respondents showed a similar growth for stenographers and typists, with the number in that category outnumbering the combined total of all other job titles held by girls, again by a factor of almost 2 to 1.

2. Employment Status: A summary of the employment status of the 1964 graduates, as reported by the respondents in May 1965, is presented in Table 49.

Table 49

Employment Status of June 1964 Municipal
Cooperative Program Graduates

<u>Employment Status</u>	<u>Business Careers</u>			<u>Health Careers</u>		
	<u>Boys</u>	<u>Girls</u>	<u>Total</u>	<u>Boys</u>	<u>Girls</u>	<u>Total</u>
A. Civil Service						
Retained in Same Agency	3	29	32		7	7
In Some Other Agency	4		4		2	2
B. In Private Industry	30	53	83	4	9	13
C. In Armed Services	6		6	2		2
D. Unemployed	12	15	27	2	11	13
Working Full-Time	38	80	118	5	15	20
Working Part-Time	5	2	7	1	3	4
Total	55	97	152	8	29	37

Full-time workers vastly outnumbered those who worked part-time. The ratio was 17 to 1 for Business Careers graduates (with the girls from this group 40 to 1) and 5 to 1 for former Health Careers graduates.

Employment among girls ranked higher for 1964 Business Careers coop graduates than among boys (84.5% to 78.2%). The reverse was true for Health Careers graduates; boys lead girls in relative rate of employment (75.0% to 62.1%).

Among Business Careers graduates, boys employed in Civil Service Departments (including inter-agency transferees) relative to those in private firms (including 1 boy working in his family's own business) was 16.3 per cent to 67.4 per cent. Girls ranked 35.4 per cent in Civil Service to 64.6 per cent in private employment for 1965. Much the same picture obtained among Health Careers graduates.

A decline was noted in relative retention in Civil Service as compared to private employment in the second year of the study. It is possible that saturation of vacancies in certain key city departments with permanent workers from the year before may have reduced the number of available new openings for provisional workers on city job lines. Moreover, the increase in available federal funds for many new and expanding job opportunity programs for youth, including subsidized placement in city departments, may have resulted in a drop in relative retention. The direct competition of such programs as the College Work-Study Program, which placed 1,200 enrollees in 38 participating city departments with a 90 per cent underwriting of salaries by the federal government under the Higher Education Act of 1965, may have also been a factor in limiting immediate and temporary job opportunities with city

agencies for the students participating in the Municipal Cooperative Education Program.¹

Again, it is of interest to note the types of jobs held by the respondents. Of the 7 Business Careers boys remaining in Civil Service, four were engaged in clerical work, but none of the girls remained in this lower echelon of employment after graduation. Almost all of the girls who remained in Civil Service were working as secretaries. One girl was a medical secretary to a medical social worker. Only one of these employed girls remained as a clerk-typist.

In the Health Careers area, none of the responding boys who had graduated from hospital aide programs, remained in such work after graduation. They either went into private employment or into the armed services. Of 18 responding employed young women who had graduated from Health Careers programs, 9 (50%) remained in Civil Service work. Eight remained in city hospitals as nurses' aides and 1 obtained employment in a State Hospital as a technician operating an electro-cardiograph machine. Of these girls who transferred to private employment, 4 remained in hospital work as nurses' aides and one as a laboratory technician. This meant that fully 72.2 per cent of employed girls from this group were continuing in work along the lines of their hospital-aide training.

The majority of Business Careers respondents went into private employment. Their number considerably exceeded those who remained in Civil Service. A majority of the boys remained in office-clerical types of employment in their new work with private firms, but the range of their employment became very varied compared to that of the young women. Even within the general area of clerical work, the type of work tended to be more diversified than in Civil Service, including file clerk, payroll clerk, dispatcher, stock clerk, mail clerk, messenger, and office boy.

Of the responding Business Careers girls employed in private industry in 1965, approximately 50 per cent found secretarial positions within a wide variety of companies. About 20 per cent of the group found work as typists; there were also some scattering of clerks. Within these general areas, there was usually a greater diversity in the employment as compared to most comparable jobs in Civil Service held by first year graduates. There were private secretaries, legal stenographers, and a medical secretary as well as just general secretarial steno-typist-office workers; there were dictaphone-transcribing typists as well as general typists in offices and typing pools; there was a bookkeeper; and there was a switchboard operator working for a national public utility corporation as well as a telephone-receptionist.

The pattern for those Health Careers graduates who left hospital work was a characteristic drift into office-clerical white collar types of work. No one from this group entered a blue collar or factory type of employment.

1. Solomon Hoberman. Municipal Cooperative Education Bulletin for Supervisors of Municipal Cooperative Education Trainees. IV (3), March 1966, p. 1

3. Participation in Civil Service Examinations: Extent of participation in Civil Service Examinations on the part of the respondents is summarized in Table 50.

Table 50

Participation in Civil Service Examinations by Municipal Cooperative Education Program Graduates (1965 Survey)

	Examination Participants		Civil Service Examination Results *			
	No.	%	<u>Passed</u>	<u>Failed</u>	<u>In Process</u>	<u>Failed Will Retake</u>
Business Careers-Boys						
City Agencies	4	57.1	3	2		2
Private Industry	15	50.0	7	7	2	3
Armed Service	1	16.7		1		1
Unemployed	5	41.7		2	3	1
Business Careers-Girls						
Civil Service	28	96.6	27	4		4
Private Industry	40	75.5	36	21	1	3
Unemployed	8	53.3	5	5		2
Health Careers-Boys						
Private Industry	1	25.0		1		1
Health Careers-Girls						
Civil Service	2	22.2		2		2
Unemployed	1	9.1	1			

* Some graduates took more than one examination.

