STUDIES IN SOCIAL WORK

SELF-SUPPORTING STUDENTS IN CERTAIN NEW YORK CITY HIGH SCHOOLS

By
WALTER W. PETTIT
NEW YORK SCHOOL OF SOCIAL WORK

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN THE FACULTY OF PHILOSOPHY, COLUMBIA UNIVERSITY

THE NEW YORK SCHOOL OF SOCIAL WORK
105 East Twenty-Second Street, New York
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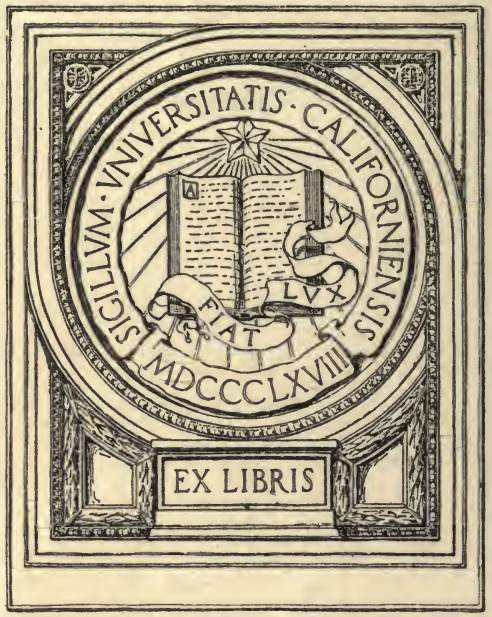
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CHAPTER I

SELF-SUPPORT IN NEW YORK HIGH SCHOOLS

In a great city like New York there are numerous opportunities for a high school pupil to earn money and pay wholly or in part his expenses while in school. Part-time positions of various kinds are open to boys and girls. Many small stores depend upon high school students to take and deliver orders after school hours, and larger stores employ students to assist in caring for the extra trade on Saturdays. The newspapers of the city give a number of school boys employment for a few hours each day, and delivering papers or caring for news-stands makes it possible for many a boy to remain in high school. The long summer vacation instead of being a period of rest, is used by a small army of boys and girls to earn money to meet the needs of the next school year.

Working for salaries is not the only way in which boys and girls are helping themselves in securing an education. Many families own small stores or stands, and children devote free hours to assisting parents in caring for the family business. Assistance rendered parents in this way frequently makes it possible to economize in hiring clerks and thus the child is permitted to remain in school. Work of this type is, therefore, a kind of self-support.

The following study has to do with New York City high school students who are working. The first investigation covered 3,395 boys and 2,578 girls; the second, 161 boys who were studied intensively; the third, groups of co-operative students[1] from three high

[1] Co-operative students: Students who are taking vocational courses and who work in pairs, alternating between the school and a position. In New York City high schools this means every other week in school.

schools. The study deals with the part-time work the student is doing from two points of view, that of the student and that of the school. The economic status of the boy's family, the position in terms of wage paid, hours required and effect on leisure time, and the vocational value of work done, are parts of the problem from the students' standpoint. The marks of working students, their elimination from school, and their regularity of attendance and punctuality are considered from the standpoint of the school. Whether students who work outside of school hours are able to do as high a grade of school work as others do is investigated. Inasmuch as co-operative classes in high schools give students who might otherwise leave school because of economic pressure an opportunity to support themselves in part, these students are studied to see to what extent their half-time work interferes with their school work. Finally, an effort is made to find out what the high schools are doing to help the working student, and the ways in which schools can be of greater assistance to the student who must support himself.

A preliminary study was made of Erasmus, Eastern District, De Witt Clinton, and Wadleigh high schools. Erasmus is in a residential section of Brooklyn and probably presents less opportunity for self-support and less need on the part of the students for outside work than the other schools studied. Erasmus was therefore not included in the final investigation. Eastern District is a Brooklyn high school with a large percentage of students of foreign-born parentage. De Witt Clinton is a boys' high school on the west side of Manhattan with a large attendance of Jewish boys. Wadleigh is a girls' high school in which, at the time this study was made, the students were mostly American born and to a large extent of American parents.

Preliminary questionnaires covering the activities of the students for one week were sent to the three high schools. (A copy of this four by six questionnaire card will be found in the appendix.) In two of the schools the principal, and in the third the head of the English Department, distributed the cards to the teachers with a request that they be filled out by the pupils without comment from the teacher. This was done in the three schools on Tuesday or

Wednesday, February 23 or 24, 1915, and covered the work done by the pupils during the week February 14–21. Several investigations previously made of the earnings of high school students had included the entire year. The possibility of inaccuracy because the student failed to remember his earnings for such a long period was so great that a shorter period was used in this study. The student was asked to state what he had done each day of this week and how much he had earned. In order to save embarrassment pupils were told that "boy" or "girl" instead of their names might be written at the top of the card. Some of the girls in Wadleigh and a few in Eastern District followed this suggestion. In general the students gave complete information under their own names.

The study of the effect of co-operative work on students' marks was made after classes had had one semester on half time in school. These classes in Bushwick and Washington Irving high schools were used because they were doing the same academic work required of full-time students. Unfortunately, the only available way of studying these students was the unsatisfactory method of using teachers' marks. Only those co-operative students were studied who according to their teachers were doing the same work in school that was expected of students on full time.

Finally, a more detailed study was made of some of the boys in De Witt Clinton High School. A questionnaire was prepared to supplement the printed card. This was used with a dozen students and somewhat modified before it was used with the whole group of 161 students. (A sample of this modified questionnaire will be found in the appendix.) Interviews were held with these 161 students during which the questionnaire was filled out and any further information which seemed of value secured. These boys were selected at random as far as possible. They were chosen from the study hall where a large and constantly changing group of students may be found at almost any hour. They come from all grades and are apparently as representative a group as could be found. The interview was held at the back of the large stage in the auditorium, and boys were sent to the interviewer in groups of two and three by the student monitors.

In the course of investigating what the schools in New York and other cities were doing to assist self-supporting students, an interesting plan was found in the newly organized work of De Witt Clinton High School and this is described somewhat in detail with suggestions for making the work more efficient.

A brief summary of the study is here given the reader. The various points in this summary are presented at length in the following pages, together with the data secured in the various investigations and a discussion of their significance.

Data from 3,395 New York high school boys show from one-seventh to one-sixth of them engaged in remunerative work during the week studied, and of 2,578 girls approximately one in twenty was working for wages during the same period. Special studies of students in one of the high schools show from one-third to one-half the boys working for money at some time during the year.

From the same studies it is evident that from one-seventh to two-sevenths of the girls and from one-sixth to one-fourth of the boys are assisting parents at home at any one time during the school year.

Economic Status

Of a special group of high school boys who reported as to the use of their money 21 per cent were supporting themselves, and several were supporting their families in addition. In the same group, boys who were engaged in remunerative work were living in apartments averaging 4.99 rooms each, while the boys who had not been working lived in apartments averaging 5.68 rooms in size. Those boys who were employed ten hours or over per week came from homes which averaged a room smaller than homes of boys who did no work.

In this group of students parents of children not working were a little more frequently the owners of their business than parents of children who were working for wages. Parents of children who were working without wages were much more frequently the owners of their business than parents of children who were not working or who were working for money.

In the group of 3,395 high school boys those born in the United States of American-born fathers were less likely to be working than those of foreign-born fathers. Boys of foreign-born fathers were less likely to be working when they themselves were born in America rather than abroad.

Brothers and sisters of working boys in the small group studied intensively were less frequently graduates of elementary schools than was the case among brothers and sisters of boys who were not working.

In the same group boys who were not working lived in apartments renting for $11.60 a month more than the apartments of boys who were working for wages, as shown by inquiries of the janitors.

Position

The boys and girls who were working in the high schools studied were earning wages which varied greatly. In one high school the median wage per hour for boys was 18 cents; in another 25 cents. For girls the median wage per hour was 30 cents in the two schools studied.

The number of hours worked per week for wages varied greatly, being twelve as a median in one school for boys and seven as a median for boys in another school. Girls worked a smaller number of hours per week, the median being six and four and a half in groups of girls from two schools.

Of a group of De Witt Clinton High School students those who do not work report for the week studied more recreation than students who work. This holds true for the number of different kinds of recreation, for the number of times any recreative activity was engaged in, as well as for the total number of hours devoted to recreation. A comparison of students working for wages ten hours or more per week with students not working, shows the latter to have had almost twice as much recreation from the standpoint of hours, kinds, and number of recreative activities engaged in. Long hours of work outside school greatly decrease the attendance of school boys at

movies and shows, and the data indicate that participation in athletic sports suffers even a greater reduction.

In the small group of boys studied the most common way of securing a position was found to be reliance on friends. Calling on employers and answering advertisements were given as next in popularity.

Boys earn money in a great variety of occupations. The most popular is working in stores or offices. Twenty-seven per cent of the students working for wages in one school and 20 per cent in another were so employed. Taking orders and delivering for stores, work connected with the distribution of newspapers, and employment as pages in public libraries are popular occupations. The girls' work is much less varied and practically all the girls from whom data were received were earning through teaching, working in stores or offices, or as waitresses or nurse maids.

In most cases there is no relation discernible between the work the boy is doing and the future occupation he intends to enter.