There was considerable difference in the proportion of Business Careers graduate boys and girls who took Civil Service Examinations, with the girls showing the greater tendency to participate. This was true of all categories of students.

The overall rates of graduates who took Civil Service Examinations was 25 out of 55 boys in 1965 for all categories combined (45.5%) to 76 out of 97 girls in all categories (78.4%). Examinations for clerical positions were most popular among Business Careers boys; among girls, the test for beginning stenographers or beginning stenotypist outranked all other tests combined.

Forty per cent of the Business Careers boys reported themselves as passing.

Business Careers girls showed an interest in filing for federal or state as well as City Civil Service. A total of 75.0 per cent of Business Careers girls passed the stenographer exam in 1964. Typist examinees who passed accounted for an additional 13.2 per cent. For Business Careers boy and girl graduates combined, 77 of 101 examinees (76.2%) who took Civil Service Examinations passed.

Turning now to Health Careers graduates, only one boy out of the 8 (12.5%) took an examination for police trainee from the 1964 graduation group. Among the Health Careers girls, the picture with respect to Civil Service was equally disappointing, with only 3 examinees out of 29 respondents (10.3%) having filed and taken examinations.

4. Further Education: The post-high school schooling undertaken by the respondents to the 1965 survey is summarized in Table 51. Type of program completed in high school, and current employment status, are related to type of institution attended and courses taken.

Table 51

Post High School Education of Municipal Cooperation
Education Program Graduates
(June 1965 Survey)

<u>Student Course in High School</u>	<u>No.</u>	<u>No. Currently Enrolled in School</u>	<u>Institution in Which Enrolled Type</u>	<u>No.</u>	<u>Course in Which Enrolled Name</u>	<u>No.</u>
Business Careers-Boys						
Civil Service	7	3	Tech Inst.	2	Acc'g	1
			Comm. Coll.	1	Aircraft Tech.	1
					Gardening	1
Private Industry	30	9	Comm. Coll.	4	Acc'g	2
			Tech. Inst.	3	Key Punch Oper.	2
			Bus. School	1	Typing	1
			Hosp. Train.	1	Bus. Manag.	1
					Stock Mgt.	1
					Mech. Draft.	1
					Lab. Tech.	1
Armed Forces	6	1	Service Sch.	1	Finance	1
Unemployed	12	4	Tech. Inst.	2	Phys. Ed.	1
			Comm. Coll.	1	Arch. Draft.	1
Business Careers-Girls			Eve. H. S.	1	Not Given	2
Civil Service	29	5	Comm. Coll.	1	Steno.	3
			Bus. School	1	Amer. Hist.	1
			Eve. H. S.	1	Art	1
			Union School	1		
			Correspond.	1		
Private Industry	53	9	Eve. H. S.	3	Secretarial	6
			Comm. Coll.	2	Psych.	1
			Bus. School	2	Drama	1
			Tech. Inst.	1	Not Given	1
			Perform. Arts	1		
Unemployed	15	3	College	1	Bus. Educ.	1
			Tech. Inst.	1	Dietetics	1
			Airline	1	Hostess	1
Health Careers-Boys						
Private Industry	4	1	Music	1	Music Educ.	1
Armed Forces	2	1	Service	1	Airplane Mech.	1
Unemployed	2	1	JOIN	1	Selling	1
Health Careers-Girls						
Private Industry	9	3	Comm. Coll.	2	Nursing	2
			Hosp. Train.	1	Lab. Tech.	1
Unemployed	11	5	Hosp. Train.	2	Nursing	2
			Comm. Coll.	1	Lab. Tech.	1
			Bus. School	1	Med. Sec'y	1
			Tech. Inst.	1	Key Punch Oper.	1

A much higher proportion of the boys among the 1964 graduates were attending schools than girls. And, once again, for the Business Careers graduates currently working in City Civil Service Agencies and in private industries, the ratio of boys to girls enrolled in institutions for further education was in the neighborhood of 2 to 1. A slightly greater number of Civil Service workers enrolled for further education than private industry employees (Boys - 49.9% vs. 30.0%; girls - 17.2% vs. 17.0%).

The per cent of unemployed young people attending schools after graduation was substantially the same as those then working in city agencies and in private industries, running to approximately 33 per cent for boys and 20 per cent for girls among those graduated from Business Careers programs. For Health Careers graduates, the per cent of unemployed at schools was considerably higher - 50.0 per cent for boys and 45.5 per cent for the girls. Such students generally enrolled for nursing and other studies ancillary to hospital and public health work.

In general, the unemployed group of Business Careers graduates tended to enroll in full-time school programs. In contrast, all such graduates working in Civil Service and private industry were enrolled in part-time evening programs. This is what one might expect in view of the difficulty for most general diploma graduates to hold down a full-time job in the daytime and take much more than one or two courses in the evening. For the Health Careers graduates unemployed at the time of the second follow-up study, 100 per cent of those attending schools were enrolled in full-time programs, presumably through most of the daytime hours. As might be expected, too, almost all of the schooling was in line vocationally with the students' current or recent cooperative employment.

Among boys graduated from Business Careers programs, almost all of the attendance was at night community colleges or technical institutes (13 out of 17 cases). In the former institutions, courses in business management, accounting, and retailing dominated the curriculum; in the technical institutes, courses for IBM-machine operators, draftsmen, and maintenance technicians seemed to herald the current and future work interests of these young men.