The School and the Working Boy

In the small group of students studied, boys working do not appear to be handicapped in their school work in so far as school marks are an indication. This conclusion is supported by another study in which boys who are working at least up to twenty hours a week are given as high marks as boys who are not working.

There is more elimination from school among the boys who work than among the boys who do not in the case of 100 boys selected at random from each of two schools, half of whom were working.

In the small group of students, boys who were working were less regular in their attendance and a little more likely to be tardy than boys who were not working.

In co-operative work in two schools studied the students seemed to be suffering little or no handicap from the half time devoted to work. There seems to be a tendency among the co-operative students studied to do just average work, and the distribution range of their

marks is smaller than in the case of students in regular courses. Co-operative work furnishes a means of helping the boy who must support himself to remain in school.

In a large high school the appointment of a special teacher to advise with students and assist in placing those who must work is advocated. The interest of the home, employer, and school must be taken into consideration, and a central bureau organized where the work of the different high schools can be systematized and the information of the co-ordinators[1] of the different high schools utilized.

Finally, the English system of secondary scholarships is described and contrasted with the policy of the Board of Education in New York City.

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[1] The teacher who supervises the student in the shop or office and correlates the work of the classroom with the outside work.

CHAPTER II

THE SELF-SUPPORTING STUDENT

The first study of self-support in New York City high schools covered 5,973 students in the three high schools, De Witt Clinton (a boys' high school), Eastern District (a co-educational school), and Wadleigh (a girls' school). Each student filled out the questionnaire card shown in the appendix, and stated whether he had worked with or without pay the previous week, what kind of work he had done each day, how long it took him, and how much his daily earnings were.

Later an intensive study was made of 161 boys in De Witt Clinton High School covering the two vacation months, July and August, and the first two months of the school year, September and October.

Number of Students Working

Because of irregular programs, absence, and refusal to co-operate, it was impossible to secure returns from the total registration of the schools studied.

In Wadleigh High School returns from the students were especially poor, and but 53 per cent of the girls in the classes studied gave the information requested. Special effort would doubtless have resulted in more complete returns, but the small number of girls working did not seem to justify the expenditure of additional time. Of the 1,322 in this school who filled out the cards 58 reported that they were working for money, and 206 that they were working outside of school hours but were receiving no wages in return for their work. In Eastern District High School where the students filled out the cards much more generally than in Wadleigh, the number of girls working

for wages was but 69 out of the 1,256 who gave returns. In Wadleigh 4.4 per cent of the girls reporting were working for wages, while in Eastern District the percentage was 5.5. Positions for girls Saturdays and after school hours are doubtless more difficult to find and are not so varied as in the case of boys. In Wadleigh High School 15.6 per cent, while at Eastern District 361, or 28.7 per cent, of the girls were working at home without receiving pay. These girls are doing housework or assisting in parents' offices and stores. In Eastern District High School 115, or 17.3 per cent, of the boys were working for wages during the week studied as compared with 386, or 14 per cent, in De Witt Clinton. Of the Eastern District boys, 26.8 per cent were working without wages, and but 18 per cent of the De Witt Clinton boys were in this class. The investigation of the work done during this one week showed that from 20 per cent of the girls in Wadleigh to 44 per cent of the Eastern District boys were doing some work outside of school hours either with or without pay.

This data, it must be remembered, were the results of a study covering but one week in the spring of 1915. This was a school week and the data are not indicative of conditions during vacation periods. In order to determine to what extent students work during the summer this question was included in the study of the 161 boys in De Witt Clinton High School. These boys were interviewed during November, 1915. The questionnaire used in these interviews with 161 students in De Witt Clinton High School, a copy of which will be found in the appendix, covered the vacation months of July and August and the school months of September and October, 1915. These 161 students were as nearly a random selection from the student body in De Witt Clinton High School as it seemed possible to make.[1] The method of selecting them has been previously explained. It is possible that in a few cases boys may have come to interview the investigator at their own request. Some of these boys were employed

[1] In order to determine to what extent this group of 161 boys represented the student body of De Witt Clinton High School, the nationality of the students comprising the group of 161 studied was compared with the nationality of the 2,731 who had been studied previously and who represented 88 per cent of the average attendance in the seven upper classes, the only classes from which data

and desired to give information about their work. On the other hand, some of the boys were under the impression that an effort was being made to find positions for boys, and in two or three cases boys not at work who wanted something to do came to apply for a position. Of the 161 boys interviewed in De Witt Clinton 104, or 65 per cent, had been working the previous summer either for wages or at home without pay. Eighty-three, or 52 per cent, had been working for wages.

This study of 161 boys gave a more representative picture of the amount of self-support among high school students during the school year than the study of one week's activities made the previous spring, as it covered two months of the school year and was also made under direct supervision of the investigator. Of these 161 boys 91, or 56 per cent, had been earning wages at some time during the four months. In addition there were 28, or 17 per cent, who had worked without receiving pay. A total, therefore, of 73 per cent of the group studied had been working. In this special group the week before the investigation there were 49, or 30 per cent, of the boys at work for wages, and 44, or 27 per cent, working without wages.

There is considerable difference in the results of the two studies, both made in De Witt Clinton High School. So far as the investigator was able to ascertain, both studies were made at a period which was neither particularly favorable nor particularly unfavorable for securing work. In accounting for the discrepancy in the results it

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were secured. The results shown below indicate that at least from the standpoint of nationality the group was very representative.

Birthplace of		Per Cent of Group of 2,731 Studied	Per Cent of Group of 161 Interviewed
Father	Child		
United States	United States	15	14
Russia	United States	26	22
Russia	Russia	16	16
Italy	United States	3	3
Italy	Italy	1	1
Austria	United States	18	20
Austria	Austria	7	14

must be remembered that the latter study in which the larger figures were secured was made through a personal interview with the student, that there was opportunity to explain to the boy the purpose of the study, and that each boy was told that the data secured were to be kept in the possession of the investigator, no teacher or other person having access to them. On the other hand, the former and larger study had been made through the schools, the cards being distributed and collected by the class-room teachers. One factor in reducing the percentage of boys who reported themselves as working in the study made through the teachers, was unwillingness on the part of some of the pupils to have the fact of their employment known.[1]

In an investigation[2] made entirely independent of this study early in 1917 of amount of work done by pupils in De Witt Clinton High

[1] This is illustrated in the following cases:

Case No. 87. Born in Russia, seventeen years of age, sixteen of which have been spent here, in the sixth semester of the high school, this young man is employed three hours each school day and twelve hours Saturdays and Sundays as an optician. In summer he works twelve hours a day. He receives $15 a week in summer and $9.00 in the school term. He lives in a flat of four rooms and has no older brothers and sisters. His father is a cloak maker and does not own his business. The family speak Yiddish at home. He stated that there was no time for recreation. He has been working since he was nine years old when he began at $1.40 a week. He did not want to give the information requested and would answer the questions only when assured that his name would not appear on the answers and that the information would never be used in connection with his name. Even then he said that he preferred not to give the name and address of his employer.

Case No. 124. This boy was born in New York sixteen years ago of Russian parents. He is in the seventh semester of the high school. His father is a dentist and the family live in an eight-room apartment. Their home language is English. He plays in an orchestra in one of the largest hotels in the city from half-past ten to two o'clock each evening. During the summer he played seven hours each day. In summer he received $50 a week; in winter he is paid $75. He belongs to a union and was very anxious that this information should be absolutely confidential as he felt that were the facts known he might not be able to keep his position. In the three days program given the interviewer he reported as recreation, attending a theater on Saturday, playing in a symphony orchestra on Sunday, and spending several hours on the street Sunday afternoon. He also mentioned the fact that at home he played cards frequently.

[2] This investigation was made under the supervision of Mr. Edward C. Delaney, of De Witt Clinton, who has organized the office in which boys are placed in half-time positions.

School, returns were received from 4,483 boys, or all the students on the register the second week in January, 1917. Boys who worked but two or three weeks or earned less than $10 during the year are not included in the number of "working boys." The boys who were working for their parents are not counted as working boys. There were 1,437 boys who received pay for their work during the year, or 32 per cent of the group.[1]

The English department of De Witt Clinton High School in 1914 found of 3,431 students 770, or 22 per cent, earning money at some time during the year.[2]

NUMBER OF STUDENTS WORKING

	Number Studied	Number Working for Wages	Per Cent	Number Working Without Wages	Per Cent
Eastern District.....	Boys....1664	115	17.3	178	26.8
Spring, 1915.....	Girls....1256	69	5.5	361	28.7
Wadleigh					
Spring, 1915.....	Girls....1322	58	4.4	206	15.6
De Witt Clinton					
Spring, 1915.....	Boys....2731	386	14	485	18
[a]De Witt Clinton					
1914.....	Boys....3431	770	22	..	..
[b]De Witt Clinton					
1917.....	Boys....4483	1437	35[c]	..	..
De Witt Clinton					
November, 1915.....	Boys.... 161	91	56	28	17

[a] Study made by the English Department.

[b] Study made by Mr. Delaney.

[c] Mr. Delaney's figure corrected to correspond with results of other studies made, by excluding students in first semester.

The Working Boy and His Position

There are three problems in connection with the boy who is wholly or in part supporting himself, which it is here proposed to discuss.

First, the economic status of the working boy is a fundamental problem. Is the boy who is working doing so because he is obliged

[1] If Mr. Delaney had omitted the first semester students, as was done in the two investigations previously made, he would have had 1,177 students out of 3,360 working, or 35 per cent.

[2] From a manuscript report of this study.

to? Do boys who are working come from poorer families than boys who are not? What do rent and size of apartments, father's business, and educational opportunities of brothers and sisters indicate with regard to the status of working boys?

Second, the problem which has to do with the boy's position. Is he required to devote too many hours to the work? Does the work interfere with his recreation? Is he well paid for his efforts or is there a tendency to exploit him?

Third, the problem which deals with the educational value of the work the boy is doing. What kind of work are students doing? Is there any relation between this work and the work the student will later enter?

Economic Status of Family

Data regarding the economic status of the families of working boys were secured through the answers to questionnaires which dealt indirectly with financial condition. Students were asked the question, What do you do with your money? The answers to the question asked on the card indicate that a large number of students are working after school hours in order to support themselves in part or wholly. In De Witt Clinton High School 113 boys, or 29 per cent, of the boys working for money reported that they were using their earnings in supporting themselves. Twenty-four boys, or 21 per cent, of those working for money, and 19 girls, or 27 per cent, of those working for money in Eastern District High School, and 5 girls in Wadleigh gave similar reports. In De Witt Clinton some of the replies were, "Enable me to go to school"; "Self-support, no help from home"; "Keep up home"; "Support mother and brother"; "Support family and myself"; "Support home." There were 238 boys in De Witt Clinton and 57 in Eastern District, and 51 girls in Eastern District and 23 in Wadleigh, who reported that their earnings were used for incidentals including school expenses, car fare, clothing, books, lunch, etc. A few of the students were saving their money. (28 boys in De Witt Clinton and 21 in Eastern District were doing this.) In each of the two schools 5 boys gave as the reason, preparation for college expenses. Five girls in Eastern District and 3 in Wadleigh reported that they save their money.

In the group of 161 boys studied in De Witt Clinton High School there were but 46 of the 91 earning money who answered the question regarding use of their money. Ten of these were self-supporting, and 3 of these 10 not only supported themselves but supported their families wholly or in part; 22 used their money for general and school purposes. Nine boys wrote that they saved their money, and of these 2 reported that they were saving their earnings for college expenses. Finally 5 boys reported that they turned their money over to their parents.

That the necessity for self-support is a considerable factor in elimination from school is indicated by the results of numerous studies. Estimates of the importance of economic pressure as a cause of elimination vary from 20 per cent to 85 per cent.[1] The difficulty of estimating the proportion of students leaving school because their families need their earnings is apparent as soon as an attempt is made to reduce economic pressure to definite terms with which another investigator can work and secure similar results. As a matter of fact the statement of the child and his parent obtained during a visit at the home must for the present be relied upon.

Mary Flexner found apparently that 376 [526 − 150] of a group of 666 children, or 56 per cent, between the ages of fourteen and sixteen had gone to work because their earnings were needed at home.[2] Helen T. Wooley found that "only 27 per cent of the families were believed to require the earnings of the children, while 73 per cent had apparently no such economic need.[3] She was studying a group of 650 families in which native-born white children had left school at the age

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[1] These studies deal generally with children in the grammar grades.

[2] A Plea for Vocational Training, Survey, Volume XXII, p. 650. Miss Flexner states that school records give 526 children as leaving school from necessity, and that interviews in their homes developed that 150 children left school for reasons other than economic "thus reducing the number of those whose earnings were needed at home from 526 to 380." The latter figure is apparently an error. Mary Van Kleeck in citing this study, Working Girls in Evening Schools, page 106, states "that apparently 380 out of a total of 530, or 72 per cent, left school because of economic pressure." Miss Flexner's study indicates that there were 666 students in the group rather than 526, or the 530 Miss Van Kleeck used.

[3] Charting Childhood in Cincinnati, Survey, Volume XXX, p. 601.

of fourteen. Mary Van Kleeck reports that of 108 girls who had left school before the age of sixteen, "Exactly half the number said that they left school to go to work because their earnings were needed at home."[1] C. D. Jarvis found that of 699 students who undoubtedly would leave school during the year, 278, or 40 per cent, were leaving because "family needs help."[2] In the report of the Superintendent of Schools in St. Louis[3] there is an analysis of the causes of 3,567 cases of elimination in the public schools. "Poverty" and "increasing the family income" are assigned as the reason 3,041 children, or 85.3 per cent of all, had for dropping out of school. In a study made by Dr. Anna Y. Reed in Seattle, Seattle Children in School and Industry, published in January, 1915, economic pressure is said to have been the cause for leaving school in the case of 132 out of 486 eliminations among high school boys and 62 of 336 eliminations among high school girls. According to this study 24 per cent of the students leaving high school left because of economic pressure. In a study made in Massachusetts, "The report of those who left school from necessity is 2,450 out of 5,459," or 44 per cent.[4] Alice P. Barrows found that "Only 20 per cent of the families visited had a per capita income of under $1.50, and on the basis of the government standard of income only 20 per cent of the children had to leave on account of economic pressure."[5] Ernest L. Talbert states that of 217 families represented "118 gave the economic cause as determining the leaving of school; 31 of these were found to be entirely able to send their children to school," which leaves 40 per cent who withdrew from school for financial reasons.[6] In another study of 605 children, 177,

[1] Working Girls in Evening Schools, p. 110.

[2] Work of School Children during Out-of-School Hours, C. D. Jarvis. Bulletin, Bureau of Education, 1917, No. 20, p. 27.

[3] Superintendent's report, St. Louis, 1914–15, p. 417.

[4] Report of the Commission on Industrial and Technical Education, Massachusetts, April, 1906, p. 86.

[5] Report of Vocational Guidance Survey, Alice P. Barrows, 1912. Reprinted from the 14th Annual Report of the City Superintendent of Schools, New York, p. 7.

[6] Opportunities in School and Industry for Children of the Stock Yards District, Ernest L. Talbert, p. 39.

or 29.3 per cent, were found to have left school because their earnings were necessary to family support.[1]

In the present study additional data bearing on the economic status of families of working boys were obtained in answer to questions regarding size of apartments, education of brothers and sisters, and ownership of father's business. It is, of course, realized that size of apartments in New York may have less to do with the wealth of a family than location, and that ownership of business means little. The significance of these facts becomes of importance as they reinforce one another by pointing to the same conclusion. In the case of rents of apartments gathered by house-to-house visits, it is believed a very definite indication of financial status is presented.

Economic Position of the Family as Measured by the Size of the Apartment.—In the questionnaire used with the special group in De Witt Clinton High School, each student was asked:

Do you live in a flat or a private house? If a flat, how many rooms?

Most of the students answered this question. Of 91 students who were working for money, 10 lived in private houses and 72 in apartments. Nine did not answer the question. There were 42 boys who were not working, and of these, 8 lived in private houses and 2 failed to answer the question. The boys who were or had been working for money during the preceding weeks lived in apartments averaging 4.99 rooms each; the boys who had not been working during the four months studied lived in apartments averaging 5.68 rooms in size. The boys who were working ten hours or longer per week at the time the study was made lived in apartments averaging 4.69 rooms each. There were but 23 boys in this group. These figures indicate that boys who do no work live in apartments which average a room larger than boys who are working for wages ten hours or more per week.

Father's Business.—Each student was asked to give his father's occupation and state whether the business in which his father was engaged belonged to the family or not. The occupation itself had little significance. A tailor may be the owner of a large shop, or a

[1] Report on Condition of Women and Child Wage-Earners in the United States, Volume VII, p. 46, 1910.

SIZE OF APARTMENTS

	Boys Working for Money	Boys Working without Money	Boys not Working
No answer	9	2	2
2 rooms	1	..	1
3	7	3	1
4	23	4	4
5	14	7	7
6	19	5	10
7	5	4	6
8	2	1	3
9	1	..	..
Private house	10	2	8
Total	91	28	42

man engaged in making garments. The data indicate that so far as this group is concerned, the father of a boy who is not working for money is more likely to own his own business than the parent of a boy who is working.

Does Parent Own Business?	Boys Working for Wages	Per Cent	Boys Working without Wages	Per Cent	Boys not Working	Per Cent
Yes	33	36	21	75	19	45
No	39	43	4	14	17	40
No answer	19	21	3	11	6	15

Of the boys who are working ten hours or more a week, 13 have fathers who own their own business, 11 have fathers who do not, and 6 do not answer the question.

The high proportion of boys working ten hours or more whose fathers own their own business may be due to the small size of the group, or to the fact that they come from families owning small stores. The latter fact doubtless explains the 75 per cent of boys working without wages whose fathers own their own business. When the family owns a store there is abundant opportunity to assist in it, and a few hours of work a week was reported on the card frequently in such cases.

Ownership of business, as has been previously said, has comparatively little significance by itself. It may mean ownership of a push

cart or a small East Side store. It is even of less value because so many of the parents of the students studied were Russian Jews, among whom there seems to be a very strong tendency to begin some small business enterprise for themselves as soon as a little capital is accumulated.

Birthplace and Self-Support.—The birthplace of a student may indicate something regarding his economic status. In general, the immigrant recently arrived is having a greater financial struggle than is the second generation. The study showed that children born abroad were more likely to have to work than children born in this country of parents born abroad. Families which have recently immigrated are apparently financially unable to meet the expense of educating their children without some assistance from the boy himself.