Among girls graduated from Business Careers programs, attendance was more evenly divided among evening or community programs of 4-year colleges, business schools, evening high schools and technical institutes. However, these girls tended much to one type of curriculum connected with office-secretarial work, and secretarial studies, stenography (including advanced and legal steno), typing and speedwriting. These courses highlighted the curriculum at all of the institutions they attended. Some evening high school academic courses such as psychology or American history were aimed at winning an academic diploma for the recent general high school graduate or at removing specific deficiencies necessary as prerequisite to special programs in other higher educational institutions.

As mentioned earlier, the majority of girl graduates of Health Careers programs were enrolled in nursing programs, in medical laboratory technician courses, in a medical secretary's program at community colleges or hospitals with training programs in practical nursing, or at a technical institute. Only one girl was enrolled in a business school. However, the few boys from Health Careers programs currently in schools appeared to be drifting away from health and hospital careers into such other fields as music teaching, aircraft mechanics, and retailing.

The main inference to be drawn from these data is that a significant proportion of the young men seek progressive escalation from the lower echelons of clerical-white collar work into a mushrooming variety of middle level business, administrative, and technical fields while the young women were far more interested in staying at their office-secretarial jobs or in advancing within the framework of their current position until they married. At the time of this survey, 11 (8.7%) of the 126 girls who responded to the questionnaire were already married. None of these 11 girls were enrolled for further training.

5. Future Career Plans: Young men graduating from Business Careers programs and currently in Civil Service work expressed plans in 5 out of 7 cases to drift away from Civil Service work, or else had no plans at all. Those at work with private firms expressed preferences for remaining in private industry in 19 out of 30 cases. These were scattered over a wide range of occupations with the bulk in such white collar employment as accounting, merchandising, investment and banking work, IBM-machine operation, and drafting. Few expressed any interest in blue collar work. The unemployed male graduates of Business Careers programs had no specific plan or made unrealistic references to college or vague statements about taking any kind of job whatever. Several of the young men with Business Careers experience who were in active service at the time of this survey expressed a desire for continuing their careers in the military.

Most of the girls who had graduated from a Business Careers program expressed a desire to continue in Civil Service; a small number expressed plans to go into private employment at the time of this survey planned to continue in office work as private, executive, legal or other kinds of secretary or typist. Others planned a wide variety of activities ranging from studies in business school for business administration to missionary work, modelling, and acting. Only 2 of these 53 young women planned to return to Civil Service offices. One-fourth planned on marriage as an immediate-short-term goal. The majority (53.3%) of unemployed Business Careers girls either had no specific plans or left the question unanswered. Only 3 of these girls planned to reenter Civil Service.

Among the 8 boys who graduated from Health Careers programs, few had made definite plans, and only 2 expressed a desire to return to the Civil Service field. Two others, one currently in private industry, and the other under military enlistment, stated plans to pursue careers as X-ray technician and as medical laboratory technician.

The major choice of young women graduated from Health Careers programs was the nursing field, with 12 planning on practical nursing, and 5 looking far ahead to Registered Nurse. Two other young women planned to stay in health careers in an auxiliary capacity, one as dental assistant, one as a medical secretary. Three others, currently unemployed, planned to go into office-clerical work in the business world.

What emerges from these responses is a fairly high degree of specificity of plans among graduates of the municipal programs. Relatively few expressed no specific plans. While the number planning to remain in City Civil Service work was perhaps disappointingly small, it is clear that these young men and women have set their sights upon middle echelon occupations, particularly in white collar types of employment. The number planning to follow blue collar or service occupations is relatively small; the number whose plans for employment involved entering the professions or glamour occupations was extremely low.

6. Graduates' Estimates of School Subjects Importance: Table 52 lists those subjects that 1964 graduates had studied in high school that they found most helpful in their jobs.

Table 52

Courses Considered Valuable by Graduates of Municipal
Cooperative Education Program
(June 1965)

<u>Subject</u>	Frequency of Mention					
	Business Careers			Health Careers		
	<u>Boys</u>	<u>Girls</u>	<u>Total</u>	<u>Boys</u>	<u>Girls</u>	<u>Total</u>
Academic Subjects						
English	14	40	54	1	4	5
Mathematics	2	5	7		5	5
Speech		3	3		1	1
Botany	3		3			
Biology		1	1		2	2
Science		1	1		2	2
Chemistry					3	3
Economics		1	1			
Language		2	2			
Civil Service	2		2			
Business, Secretarial Subj.						
Clerical Practice	15	34	49			
Steno-Transcription		48	48			
Typing	12	36	48			
Business Machines	5	10	15			
Stenography		11	11			
Bookkeeping	5	3	8			
Business Arithmetic	5	2	7			
Record Keeping	2	3	5			
General Law	1	2	3			
Related Nursing						
Nursing Skills				3	26	29
Body Structure Function					8	8
Hospital Practice				1	2	3
Medical Terminology					1	1
Foods					1	1
Hygiene					1	1
Child Psychology					1	1
Vocational Subjects						
Drafting	4		4			
Mech. Drawing	1		1			
Major Art	1		1			
Metal Shop	2		2			
No Response or "None"	11		11	4	1	5
"All"	1	2	3	4	1	5

Heading the list for Business Careers male graduates was clerical practice where filing procedures are taught, followed by business machines and business arithmetic. For young women who had graduated from Business Careers programs, the three leading subjects were steno-transcription, followed by typing and clerical practice.

Graduates of blue collar coop programs and those assigned as engineering aides or junior draftsmen listed drafting and mechanical drawing as most helpful subjects in their recent work.

With respect to correlated academic subjects which they had chosen as most helpful, considering combined responses of both boys and girls, English led the list by a margin in excess of twice the combined sum of all other chosen academic subjects. Mathematics received a number of choices among both boys and girls, followed by the sciences.

The pattern of subjects chosen as most helpful by Health Careers graduates found nursing, nursing skills, and related nursing exceeding by far the sum of all other subjects taken in the health area. Another course that seems to have won some prominence in selection was the course known as "Body Structure and Function," dealing with aspects of human anatomy and physiology for girls in nursing programs. Eight girls out of the 29 who responded or 27.6 per cent mentioned this course as relatively important.

The graduates were also asked to indicate which subjects they felt they should have taken in high school. The choices selected most often by boys graduated from Business Careers programs were mathematics and typing. Girls who had been in these programs chose bookkeeping and stenography most frequently.

Among the Health Careers graduates, mathematics courses and chemistry were considered as related subjects they should have taken in connection with their nursing programs. A considerable number of graduates also chose Spanish as a needed course for work in city hospitals and health classes.

CHAPTER IX

SUMMARY AND CONCLUSIONS

Cooperative education was first referred to by Paul M. Hanus, Professor of Education at Harvard University in his Report to the Committee on School Inquiry of the Board of Estimate and Apportionment of New York City in 1912. Professor Hanus insisted that "in the interest of industrial and social welfare..." neither industry nor the schools alone could perform the educational responsibility of society to its young workers. He advocated education accompanying gainful employment in the cooperation of industry and education, utilizing cooperative or part-time vocational schools. His model for these recommendations was the system instituted by Herman Schneider in Ohio a few years earlier.

The term "cooperative" as defined by Dean Schneider is found in his Report to the President of the Board of Education in 1915. He introduced the term "Coordinator" for teachers coordinating the work of the shops with the instruction of the school. He also recommended that a Bureau of School Cooperation with a Director in charge, be established. By the Spring term of 1915, cooperative courses had been established in ten high schools, and some 341 students were assigned to cover 168 positions. In 1917, the program was consolidated to eight schools and in 1925, the program was confined to three schools.

Careful selection of students for entry into cooperative courses was based upon criteria of health, strength, and general ability to meet the requirements of each position. The primacy of economic need was not mentioned among the criteria cited, but it was readily recognized that these students were vocationally rather than academically inclined, and that this was the most satisfactory way to prepare them for a life of useful work in industry.

Each student received individualized training fitted to his own needs, and gained a sense of personal maturity. It was observed that these students tended to remain in school until they earned their diplomas.

One of the problems that was encountered was the prevailing conservative attitude of teachers toward innovation, which made it difficult to obtain coordinators.

A. Fifty Years of Growth

Grace Brennan, the only full-time Director of New York City's Cooperative Education Program served during two distinguished periods of development in the administration of cooperative education in the early history of cooperative education: 1) The period of decentralized local autonomy when different cooperative programs were tried and courses were revised. The period from 1915 to 1924 saw the consolidation of the program from 10 high schools in 1915 to one school (The Haaren-Cooperative High School in 1920), due to problems of obtaining coordinators and the

high cost of maintaining a widespread program. 2) The centralization of all student placement and vocational guidance, which began with the organization of the Central Office of Vocational Investigation, Guidance and Placement in 1925. Charles M. Smith was appointed the first Director in 1928. Enrollment in the program continued to rise.

The year 1946 proved to be a turning point in the history of cooperative education. Two new developments were of major importance: 1) The State Education Law of May 10, 1919 was revised to extend state aid in full to students enrolled in part-time school work-study programs in which the work was considered an integral part of the curriculum. 2) A Cooperative Education Commission, comprising leaders from business and industry, was formed by the Advisory Board for Vocational Education. Since 1947, the Cooperative Education Office has been separated from Vocational Guidance, in keeping with Dean Schneider's recommendation. Cooperative courses thereafter were introduced steadily into a greater number of academic and vocational high schools as the program increased.

In May, 1960, Mayor Robert F. Wagner announced the formation of an 18-member Manpower Utilization Council to cope with the acute shortage of personnel in key areas of city government and industry. In April, 1961, the Council requested funds from the Ford Foundation to extend the Cooperative Education Program to various agencies of the City Government for 1,000 selected youth from low socio-economic groups.

Beginning with 408 students in 18 city agencies in 1962, the program grew to well over 1,000 enrollees working in over two-thirds of the city's 99 departments at the end of three years.

In May, 1963, a follow-up study of the Municipal Cooperative Program was undertaken with an 8-item questionnaire. Graduates returning forms specifically requested aid in seeking employment. In May, 1964, a two-page questionnaire was sent to 128 Supervisors in 54 City Departments representing all the municipal locations participating in the Program. The survey of May, 1965, comprised two questionnaires, directed to immediate supervisors and agency coordinators.

These three surveys resulted in both the completion of on-the-job training and final full-time employment of a large percentage of student respondents and trainees, which was the main objective of this Program.

Under the job freeze applicable to all city Civil Service positions in November, 1965, a Vacancy Control Board authorized agencies to continue operation of the Cooperative Education Program at the current level. In April, 1966, the Cooperative Education Program reported an all-time record of 1,296 students working in 74 city agencies.

B. Why This Study Was Made

The purpose of this study was to appraise the effectiveness of the Municipal Cooperative Education Program in fulfilling its stated objectives.

Since extension of cooperative work-study to municipal civil service areas is a relatively new departure, a study of the organization of the program as a whole and its operation in the seven project schools serving students from disadvantaged neighborhoods was undertaken. The study entailed visits to the seven major study schools. The program in the several departments of the city government which were included was investigated by means of visits to work locations in city agencies. Interviews were conducted with agency coordinators and local job supervisors. Working students were also questioned.

Five of the major study schools visited were selected for control studies. Six criteria were used for selecting control samples. A three-year study of high school performance was made for all senior students, and a corresponding two-year study of high school performance was made for the 10th and 11th years of all junior students.