	Eastern District	De Witt Clinton
Boys born abroad	195	656
Working for wages	42	144
Per cent	22	22
Boys born in United States	460	1373
Working for wages	72	191
Per cent	16	14

This difference is especially noteworthy in the large group of Russian Jews in De Witt Clinton High School. In this institution a boy born in Russia is twice as likely to be self-supporting wholly or in part as a boy born in the United States of Russian parents. The following table shows the relation between birthplace and self-support in the case of boys working for wages:

Birthplace of		Eastern District			De Witt Clinton		
Boy	Father	Number in School	Number Working	Per Cent	Number in School	Number Working	Per Cent
United States	United States	30	0	0	408	49	12
United States	Russia	244	44	18	696	71	10
Russia	Russia	137	30	22	435	97	22
United States	Austria	100	16	16	473	56	12
Austria	Austria	26	2	8	188	41	22
United States	Italy	17	3	18	80	15	19
Italy	Italy	7	2	29	36	6	17

The probability is that the economic status of the Russian Jew in one generation has improved to such an extent that the boy can be sent to school without having to look for a position where he can earn something to add to the family income. The same thing holds true of the group of Austrian origin in De Witt Clinton High School.

An examination of the data of the boys who are working without wages shows that there is a larger per cent in this group born in the United States of Austrian or Russian fathers than in the group working for wages. This may well indicate that the longer residence of these families in America has resulted in savings which have permitted the opening of a small business in which boys work. This may also explain in part the 75 per cent of boys working without wages whose fathers own their own business.

TABLE SHOWING BIRTHPLACE OF BOYS WORKING WITHOUT WAGES

Birthplace of		Eastern District			De Witt Clinton		
Boy	Father	Number in School	Number Working	Per Cent	Number in School	Number Working	Per Cent
United States	United States	30	10	33	408	32	8
United States	Russia	244	59	24	696	130	19
Russia	Russia	137	32	23	435	79	18
United States	Austria	100	22	22	473	83	18
Austria	Austria	26	4	15	188	29	15
United States	Italy	17	4	23	80	14	18
Italy	Italy	7	1	14	36	15	42

Education of Brothers and Sisters.—Each of the 161 students interviewed in De Witt Clinton High School was asked to state the number of older brothers and sisters he had, and the grade of each on leaving school. The 91 boys of the group who had been working for money at some time during the previous four months reported 57 brothers and 66 sisters. The 42 boys who had done no work reported 21 brothers and 33 sisters. Among the older brothers and sisters of the group working for wages there were 73, or 59 per cent, who had finished elementary school. The group of boys not working had 47 brothers and sisters, or 87 per cent, who had finished the elementary school.

Students working ten hours or more a week for wages at the time the study was made reported 17 older brothers and 21 older sisters. Thirteen brothers and 11 sisters had graduated from the elementary school. Three of these brothers had gone on into college or normal school, and one of the sisters had entered high school. Sixty-two per cent of the brothers and sisters of students working ten hours or longer had graduated from public school, 11 per cent from high school, and but 8 per cent had entered higher institutions. The data indicate that in so far as educational opportunities measure economic status, the boys who were not working were from families with more money than the boys who were working.

Working boys show a percentage of brothers who finish the elementary school not much lower than that of brothers of non-working boys. This is 63 per cent in the first case and but 75 per cent in the second. However, a much larger percentage of non-working boys' than of working boys' sisters graduated from the elementary school, 88 per cent in the first case and 56 per cent in the second. The working boys' families are apparently not able to keep their daughters in school as long as are the families of boys not working. Brothers of working boys, however, are able to be also in part self-supporting and earn their way through school. Therefore the per cent of brothers of working boys graduating from elementary school is more nearly that of brothers of boys who are not working.

Rent of Apartments.—In New York where, as it has been said, the size of an apartment is of little significance in measuring the economic position of a family because so much depends upon the location of the apartment, and where ownership of business among the great industrial and commercial organizations has little meaning, a better index of economic standing is the rent paid for an apartment. The unreliability of information when furnished by the student himself made it necessary to secure the facts through some other means. An investigator was sent to the addresses which boys had given on their cards, and through this means the rents were secured for 36 boys who were earning money and 27 boys who were not working during the four months preceding the investigation, two of which had been vaca-

tion months. The investigator knew the size of the apartment as given by the boy and with this information asked the janitor of each building visited the rate for an apartment of that size. The investigator knew many of the boys personally and was in most cases able to check up items regarding the size of apartments. In but one case did he fail to secure the information, and that was where the boy had given the address of his employer instead of his own.

Boys who were working for wages were living in apartments which rented for from $9.00 to $63 a month. Boys who were not working were living in apartments for which from $8.00 to $100 a month was paid. Boys who were not working came from families which paid an average of $11.60 a month more for their apartments than do the families of boys who were working. Table on page 28 shows the relation between the distribution of rents of working boys and boys who were not working.

The students who were working while attending school came from families lower in the economic scale than boys who were not working. Many of the students were kept in school by their own earnings. It was necessary for them to earn if they were to continue their education. The remunerative employment in which they were engaged, outside of school hours, helped to keep the already large proportion of students leaving school because of economic pressure from increasing. This investigation strengthens one in the opinion that there is often a great struggle to secure an education both on the part of the child and his family. Born abroad or coming from families which have immigrated from countries without free schools or where race prejudice prevented their attending public schools, these children by the hundred grasp the opportunities offered them here frequently at the expenditure of great effort and sacrifice. The rents many of them pay indicate the poverty from which they come.

Data of this sort emphasize the care needed in outlining a curriculum for such students. Most of those studied were taking the academic courses, Latin, mathematics, English, history and science. Many of them who will fail of their aim to enter college will thus be thrown into life with a smattering of a number of subjects for which their position in industry will find little use.

RENTS FOR APARTMENTS OF BOYS IN DE WITT CLINTON HIGH SCHOOL

Monthly Rent	Boys Working for Wages	Boys not Working	Monthly Rent	Boys Working for Wages	Boys not Working
$8	..	1	$26	..	3
9	1	..	27	1	..
10	1	..	28	2	3
12	1	..	29	1	..
13	1	..	30	2	1
14	1	1	32	1	2
15	2	..	35	..	2
16	1	..	40	..	1
17	1	..	45	2	..
18	6	1	58	..	1
19	4	..	60	..	1
20	3	2	63	1	..
22	1	..	65	..	1
23	..	1	68	..	1
24	1	1	100	..	1
25	3	2			
				37	26

	Monthly Rent of Boys Working for Wages	Monthly Rent of Boys not Working
Average	$22.78	$34.38
Median	19.00[a]	28.00
1st quartile	17.50	23.50
3rd quartile	26.00	35.00
A.D. from median	7.08	12.61

[a]In a study of 3,000 families applying for relief in the Charity Organization Society of the City of New York between January 1 and September 30, 1916, the median rent paid was between $10 and $11.99, and 50 per cent of the families were paying from $8.00 to $14.

In Causes of the Elimination of Students in the Public Secondary Schools in New York City, by J. K. Van Denburg, page 81, the median rent for 420 apartments of students was from $17.50 to $22.50. The mode was $12.50 to $17.50 and the average $29.

That many of these boys will soon leave is shown by the data on elimination from New York high schools. In the term ending June 30, 1906,[1] 21.3 per cent were eliminated, and for the semester, March to May, 1916, the average for the city was 5.9 per cent.[2] The present

[1] Van Denburg, Causes of the Elimination of Students in the Public Secondary Schools in New York City, pp. 11–12.

[2] Report on High Schools for the year ending July 31, 1916, New York City.

investigation showed that in the two groups studied in Eastern District and in De Witt Clinton high schools there was more elimination among students who were working for wages than among others.

The Position

The facts cited indicate that there are many families in which it is necessary that school children assist in earning money, and that a considerable part of the elimination from school is due to economic necessity. Many of the students who are working are enabled to attend high school only because they are self-supporting.

There is, however, always a danger that in the case of these adolescent boys and girls too many hours will be devoted to work, and that school work will be neglected and the recreation period shortened. There is also the danger that these young people who must earn, but who are not protected by union organizations or by the child labor laws, may be exploited by their employers. In the following section data will be given regarding age, the number of hours students work, the amount of recreation working boys have, and the wages they receive.

Wages Received.—The median salary of 372 boys in De Witt Clinton High School who gave their earnings during the school week studied was $2.50, and 50 per cent of the group were receiving from $1.50 to $3.75. Across the East River in Eastern District, positions are apparently not so remunerative, and the median wage for boys is but $1.50[1] with quartiles at 80 cents and $2.75. The De Witt Clinton boy earns more than the Eastern District boy. De Witt Clinton High School is easily accessible to the business sections of New York, which may in part explain the difference.

The median salary per hour in De Witt Clinton is 18 cents, with the first and third quartiles at 9 and 33 cents. In Eastern District

[1] In Work of School Children During Out-of-School Hours, by C. D. Jarvis, Bulletin, U. S. Bureau of Education, 1917, No. 20, p. 8, is the statement that for 3,846 children in the sixth, seventh and eighth grades, "the average weekly earnings for those who work during out-of-school hours amount to $1.51."