Descriptive analysis was made of the administration of the Cooperative Education Program in municipal government, the work of the Cooperative Education Office and Student Placement, administration of the program at the high school level, and the administration of the program in the departments of the city government.

From information gathered through interviews during visits to the city departments, attitudes of Supervisory Personnel in City departments toward the program were evaluated.

In 1964 data were gathered from supervisors by use of a questionnaire. This instrument, designed to survey attitudes of supervisors, was mailed directly from the Board of Education to city agencies employing student-trainees.

To assess the attitudes of School Personnel toward Cooperative Students and the program, interviews were conducted with Principals, Teacher-Coordinators, Department Chairmen, and Teachers of Cooperative Program Classes. Visits were made to cooperative classes in the seven selected major schools.

To get a mass sampling of the attitudes of participating students, a questionnaire emphasizing the kinds of questions appropriate to the assessment of student attitudes was developed. These questions covered two main areas: 1) work experiences, including work inventories and future aspirations, and 2) school learning experiences.

A three-page survey was administered to students in such school classes as English, Social Studies, or extended home room periods. The thirty-question instrument for 1965 was completed by 1,136 cooperative

student enrollees.

A follow-up study of municipal cooperative programs graduates was made. A single page, eight-item questionnaire was mailed to the graduates at the last known address in May, 1964. The second survey was mailed in May and June of 1965.

Those graduates who returned forms specifically requesting aid in finding employment were referred to local, State, and Federal agencies who assist job-seeking youth, particularly as they relate to Civil Service employment.

C. The Administration of the Cooperative Education Program

The duties of the Director of Cooperative Education were described by the Board of Education when the position was created in 1954 in the following terms:

1. To organize cooperative programs in high schools
2. To assist with pupil guidance, including testing
3. To contact employers to establish cooperative positions
4. To maintain contacts with City, State and Federal agencies as well as with other organizations
5. To conduct surveys, write reports including the Annual Report, and make other evaluations as needed

The role of the Cooperative Education Office in program administration includes arranging for the allocation of additional Civil Service positions, extending municipal cooperative programs and instituting the courses necessary to sustain them in additional academic high schools, persuading labor unions controlling certain types of trades in the city departments to agree to open their doors to a limited number of cooperative education trainees, and convincing certain city departments to hold open for new trainees those positions at work locations temporarily vacated by graduating senior cooperative students.

The specific duties of program coordinators may be summarized as follows:

- Screening selected applicants in pre-placement interviews;
- Visit city departments employing students, every term;
- Visit every work location once a year;
- Maintain contacts with the program in each school

As the chief executive officer for this school organization, the principal is the person legally responsible for all school aspects of municipal cooperative education, just as he is responsible for all programs conducted on school premises.

One of the Coordinator's guidance functions is to prepare the student for his interview at the Board of Education and for his job

interview at the city agency. The coordinator must guide the student's program to insure his meeting the requirements for graduation on schedule. At times the teacher-coordinator serves as homeroom teacher of the cooperative student group of his school.

To implement the centralized authority of her office, the Director of Cooperative Education holds monthly conferences with Coordinators. At those times the teacher-coordinator and the Program Coordinator discuss policies and problems. Coordinators file a monthly report, called "Report of Supervisory Visits to Industry" with the Cooperative Education Office, summarizing specific jobs performed by students observed, noteworthy details of their respective performances, special problems, and remarks about student activities and attitudes.

The Office of the Field Supervisor of the City Department of Personnel was the center for all the functions of municipal cooperative education and related activities in the Civil Service area. It was to the municipal government what the Cooperative Education Office was to the Board of Education. The Field Supervisor served in an executive position in municipal government analogous to that of the Director of Cooperative Education for the school system. The local supervisor was responsible for orientation of the newly-placed trainees. The main responsibility of the immediate supervisor was on-the-job training of students.

D. Summary of the Findings of the 1965 Study

A major aspect of the evaluation of the Municipal Cooperative Education Program was a study of the school performance of the participating students in the seven schools during the 10th, 11th, and 12th school years. Among the particular areas to which attention was directed were success in school subjects, absence and lateness, the school's character ratings of the students and the supervisors' ratings of the students on the job. Two groups were used in the study: a group of 361 Cooperative students and 370 students in a control group.

All data used were obtained from the students' cumulative record cards and from folders from each student maintained in the central records offices of the participating schools. The data used covered a three-year period.

Findings: In general, the school performance of the Cooperative Students, as measured by average marks in major subjects, tended to be slightly superior to the comparable performance of their control group peers. The divergence between cooperative students and the controls tends to increase as the students spend more time in the program; cooperative students who have been in the program for two years show higher grades than the comparable performance of their control group peers.

It would appear that the cooperative program had greater holding power (that is, students enrolled in this program were more likely to remain in school until graduation) than the conventional school program.

It is evident that the records of absence and lateness among students in the Municipal Cooperative Program were considerably superior to the comparable records of their control peers in the 11th and 12th grades.

Both absence and lateness were considerably lower during those weeks when the cooperative students were on the job. This does not mean that school absence was high.

Consideration of character ratings showed no appreciable differences between the two groups of students at any grade level, with one exception--senior girls in the Cooperative program obtained a slightly higher average character rating than their control group peers. Differences between sex groups were also small. It is extremely likely that the teachers who made the ratings tended to depart from a "satisfactory" rating only in rare instances.

Ratings of Cooperative students by on-the-job supervisors ranged between average and above average, and the distribution of ratings reflects the relatively favorable attitude of the supervisors in the field. The ratio of the number of favorable to unfavorable comments was approximately four to one.