High School the boys are earning a median salary of 25 cents an hour, with quartiles at 14 and 37 cents.

Though the boy in De Witt Clinton earns approximately a dollar more per week than the Eastern District boy, yet his median wage per hour is 6 cents less, and his average wage 5 cents less than that of the boy across the river. There is more work for the boy to do in Manhattan, but the pay is poorer. In some cases the student is paid so little for his time that were the facts known, he would doubtless be advised to discontinue his work and find another position. One boy who was working nine hours a day seven days a week selling candy in a theater received but 4 cents an hour.

Both groups of boys were earning more each week than were the girls in the two schools from which data were collected. In Eastern District, girls had for the week studied a median salary of $1.25, with quartiles at 50 cents and $2.50. In Wadleigh the median salary was $1.50, with half the girls receiving from 75 cents to $2.00 a week. In both schools the median wage an hour for girls was 30 cents. In Eastern District half the girls were receiving from 11 to 50 cents an hour, and in Wadleigh from 20 to 50 cents.

The higher median wage an hour paid to girls was due in part to the fact that a larger proportion of the girls working were giving lessons. A majority of these were giving music lessons, for which they received 50 cents or $1.00 an hour. Many of the boys were teaching English to foreigners and frequently received 25 cents an hour and occasionally 50 cents.

These wages do not seem low when compared with the wage paid high school students during the summer vacation. The average weekly wage for a small group of boys in De Witt Clinton during the summer vacation was $6.00. The co-operative students in New York high schools for the week ending May 20, 1916, earned an average salary of $2.86.

There are many high school boys who are earning comparatively high wages in De Witt Clinton. Of 372 boys whose weekly wage is known, 62, or 16 per cent, were earning $5.00 or more a week, and 16 of these, or 4 per cent, receive $10 or more. One young fellow owns

and operates his own restaurant and is making $56 a week; another plays in an orchestra in a popular hotel and earns $75 weekly.[1]

Number of Hours Worked.—One of the greatest dangers arising from the outside work which high school students do, is in the long hours some of them are required to work. With no supervision on the part of the school or the state over their work, individual employers and parents are likely to require an unreasonable amount of work done outside of school hours. A railway mail clerk and a post-office clerk were giving five hours to high school work. The clerk in a telegraph office who worked from 5 p.m. to 2 a.m. every day in the week was one of the most extreme cases found.[2] In De Witt Clinton High School the median number of hours worked by boys who reported that they were earning wages was 12, while the quartiles were 6 and 21. In Eastern District High School the median number of hours worked by the boys was 7, with the quartiles at 3 and 16. For girls in the same school the median was 6 hours, and quartiles at 3.5 and 10, while in Wadleigh the median was 4.5, with quartiles at 2 and 10.

Students who are working at home have also long hours, especially in Eastern District and De Witt Clinton where there are many working in parents' shops. In Wadleigh, of 156 girls who furnished the data and were giving an hour or more a week to home work, 151 were doing some form of housework—cooking, dusting, washing dishes, or minding the baby. This work does not require so much time apparently, and in Wadleigh the girls working without pay are giving a median of four hours with quartiles at 2 and 8, as compared with the median of four and a half hours, with quartiles at 2 and 10 of girls who are earning money.

[1] See appendix for hourly wage distribution tables.

[2] Case No. 82. A Jewish boy who has been employed during the last six years in a telegraph office in various positions, beginning as a messenger. He is eighteen years of age, in the senior class, and works fifteen hours a day in summer and nine hours a day during the school year. He is self-supporting and able to save some money for college. He lamented the fact that his only recreation is an hour's practise on the violin each day, and that he has never had time to make friends among the boys. The attention of some of his teachers was called to the case and as a result of their advice he dropped his work.

In Eastern District, girls working without pay have eight as a median number of hours, as compared with six hours for those with pay, and for boys eight hours compared with seven for pay. There were 9 boys working without wages in Eastern District thirty hours or more per week, and in every case they were clerking in parents' stores. The longest period of work in a week was seventy-one hours, reported by a girl of Eastern District High School who was nursing a sick mother. The girl working next longest was "attending store" fifty-five hours weekly.

The kind of work, the age of the boy, and his physical condition are such important factors in determining the length of time he should be permitted to work outside of school hours, that a statement that a boy should not work more than a given number of hours per week can hardly be ventured. Each case calls for study and decision on its own merits. It would seem, however, to be inadvisable for a student who is spending five hours a day in high school to work twenty hours or more a week at any occupation unless circumstances were very exceptional. In De Witt Clinton 115 boys, or 30 per cent, of those earning money are employed twenty hours or more a week; in Eastern District 20 boys and 5 girls, and in Wadleigh 6 girls are working such long hours.

The next problem was to determine to what extent the work which students are doing outside of school hours affects their recreation period.

Recreation.—Of the group of 161 students at De Witt Clinton High School questions were asked regarding the kinds of recreation engaged in during the week preceding the study and the number of times each kind of recreation had occurred. Each student was requested to make out a program by hours of his activities during the Friday, Saturday, and Sunday preceding the investigation. No special mention of recreation was made in this request but the data have been used to determine the amount of time the students devote to recreation. In examining the results of the questionnaire the students were divided into two groups—those who were not working and those who were working. There were 68 who were not engaged in any kind of work during the week studied, and 93 who were working

either for wages or without wages. This latter group was later divided into four parts; those working for wages ten hours or more a week and of whom there were 30, those working for wages less than ten hours a week, 19 in number, those who were employed at home ten hours or more a week, and those working at home for less than ten hours a week. There were 20 and 24 in the last two groups respectively.

The questions were given to the students in the following form: Check below recreations you have had the past week giving number of times engaged in

Movies	Clubs
Theater	Gym (outside school hours)
Pool or billiard hall	Swimming pool
Dance hall	Athletic field
Walking	Games at home

Name any other engaged in.

The different kinds of recreation engaged in during the week preceding the investigation were first tabulated. This was done without regard to the number of times any one form of recreation occurred during this week. All students who were working, without regard to how many hours they were employed or whether they were receiving pay, reported an average of 4.1 different kinds of recreation in the week. Students who were not working mentioned 4.4 kinds of recreation on the average. All students who were employed during this week for ten hours or more with or without pay were next considered. They reported 3.3 kinds of recreation. The thirty students who were employed ten hours or longer for pay, however, averaged but 2.6 kinds of recreation.

The hourly programs for the Friday, Saturday, and Sunday preceding the study were next examined and the number of different kinds of recreation mentioned tabulated without regard to the number of times any one kind occurred in a single student's program. Students who were not working mentioned an average of 4.5[1] kinds of

[1] This figure for three days is greater than that for the entire week. This is due to the fact that in the suggested list of recreations for the week, visiting and parties were not included but were reported frequently in the three day program.

recreation during these three days especially studied, while the students who were working reported but 3 kinds. Those working ten hours or more a week gave but 2.48 different kinds of recreation, while those working for wages ten hours or more averaged 2.53.

In the hourly program for three days each student mentioned his activities and the length of time he was engaged in them. From these figures it was possible to estimate how much recreation boys had during the three days, one of which was a school day. The data indicate that the 93 boys who were working had on the average 9.7 hours recreation during the three days studied, while the boys who were not working averaged 14.7 hours. The group which was working ten hours or more each week averaged during these three days 7.8 hours recreation, while those 30 boys who were working ten hours or more for wages had but 7.7 hours for recreation.

The students, in addition to mentioning the number of recreations engaged in and the length of time devoted to an activity, mentioned in their report for the preceding week the number of times each activity occurred during the week. The total number of times a recreation was mentioned by a student during the week is the basis for the following table:

	Average of the Total Number of Times Recreation Activities Were Mentioned During the Week
Students not working	9.9
Students working	7.5
Students working 10 hours or more per week	6.5
Students working 10 hours or more per week for wages	5.4

These figures indicate that in the group studied the boy who works has to sacrifice recreation time, and in the case of boys who work for wages ten hours or more a week, the amount of recreation is about one-half that of boys who are not working. Boys who are working ten hours or more for wages get along with less recreation than do boys working the same length of time at home. Much of the home work is looking after stores when it is possible to do some studying. There is, therefore, more time perhaps for recreation after school and work hours.

Much of the time devoted to recreation by the high school boys studied is spent in the theaters and movies. The 30 boys working

for money ten hours or more per week report 18 visits to the theater or moving picture show during the week studied, and 14 during the last three days of the week when hourly programs were submitted. On the other hand the 68 students not working reported 96 visits to the theater and movies in the week and on the last three days 51 visits. The boy who has nothing to do outside of school spends much more time at shows. This would not seem of great significance from the standpoint of the working boy if it were not for the fact that the number of visits to the swimming pool, gymnasium, and athletic field show a similar falling off on the part of boys working ten hours or more. The 30 boys working for wages ten hours or more a week mention athletic activities but 25 times for the week studied, while the 68 boys not working mention such activities 191 times. An examination of the daily program for the three days, which included a Saturday and Sunday when special opportunity for recreation exists, discloses the fact that the 30 boys mention participation in active games but five times, while the 68 boys not working mention such activities 63 times. All references to watching games are eliminated from these figures.

Educational Value of Position

The third problem concerns the relation of the students' position to his future work. The method used in securing a position naturally has much to do with this. It cannot be expected that high school students unassisted, will display great ingenuity in finding positions where they will engage in activities of value to themselves. Blind alley positions often appeal to the boy because the salary is attractive and the nature of the work is such that it can be engaged in after school hours.

How Positions were Secured.—In the questionnaire used in De Witt Clinton High School the following question was asked:

> If you tried to get a job last summer, indicate below what you did to get one.
> Registered at an employment agency.
> Asked teachers to find me a place
> Asked friends.
> Answered advertisements.
> Called on employers.
> Advertised.
> Through family influence.

By far the most common way of securing a position is by reliance on one's friends. Thirty-seven boys checked asked friends as the means they had used in trying to secure a job. Twenty-two had called on employers in an effort to secure work during the previous summer. The next most popular means was answering advertisements. Family influence was given by 15. One boy reported that he had been asked to take a position without having made any effort to secure one; another had inserted an advertisement in the papers. An expert musician secured his engagements through the union. The employment agency is not a popular means of securing positions for this group of boys. But one of the 95 replies mentioned the employment agency. The Y.M.C.A. found a position for one boy. Teachers have not played an important part in securing positions for this group of boys. Only one boy checked, "Asked teachers to find me a place." The employment secretaries in school where placement work is organized have given little attention to this work. In 1915–16 the Employment and Recommendation Bureau of one of the New York high schools filled 471 positions, but only some 10 part-time places were filled. In the year 1916–17 this number was increased to 100. In another high school there were about 50 part-time positions filled through the employment secretary during 1916–17.[1]

Kinds of Work Students Do.—The boys are doing many different kinds of work. A table of the positions held by students is appended. In De Witt Clinton High School there are more boys working in stores and offices than in any other line. Ninety-nine, or 27 per cent, of the students working for wages in this school are in stores or offices. In Eastern District, 23, or 20 per cent, of the boys are so engaged.

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[1] "There are two chief methods of finding a place. One is to have the path made easy by the father or mother or some other relative 'who has a pull' with the boys, and with this method may be included the plan of having 'a friend put in a word.' The second way is to 'hang around' after leaving school or a previous place, looking up 'ads,' walking the street in order to catch sight of the 'Boy Wanted' signal, or making written and oral application to many establishments. Data on this point show about an equal number of boys and girls using the 'assisted' and the 'alone' method." Opportunities in School and Industy for Children of the Chicago Stock Yards District, p. 22, Ernest L. Talbert. These children left school in the grammar school grades to look for full-time positions.

The boys who report working in stores often mean doing odd jobs, clerking during the rush hours, running errands, sweeping, etc. Some of the boys are working as regular clerks in the rush hours of the afternoon and on Saturday. In addition to this large group of boys who are doing store and office work, there are 48 boys in De Witt Clinton and 14 in Eastern District high schools who are working as order and delivery boys for small stores, for which they are paid from ten to fifteen cents an hour. Sixteen per cent of the working boys in De Witt Clinton and 23 per cent in Eastern District are teaching. In De Witt Clinton 43 boys, and in Eastern District 35 boys are engaged in work with newspapers. Most of the boys are delivering papers, but in a few cases they own stands, and two or three of the boys are earning comparatively high salaries by inspecting news routes.[1] Twenty-five of the boys in De Witt Clinton are working as pages in the public libraries of the city, for which they are paid from 14 to 16 cents an hour, and are required to work from twenty-two to thirty-six hours a week. Nine have regular routes in the city, lighting arc lights. These boys are paid about 25 cents an hour. Nineteen in De Witt Clinton and 2 in Eastern District are playing some instrument or singing in order to earn their way through school. Several play in moving picture houses, others play in orchestras or for dancing classes or dances. Others are post-office clerks, chauffeurs, and conduct insurance agencies. There are barbers and bellhops, detectives and preachers, acolytes and lamp lighters. One young man rented umbrellas at the subway on rainy days.

In the case of girls there is not so much opportunity for varied employment. Teaching is by far the most popular. Forty-four per cent of the girls who are working for wages in Wadleigh and 43 per cent in Eastern District are engaged in teaching. Twenty-six per cent in Wadleigh and 16 per cent in Eastern District are employed in stores and offices. Others are waitresses or maids, or "mind babies." Of the 124 girls in the two schools who mentioned their occupations but 7 were engaged in forms of work other than those mentioned above. Three were playing the piano, one was painting

[1] Case No. 17. "Inspector of news deliveries," ten hours a week, salary $14.

place cards, one had earned a prize through writing a composition, and the other through delivering a suffrage speech.

The Students' Future Plans.—The students who are working for wages are fitting into the industrial organization of the city in many different ways, and the method by which they have secured their work indicates little thought given to their placement. In fact they have in most cases gone out and taken the first opportunity open, sometimes without giving much consideration to the adequacy of the wage paid or the value of the work done. The boys in high school have in many cases planned for their future occupation, and an attempt was made to ascertain whether there was any relation between their present work and their future profession.

De Witt Clinton High School is an academic high school preparing for college. It is to be expected, therefore, that most of the students are planning for a college course. Of the 161 students in the group studied, 154, or 95 per cent, stated that they were going to some higher school on completing their high school work, 3 did not answer the question, and 4 stated that they were to enter some form of business. The following indicates the future plans of the group studied:

Further school work		154
College	129	
Night law	1	
Night college	2	
Dental school	6	
Diplomatic and consular course	1	
Library work	1	
Dramatic school	1	
Medicine	6	
Teachers' training school	2	
College after working	2	
Scientific school	1	
Technical school	1	
Art school	1	
Insurance office		1
Mercantile business		1
Fire department clerk		1
Candy and stationery store		1
No answer		3

A comparison of the plans of the students who are working with those who are not working shows no difference in the proportion going to college. The fact that a boy is working to support himself does not apparently affect his plans for further schooling. This is true notwithstanding the fact that 56 per cent of this group of boys were found to have been earning wages at some time during the four months preceding the study, and 10 stated that they were self-supporting, while 3 not only supported themselves but supported their families either wholly or in part.

Relation of Outside Work to Future Occupation.—An examination of the reports of the boys on their plans after leaving high school indicates that in most cases there can be little connection between the work they are at present doing and the work they intend doing in later life. This does not necessarily condemn all the work they are doing, for in many cases there must be considerable value to the boy in the contacts he is making through his business. However, thought and time placed on each boy as a separate problem would result in opportunities for work where the experience would be more valuable than in the present chance employment, and at the same time the remunerative advantage which is often the only one at present, would be retained.

Each boy in the group of 161 in De Witt Clinton High School was asked whether there was any connection between the work he was doing outside of school hours and the work he was planning to do in later life. On the questionnaire which was given him to fill out during the interview, was the following:

Is the work you are doing outside of school
Of no help in what you intend doing after you leave high school?
The same kind of work you expect to enter later?
Somewhat like the work you will enter?
If it will help your future work in some other way, what is that way?

It was hoped through this question to find out whether there was any feeling on the part of the boys that their work was of educational value to them from the standpoint of their life work. Many of the boys did not express any opinion regarding the value of their work.

There were, however, 42 boys who indicated that they felt that outside work while in school was of no help to them in the work they looked forward to as a life profession. Ten felt that their present work had some bearing on their life work; and 4 stated that there was a definite relation. But 6.6 per cent of the students reporting, or 3.3 per cent of all who were working for money, saw a definite relation between the work on which they were spending so much of their time and the work which they had chosen as a life profession, while 71 per cent of those reporting, or 35 per cent of the boys who were working for wages, stated that there was no such relation. Fifty-one per cent of the students did not answer the question.[1]

As an additional indication of the bearing of the work the boy was doing on his life work the boys' cases were gone over one by one, the work the boy was doing outside of school hours considered in connection with what he was planning to do, and an opinion registered as to whether with the little data at hand there was any relation to be seen between the work being done and the work the boy stated he was planning to do. This judgment was personal, and in many cases the data were insufficient to make a satisfactory decision. Some of the cases were very simple. One boy who is going to a dental college is inspecting paper routes; another boy who is planning on a college education spends his free time delivering dress suits for an establishment which rents them out by the night. Another boy peddles candy in a theater and is planning to attend college. A boy who spends his summers as a dining-car waiter is to study dentistry, and a boy who is clerking in a candy store is going into medicine. On the other hand, one of the boys planning to become a doctor is working in a doctor's office. Of the cases in which data were furnished by the boys, 99, or 88 per cent, seemed to show no relation between the part-time work and the boy's probable future, 3 per cent indicated a definite relation, and in 9 per cent, or 11 cases, there was a possible relation.

[1] Of 91 boys who were working for wages 45 answered the question, 32 considered the work of no help, 3 the same kind, and 10 somewhat like the work they expect to enter later. Of 28 boys who were working without wages, 10 considered the work of no help, 1 the same kind (engaged in his mother's fur store), and 17 did not answer the question.

Summary

The chances that a student in De Witt Clinton High School is working for money are between one in three and one in two. If he has no remunerative position the chances are from one in three to one in four that he is working at home.

If he works he probably comes from a poorer family than the boy who does not work. The chances are from one in four to one in three that if he is working he is supporting himself. He may be supporting his family in exceptional cases. He lives in an apartment of about five rooms in size. If he works ten hours or longer a week the chances are that his apartment is a whole room smaller than apartments of boys who do not work. There is less chance that his father owns his own business. There is more chance that he was born abroad, and that his older sisters have had considerable less educational opportunity than is the case where boys are not working. This is not as true of older brothers. His family pays about $22 a month for its apartment, which is $12 less than families of non-working boys are paying.