A word about students who left the program. Of the 773 boys and girls of the 11th and 12th grades enrolled in the Municipal Cooperative Program, 213 (27.6 per cent) of the boys and 80 (16.0 per cent) of the girls withdrew from it. It should be noted that only a small proportion of the students who leave the program drop out of school.

E. Attitudes of School Personnel Toward the Cooperative Program

Generally speaking, principals were favorable to the idea of the program, but were strongly academically oriented in their thinking about the students. They were not well informed regarding the program's operation, and they had no direct contact with the municipal agencies in which the students worked. These administrative duties were delegated to the Teacher-Coordinator.

Administrative problems prompted some reservations about expansion of the program. Many principals voiced concern about what happens to students who have to vacate their civil service jobs following graduation.

Teacher-Coordinators expressed awareness of their key role and of the resentment on the part of some teachers because of the special status afforded them by the program. They were observed to handle their guidance functions with students effectively.

In general, guidance personnel were found to be favorable to the Municipal Cooperative Education Program. They treated the Teacher-Coordinators as full members of the guidance staff.

Deans and School Psychologists were entirely favorable to the program. Deans in particular stated that cooperative enrollees showed a remarkable decrease in school infractions that brought them into confrontation with their offices.

Departmental Chairmen varied more widely in their attitudes toward the program than guidance personnel. Of the twenty Departmental Chairmen interviewed in seven schools, only 11 (55%) were rated as having an overall favorable attitude towards the program.

Teachers of cooperative classes tended to fall into two categories: (1) those who looked upon working with general track students as a requirement of their job, but not as a desirable assignment and (2) those who approached their employed students with creative energy, even with zeal. The latter category, the majority, tended to remain with the Cooperative courses over a period of several years and did not rotate back to teaching classes attended by principally academic track students.

F. Attitudes of Supervisors

In order to assess the attitudes of supervisors in the City Departments toward Cooperative pupils and toward the Cooperative program, a questionnaire study was conducted in May 1965.

A cover letter was prepared for this survey. This letter was sent, with a packet of questionnaires, to the agency coordinator at each City Department. He was instructed to complete his own Coordinator's Questionnaire, and to distribute the Supervisor's questionnaire to the local supervisors of student-trainees within his agency.

Returns were obtained from 53. A total of 47 (71.2%) of the 66 agency coordinators returned completed questionnaires. In addition, 310 completed Supervisors' questionnaires were returned.

THE FINDINGS

Approximately one third (34.8%) of the respondents felt that the student trainees constituted no more of a burden with respect to on-the-job training than did permanent employees in Civil Service positions. On a total of 10,100 items, out of a total of 1,010 students only 642 (6.4%) were rated "unsatisfactory," while 9,313 (92.2%) were rated "satisfactory" or "very good to excellent." In general, the ratings are indicative of a high level of functioning on the part of the trainee group.

Of the 310 supervisors from whom responses were obtained, 80 (25.8%) reported that they had observed "No weaknesses" or "None" and 47 (5.2%) did not reply to the questionnaire. The 184 supervisors who did report inadequacies cited a total of 266 weaknesses. More than one-third 101 (38.0%) of the weaknesses noted by the supervisors were in the area of communication skills, with poor spelling and poor English being referred to most frequently. Poor office skills, typing, and filing were also named.

Of the 310 supervisors to whom questionnaires were sent, 57 (18.4%) did not reply. Of the remaining 253 supervisors, 135 (53.4%) indicated that they found no deficiencies that merited reporting; the other 118 supervisors cited a total of 159 weaknesses in personality and character traits.

Lack of maturity and associated lack of responsibility were cited most frequently as deficiencies. These were followed by lack of interest, lack of initiative, and shyness. The lack of maturity, the most frequently noted deficiency was cited by only 25 of the supervisors, less than 10 per cent of those returning completed questionnaires, or 8.1 per cent of the total group to whom the questionnaire was sent.

Of the 236 who responded, 31 (13.1%) felt that no improvement in the preplacement program was needed; the remaining 205 respondents cited 290 needs.

Supervisors were more prone to criticize preplacement training than training that was carried on during the placement period.

Of the 310 supervisors to whom questionnaires were sent, about one-third favored enlarging the program, and about one-half favored continuation of the program at the current level of operation. Only about 6% of the supervisors and coordinators favored some reduction in size of the program.

The questionnaire made minimal provisions for some additional or terminal comments by supervisors or coordinators who wished to do so. Twenty-two coordinators made positive comments about the program. In general, they spoke in broad generalities and did not add any new categories to those already indicated for the supervisors, nor did they make specific recommendations. Only 6 critical remarks were made by coordinators who ventured to make terminal comments.

G. Students' Attitudes Toward the Municipal Cooperative Program

The Cooperative students' survey of the 846 students enrolled in the program as of April 1964 yielded a response of 90.1 per cent. On the basis of this survey, minor changes were made in the 1965 instrument.

It is clear that many students found little relation between their school program and the work they did at the city agencies. In the Business Careers area, 39.8 per cent of the respondents cited a lack of connection between the cooperative work situation and the courses in school. It would appear that this matter merits close examination.

Respondents were asked to list those subjects that they thought had helped them most with their city jobs. Most students listed between two and three subjects and some said "none." Others listed as many as five or six subjects. Business Career boys listed academic subjects most frequently. English was mentioned more often than all other academic subjects added together. Math ranked second in frequency, followed by economics. Business Career girls listed typing, stenography, and shorthand transcription as their most helpful subjects. Health Careers girls named Nursing first and English second.

In response to a question asking what subjects students felt they should have completed, it was often noted when a subject was named the word "more" preceded the named subject. These subjects included chemistry and biology for Health Careers students, bookkeeping and record keeping for Business Careers students, and stenography for Business Career boys.