From the standpoint of the position we have a boy from sixteen to seventeen years of age earning about $2.50 a week and working twelve hours a week. He has considerably less time for recreation than the boy who does not work, sacrificing not only opportunities to attend the "movies" and theaters but also outdoor sports of an athletic character.

The value of the work done is shown in part by the haphazard way in which it is secured. Asking friends or calling on employers are methods frequently used. The most popular kind of work is in stores or offices, though many boys are selling newspapers and teaching. It is very probable that in spite of the efforts the working boy has to make to remain in school, he is planning on going to college. In view of his future plans it would seem that the work he is at present doing has its chief value in supplying him with funds. He admits in most cases that his "job" has no relation to the thing he wishes later to do.

CHAPTER III

THE SCHOOL AND THE SELF-SUPPORTING BOY

The immediate task before the school regarding the working boy is to determine whether he can or cannot do his school work. To some of those interested in the problem, the marks the working boy is given furnish a basis for condemning or approving employment outside of school hours. Several investigations along these lines have been made by teachers having as their main purpose to determine whether working boys are doing their school tasks as well as the non-working group. In interviews with teachers this same question was raised. On the part of some, opposition to the co-operative system was based on a belief that with but half time in school the required school work could not be covered.

Other interests which the school has in the boy who must work are the amount of elimination among working boys as compared with boys who do not work, and the punctuality and regularity in attendance of the self-supporting group.

School Marks

In the original questionnaire, a copy of which will be found in the appendix, students were requested to give their most recent school marks in certain subjects. In order to determine the value of this data from 5,973 students, its reliability was tested in the following manner: In the interviews with 161 De Witt Clinton boys a request was made that they give the last mark they had received in the subjects indicated. This was soon after the midyear marks had been received. These marks were compared with the marks on the permanent record card on file in the office of the school. Some of the 161

boys neglected to state their marks, and the permanent record cards of others were not to be found. There were, however, 122 students who reported and whose cards were examined to test the accuracy of the information furnished. Of these 122 students

46 had reported the same or within 5 of the same mark as recorded on the permanent record card.

70 had reported failures as passing.

8 had reported passing marks as failures. Five of these had in addition reported failures as passing.

There were so many inaccuracies in these marks as reported by the students that no use was made of the material.

Marks for 122 students had been secured from the permanent record card. Of these students 52 were not working, 22 of whom, or 42 per cent, had failed in at least one subject; 4, or 8 per cent, had failed in two, and 3, or 5 per cent, in three subjects. Of 70 who were working at the time the investigation was made 25, or 36 per cent, had failed in at least one subject the previous term; 8, or 11 per cent, in two subjects, and 4, or 6 per cent, in three subjects.

According to the grades the students themselves gave, of the 52 students not working 10 had failed, one in two subjects; and of the 70 working only 5 had failed, one in three subjects.

The table below is intended to show the relation between failures in school work and number of hours per week employed. The base line indicates the number of hours per week worked. The letter "P" means that the student working the number of hours indicated on the base line had not failed. "F" means that he failed in one subject, and a "2" or a "3" above the "F" indicates that he failed two or three times. The median number of hours per week worked by these boys was 17. Among the 35 boys working more than seventeen hours, 12 reported 22 failures. Of the 35 boys working less than seventeen hours per week, 13 reported 19 failures.

The Pearson coefficient of correlation of averages of boys working for wages and number of hours worked is .16; of averages of boys working without wages and number of hours worked is .07.

			F					P										P		
			F^3		F			F										P		
	P		P	F^2	P			P	F			P						F		
	P	P	P	F	P			P	F	P	P							P		
F^2	P	P	P	P	P	P	F^2	F	F	F^2	P	P				P		F		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
P																				
P																				
P				P																
P				P																
P				F^2																
F^3		P	P				F^2	F^2												
P	F	F^3	F		F	F^3	P		P	P	P	P	P	P	P	F^2	P	P	P	
21	22	23	24	25	26	27	28	29	30	32	33	34	37	41	42	46	48	63		

In the study made in the spring of 1917 in De Witt Clinton High School,[1] special attention was paid to the effect on scholarship of work done outside of school hours. This study showed that those who work have almost uniformly a better scholarship record than those who do not, a lower average of failures and a higher average of marks above 80 per cent and above 90 per cent.

Boys Who Worked	No. in Group	Failures per Pupil	No. Marks Above 80 per Pupil	No. Marks Above 90 per Pupil
During no part of year	3,046	.707	1.061	.331
During some part of year for money	1,437	.625	1.152	.369
During less than half of summer only	159	.679	1.075	.299
During more than half of summer only	527	.559	1.278	.445
During school but only on Saturday or Sunday	110	.800	1.261	.409
On school days but less than 20 school weeks and less than 20 hours a week	142	.478	1.183	.422
On school days more than 20 school weeks and less than 20 hours a week	134	.529	1,179	.350
On school days but less than 20 weeks and more than 20 hours a week	151	.649	1.063	.298
On school days for more than 20 weeks and more than 20 hours a week	214	.799	1.039	.247

The data furnished by this study indicate that boys who are working are doing as well in school work as boys who are not working,

[1] Made by Mr. Delaney.

better, in fact, except for the group working more than twenty hours a week for more than twenty school weeks a year.

The data for the small group of 70 if used in the form which was the base of the De Witt Clinton study cited, would show a similar result: Thirty boys working over twenty hours registered 20 failures; 40 boys working less than twenty hours registered but 21 failures. However, as a matter of fact only 10 of the 30 boys working over twenty hours a week had failed in a subject, whereas 15 of the 40 boys working under twenty hours a week had failed in subjects.

It may therefore be that the .799 failures per pupil, the 1.039 marks above 80, and the .247 above 90 among the students giving the most time to work are caused by a very small group which has done exceptionally poor work. If this be true as it is in the case of the smaller group studied, the investigation made in De Witt Clinton in 1917 does not indicate that students who work even twenty hours or longer for more than twenty weeks are handicapped in their school work except in a comparatively few cases. The data from which the study was made is not in shape to permit this to be verified.

There is no great difference in the marks which students working and students not working receive. Care must be exercised in drawing conclusions from these facts. There are a number of factors to be considered. The boys who are working average a year older than the boys who are not working.[1] Many of them are in the higher grades. There is more elimination among the working boys than among the non-working, in so far as the groups studied in the following section are concerned. The working group may be the result of selection of those working students most able to do their class-room work and the elimination of most of those unable to carry their school work.

[1] The 2,267 boys who were not working for wages at the time the first study was made had a median age of fifteen, while the 369 boys who were working had a median age of sixteen. One-half of the boys who were not working were between fifteen and sixteen, while one-half of the boys who were working were between sixteen and seventeen. Nineteen per cent of the boys over fifteen years of age, and but 9 per cent of the boys fifteen and under, were working for wages. Of the small group of boys studied in De Witt Clinton High School, 62 per cent of those who were over fifteen years of age had been earning money during the four months preceding the study, while but 19 per cent of those fifteen years and younger had

Elimination of Working Boys

In order to determine whether there was more elimination from school in the group of boys who work than in the group who do not work, two groups of 50 boys each were selected from the students studied in De Witt Clinton High School in February, 1915. In one group were placed only boys who during the week studied in 1915 were earning money, and in the other group were placed boys who during that week were not at work. The groups were the result of a chance selection. No attempt was made to include students who were in a certain grade or who were doing the same kind of work.

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been receiving remuneration. The following table shows the age of boys and the per cent of each group working for money:

Age	De Witt Clinton High School One Week		De Witt Clinton High School Four Months Preceding Study	
	Number for Wages	Per Cent Working for Wages	Number for Wages	Per Cent Working for Wages
13	113	7	2	0
14	458	7	10	0
15	749	10	25	28
16	637	15	50	54
17	422	29	42	57
18	160	36	22	73
19	51	26	8	100
20	13	54	1	100
21	5	60	..	..

More of the older boys are working ten hours or more per week than the younger ones. Of the 255 boys over fifteen who are working, 163, or 64 per cent, are working ten hours or more a week, while but 44 per cent of the boys fifteen and under who are working are devoting such long hours to their work.

Classifying the boys by semesters as in the following table, the boys in the more advanced classes are shown to be working to a greater extent than those in the lower classes.

Semester	Number of Boys in Semester	Per Cent Working
II	404	11
III	479	12
IV	498	10
V	366	14
VI	311	16
VII	284	19
VIII	193	20

The next step was to find whether these boys were still in attendance in February, 1916, a year after the first investigation had been made. The records at De Witt Clinton High School showed that of each group two students had graduated, and that one of the boys in the non-working group had been transferred to Chicago. In the group of 50 non-working boys at the time of the investigation in 1915, 36 were still students in De Witt Clinton High School. Of the 50 boys who had been at work the previous year 32 remained in the high school, 16 of the boys working, and 11 of the boys who were not working were not registered in De Witt Clinton High School in February, 1916, and had left school without being transferred or graduated.