Of the approximately one-half of the respondents who indicated definite plans for post-high school study or training, prospective attendance at a Community College by far led all the rest. Related to this category were plans for two-year Associate Arts programs at a four-year college. Business schools were the second largest category, representing 110 choices among Business Careers students. Technical Institutes or trade schools received the highest selection from "blue collar" boys. Of special local interest was the large number of Business Careers students who planned to enter the New York Police Academy's training programs. Very few Cooperative students planned to work for a baccalaureate degree.

A much higher percentage of Business Careers students had taken some Civil Service Examinations than their Health Careers peers. Considering tests taken or planned to take, tests for clerical positions led the list among senior Business boys, with 81 seniors having taken them and 64 planning to take them. Examinations for state and federal positions were more popular than examinations for city jobs. The students' attitudes toward their city jobs were overwhelmingly favorable, the girls expressing more favorable sentiments than the boys. Junior boys and girls expressed more favorable attitudes than seniors. Only a small minority stated that they disliked their work assignments. (Five per cent of Business Careers students.) The only group in which less than one-half of the respondents indicated that they had liked their Cooperative work was the senior Health boys' group.

In listing two or three things which they "liked best" or "liked least" about their cooperative work-study assignments, the most frequently cited reason for liking the job was some aspect of the work the students were called upon to do. These were sometimes referred to in general and sometimes in specific terms. This held true for Health Careers as well as for Business Careers students. The second most frequently mentioned area was the broad spectrum of "everything."

"Good working conditions," "like co-workers," "good hours," and salary were also mentioned frequently. On the negative side of the ledger, the most frequently mentioned things were dull, boring or repetitive work, the "low" salary checks or infrequent pay, and generally poor working conditions, due to run-down or dirty old buildings that were too hot and uncomfortable in summer, work in a bad neighborhood, or work in an office that was inadequately equipped, with run-down old office machines and typewriters. In the personnel side, some respondents apparently felt some resentment toward their supervisors.

Business Career boys and girls objected to continuous filing. Girls disliked too much typing and/or not enough stenography or dictation. Inter-office messenger running and outside deliveries also ranked low in the esteem of many student-trainees. Among health career students, menial cleanup chores were most frequently named among the "disliked" items.

The majority of cooperative students worked in the city agencies under two or three supervisors much more frequently than under one. For the Business Career boys and girls, slightly over 35 per cent reported they worked under two supervisors; another large group reported working under three. About one fourth of the Business boys and girls (24.3%) reported working under only one supervisor. For Health Career students, more than 52.5 per cent reported working under one supervisor.

There was little difference in the students' evaluation of their own work and in their perception of their supervisors' evaluation of the quality of their work. All but a small proportion of the students felt that their work should be rated "good" or "excellent."

In response to how much training or help the students felt they had received from their supervisors on their municipal jobs, most of the Business Careers students who responded felt that they had received a moderate amount of on-the-job training. This feeling was expressed by 44.9 per cent of the respondents.

An additional 32.2 per cent indicated that they had been helped a great deal by their supervisors. Only 2.8 per cent of the Business Careers students felt their training had been over solicitous of their needs and that they should have been given less. Approximately three out of every four expressed the opinion that the training they had received was just about right for them. Only 22.0 per cent of Business Careers respondents stated they had received only a small amount of training or no training at all. Obviously they indicated that they should have been given more training.

Regarding future plans, approximately one-half (47.4%) of the Business Careers students said they would like to stay on their jobs following graduation. This figure was generally higher for the girls than for the boys.

Among the Health Careers students, fewer student-trainees (37.7%) desired to remain on in these jobs following graduation, and correspondingly more (35.2%) chose not to remain.

In response to the question as to what the trainees planned to do immediately following graduation, the two activities most frequently mentioned were school and civil service work, the same activities in which they were currently engaged, with each being selected by more than one-fourth of the Business Careers respondents. A substantial proportion of the boys expressed a desire to join the armed forces or the city's Police Force after graduation (13.6% of the seniors and 16.3% of the juniors). Seven and a half per cent of the seniors and 12.6% of the juniors planned to join the Police Force. One hundred forty-three enrollees (about 10%) hoped to work in private industry. The ratio of girls (almost all of whom wished to become private secretaries or typists) to boys for this category was about 2.1. Ninety-three respondents (6.7%) were unsure of what they might do following graduation. Approximately one-half of the Health Careers students planned to continue their education following graduation.

As to whether their experiences in the Municipal Cooperative Program had had any effect in changing their plans concerning work after graduation, the split between those Business Careers students who replied that their plans had changed and those whose plans had not changed was pretty even (46.3%) plans have changed; 42.4% have not changed. The variation between boys and girls in their reply was not great, generally well under 6 per cent. The remaining 11.3 per cent failed to respond to the question.

Well over half (60.5%) of the Health Careers students felt that their plans had not changed. Only 34.0 per cent replied that their cooperative experiences had helped them to change their plans.

Business Careers students who had been influenced by their cooperative experiences to change their minds were most frequently influenced to try to seek full-time employment in Civil Service, followed by decisions to continue with their formal education or training. Furthering one's education was most frequently mentioned by Health Careers students as a change of plans precipitated by their Cooperative experiences. Desire to work full time in Civil Service took third place to interest in nursing, hospital work, and other para-medical work.

H. Follow-Up Study of Graduates of Cooperative Program

The follow-up studies of the graduates of the Municipal Cooperative Education Program was made in 1964 and 1965. They were specifically addressed to the question of what proportion of these graduates had succeeded in gaining entry into Civil Service careers as well as their success in finding other kinds of employment and/or continuing their education and training.

Of the city agencies to which respondents were assigned, the Welfare Department employed the largest number of Business Careers students, followed by the Department of Hospitals, where 20 girls worked in administrative offices in secretarial and clerical positions. Among Health Career students, all but one respondent were employed in the Department of Hospitals of the Department of Health.

The young men in Business Careers responding in 1965 had worked in a variety of city offices, usually as clerk-trainees. Among the girls who graduated from Business Careers programs, the 1965 respondents showed a similar growth in numbers of stenographers and typists, outnumbering the combined total of all other job titles held by girls by a ratio of almost 2 to 1.

Full-time workers vastly outnumbered those who worked part-time. The ratio was 17 to 1 for Business Career graduates (with the girls showing a ratio of 40 to 1) and former Health Careers graduates represented by a ratio of 5 to 1.

A decline in relative retention in Civil Service jobs as compared with employment in private industry in the second year of the study was noted.

About 72.2% of the girls were continuing in work along the lines of the Hospital Aide training. The majority of Business Career respondents went into private employment. Of the responding Business Career girls employed in private industry in 1965, approximately 50 per cent held secretarial positions in a wide variety of companies. Those who left hospital work tended to drift into office-clerical white collar types of work. No one from this group went into blue collar or factory work.

In 1965 the overall rates of graduates who took Civil Service examinations was 25 out of 55 boys in all categories combined (45.5%) and 76 out of 97 girls in all categories (78.4%). Examinations for clerical positions were most popular among Business Careers boys. Among girls, the test for beginning stenographer and beginning stenotypist outranked all other tests combined.

Forty per cent of the Business Careers boys reported themselves to have passed their examination. Business Career girls showed an interest in filing for Federal or State as well as City Civil Service jobs. A total of 75.0 per cent of Business Career girls passed the stenographer examination in 1964.

Among 1964 Health Career graduates, only one boy out of 9 (12.5%) took an examination for police trainee. Among the Health Careers girls, the picture with respect to Civil Service was equally disappointing, with 3 out of 29 respondents (10.3%) having filed and taken examinations.

Regarding the post-high school education undertaken by the respondents in the 1965 survey, a much higher proportion of the boys among the 1964 graduates were attending schools than were girls.

And for the Business Careers graduates currently working in Civil Service agencies and in private industries, the ratio of boys to girls enrolled in institutions for further education was in the neighborhood of 2 to 1. A slightly larger number of Civil Service workers enrolled for further education than those employed in private industry (boys, 49.9% vs. 30.0%; girls, 17.2% vs. 17.0%).

In general, the unemployed Business Careers graduates were enrolled in full-time school programs. Graduates working in Civil Service and private industry were enrolled in part-time evening programs. Almost all the boys graduating from Business Careers programs (13 out of 17) were attending community colleges at night or were enrolled in technical institutes.

Among girls who were graduated from Business Careers programs, attendance was more evenly divided among evening or community programs of four-year colleges, business schools, evening high schools, and technical institutes. The curriculum connected with office-secretarial work highlighted all the institutions they attended. The majority of girls graduated from Health Careers programs were enrolled in nursing programs.

The main inference to be drawn from these data is that a significant proportion of the young men seek social mobility by rising from the lower echelons of clerical white collar work into a variety of

mushrooming middle level business, administration, and technical fields. The young women, however, were more interested in staying at their office-secretarial jobs or in advancing within the framework of their current positions until they married.

At the time of the survey, 11 of the 126 (8.7%) girls who responded to the questionnaire were already married. None of these 11 girls were enrolled for further training.

Young men graduating from Business Careers programs and currently in Civil Service work expressed plans in five out of seven cases to get away from Civil Service work, or else had no plans. Those at work in private firms expressed a preference for remaining in private industry in 19 out of 30 cases. These were scattered over a wide range of occupations, with the bulk in white collar employment. Few expressed interest in blue collar work. The unemployed male graduates of Business Careers programs had no specific plans. They made unrealistic references to attending colleges and were not interested in any kind of job. Several young men with Business Careers experience who were in the armed forces expressed a desire to seek military careers.

Most of the girls who had graduated from a Business Career program expressed a desire to continue in Civil Service. A small number who planned to enter private employment also planned to continue in office work. Plans of other students included a wide variety of activities ranging from business school studies for training in business administration to missionary work, modelling, and acting. Only 2 of the 53 young women planned to return to Civil Service. One-fourth named marriage as an immediate goal. The majority (53.3%) of the unemployed Business Careers girls either had no specific plans or left the question unanswered. Only three of these girls planned to re-enter Civil Service. The field of Nursing was the major choice of young women graduated from Health Careers program.

What emerges is a high degree of specificity of plans among graduates of the municipal programs. Relatively few said they had no specific plans. It is clear that these young women have set their sights upon middle echelon occupations, particularly in white collar types of employment.

Graduates were asked to give their appraisals of the relative importance of various school subjects. Heading the list named by Business Careers male graduates was clerical practice where filing procedures are taught, followed by business machines and business arithmetic. For young women graduates from Business Careers programs, the three leading subjects were steno-transcription, typing, and clerical practice.

Both boys and girls named English as the most helpful academic subject. Mathematics received a number of choices among both boys and girls, followed by science. Health Careers graduates tended to name courses related to nursing.

In response to what subjects the students thought they should have taken in high school, boys graduating from Business Careers programs named mathematics and typing. Girls in this program named bookkeeping and stenography most frequently. Health Careers graduates considered mathematics and chemistry as the subjects they should have taken in their nursing program. A considerable number said Spanish would have been useful in their work in the city hospitals.