For some reason 5 of these boys' names do not appear either in the present records or in the files of eliminated pupils. It is possible that these records have been misplaced or that they have given the wrong names. The probability is that the absence of their names in the lists indicated that they had been dropped. Three of them were boys who were at work in 1915 and two were boys who were not at work. The fact that they were divided between the two groups would hardly change the results. Elimination then, so far as this group is concerned, is somewhat greater among boys who work than among boys who do not.

A similar random selection was made of one hundred students from Eastern District High School, Brooklyn. All of these were students who had been included in the study made the year before. Half reported themselves as working during the week in 1915 when the study was made.

An investigation was then made to see whether these students were still in school or not. The results are indicated below.

	De Witt Clinton		Eastern District	
	Working	Not Working	Working	Not Working
Still in school	32	36	26	37
Transferred or graduated	2	3	11	5
Eliminated	16	11	13	8

In Eastern District, too, there would seem to be a larger elimination from the working group than from the group that is not at work.

It is probable that several factors enter into this result. The long hours many of the boys work must tend to discourage them in their efforts to attend school. Then, it is doubtless true that positions secured open up full-time positions and offer opportunities for boys to leave school and enter industry.[1] The need for funds to assist the boy in attending school must often become greater and require him to give all his time to his position.

Tardiness and Absence

In comparing the regularity of attendance and punctuality of working boys and non-working boys during one semester, only those students are considered in the working group who were employed on school days. Boys who were working on Saturdays or on but one or two school days a week are not considered. In the non-working group are all boys who were not working during the school term regardless of whether they were employed during vacation or not.

The school is directly concerned with the regularity of attendance and punctuality of the student, just as it is with the amount of elimination and the ability to do the school work assigned. The long hours devoted to outside activities by students would seem to increase the amount of tardiness and absence. However, in so far as the small group studied is an indication of the effect of outside work, there is but little difference in the working and the non-working groups.

A separation of the working group into those who are working for wages and those who are working without wages reveals considerable more absence and tardiness among those students who are working for wages. These averaged one more absence and twice as many

[1] In Superintendent Maxwell's letter to high school principals on June 8, 1917, referred to in Chapter V of this study, the plan proposed for placing students during the summer is said to be open to the above criticism, and he states that "the danger of pupils not returning to school at the end of the summer will be reduced to a minimum, as the department will be in touch with the pupils and the employer."

	In One Semester Number of Times			
	Absent		Tardy	
	Average	Median	Average	Size of Group
Working boys	7.2	7	1.12	49
Non-working boys	6.66	6	.77	53
Of the working boys, those				
With wages	7.6	..	1.66	30
Without wages	6.57	..	.26	19

cases of tardiness as the non-working group. The boy who is working for wages, even though he may be giving no more hours to his work than the boy who is helping at home without remuneration, is a greater problem from the standpoint of the teacher. This somewhat greater irregularity in school attendance and punctuality is due probably to the fact that the boy working for wages is required to work during fixed hours, and is employed in work which frequently takes more of his energy and gives him less time to study his school lessons.

CHAPTER IV

CO-OPERATIVE WORK

By co-operative work is meant the system at present in operation in a number of the New York City high schools by which certain students, who are taking vocational courses, work in pairs alternating between school and position. Generally one student spends a week in school while his comrade is working in the office or shop. At the end of the week the two students change places, the student in the shop returning to school and his place being filled by the student who has had a week in school. Positions for students in factories, shops, and offices are found by the co-ordinator, a special teacher in each high school. The selection of the student to fill a position is also made under his direction, and careful supervision of the student's work is a part of the co-ordinator's duty. The employment is more or less related to the class-room work.

In the Seventeenth annual report of the city superintendent of schools for 1914–15 in the section on part-time co-operative and continuation classes, Associate City Superintendent John H. Haaren closes his part of the report with his conclusions under ten headings. The following seemed of special importance from the standpoint of the present study:

The experience of less than a year with the co-operative system seems to prove the following:

6. That the time spent by co-operative students in employment does not necessarily prolong the period of high school attendance for graduation.
7. That the plan provides a means by which pupils who would otherwise have to leave high school may continue their education.
9. That the student is keener and more alert in his school work after entering upon the co-operative course.

It was with these statements in mind that an investigation was made of the boys and girls in certain co-operative classes in New York City. This part of the study needs, however, to be prefaced by a statement of the limitations to which the data presented are subject.

The marks which have been secured from the two high schools studied indicate that there has been no marked failure on the part of these co-operative students to do their class-room work. However, the following points should be kept in mind as bearing on this conclusion:

A. Actual co-operation between the firms and the school began February 8, 1915, and the present study covered but a comparatively small group of students who were in the first class. The limited amount of data therefore lessens the value of the conclusions drawn.

B. The co-ordinators with whom the writer worked were an enthusiastic group of teachers anxious to have their new work a success and definitely committed to emphazing the most favorable side of it. There were advocates of the system among the teachers interviewed. In other cases teachers were seen who had condemned the system before a fair experiment was possible. Under these circumstances it is recognized that impressions secured through interviews were not very reliable.

C. As a result of this it was difficult to ascertain whether the school work done by the group of co-operative students was actually the same or approximately the same as that done by the non-co-operating students. Teachers and co-ordinators interviewed in almost every case asserted that it was the same, and that the students in co-operative work were given longer lessons during the week in school than others or that they made up more work outside of school. Marks on the school registers were given, in most cases, by the same teacher who was marking the full-time students.

D. The lack of any means of comparing the relative ability of students before entering the co-operative course or after finishing it, other than the marks given by the teacher, is a weakness. Marks at best are poor indications of achievement.

In this case the person marking realized that a new system was being tried. He was predisposed frequently to favor or oppose the system. Therefore even less reliability may be placed on these marks than ordinary school marks.

These studies of co-operative students were made in Bushwick and Washington Irving high schools. In these two schools the co-operative students studied were doing practically the same work expected of full-time students. The data secured from these two schools are significant in the present study of the self-supporting student in high schools. In the first place the co-operative system is in many instances a solution of the problem of self-support.[1] In Bushwick High School the co-ordinator mentioned *this* fact as one of the criteria on which he based his selection of students. In the report on part-time co-operative and continuation schools for 1915, New York City, the co-operative course is described as valuable in part because "it helps to solve whatever financial difficulties the student may meet in his high school course."

Mr. Charles M. Smith, co-ordinator in Newtown High School, states that the course has been of great value "in encouraging the student of limited financial circumstances to continue his school work. More than one-fourth of our co-operative students are staying in school on account of the financial assistance they are now able to furnish for the support of their families."[2]

And again, the effect of co-operative work on school marks where half-time students are doing full-time work, is indicative of the degree to which self-supporting students are handicapped in their school

[1] Occasionally a student finds that the wages received from co-operative work are not sufficient to meet his needs and therefore he continues in the regular course working outside school hours. The following case illustrates this: Abraham S. is working in a newspaper office from 5 p.m. to 12 p.m. each school day, and from 9 a.m. to midnight Sundays. He receives $10 a week. He is graduating at the head of his class from a commercial course. When asked why he has not entered the co-operative class in his school he stated that he could not afford to, as the co-operative students earned but $8.00 every other week.

[2] The Report on Continuation and Part Time Co-operative Classes in New York City for the year 1915–16, p. 99.

work. For both there is a curtailment of home study. The self-supporting student, the chief interest of this investigation, has even more time for school work as a rule than the co-operative student. The median number of hours which full-time students worked each week for wages was in the case of boys in De Witt Clinton High School twelve; seven in Eastern District High School; for girls in Eastern District High School six, and in Wadleigh four and a half hours. The co-operative student, on the other hand, works regular factory or office hours. This would mean a minimum of thirty-nine hours a week; or, as he is employed every other week, nineteen and one-half hours a week. If the co-operative student's work is not seriously affected by half time spent out of school, it may be inferred that considerable time may be devoted to work outside school hours by a full-time student without seriously interfering with his school marks. The factory or office work which co-operative students do has been selected both with regard to their future work and the school course. The co-operative student is, therefore, employed in outside work which should make his school work much more vital. In the appendix are statements from girls in Washington Irving High School giving their opinion of the co-operative course and a brief outline of the experience they gained. A description of the work which girls in the commercial course were given in offices is also added.

While the carefully selected outside work of co-operative students is much more liable to motivate school work than is true in the case of self-supporting non-co-operative students, still it should be remembered that the latter group attends all class recitations, and that the co-operative student is able to attend but half his recitations. It is also true in many cases that students willing to make the sacrifices which earning their way through school implies, see, or imagine they see, a real reason for attending school. Ninety-five per cent of a group of students studied in De Witt Clinton High School are planning on further education for which the high school course is direct preparation.

The study of co-operative work in Bushwick High School covers a class of 79 girls in the commercial course, of whom 41 had been doing

half-time school work in the co-operative system. In Washington Irving High School 140 girls in the German commercial course were studied, 60 of whom were giving every other week to office work.

Bushwick High School, Brooklyn

Seventy-nine girls in the commercial course of the Bushwick High School, Brooklyn, were studied in the spring of 1916. Forty-one had spent the semester previous to the investigation, the fall of 1915, in half-time work in school on the co-operative plan, the rest of the time being devoted to work in some business office. The other 38 girls were full-time students of the school, and both groups were doing practically the same academic work under the same teachers.

The school marks for these girls during the semester, September, 1915, to February, 1916, when part were in the co-operative system, were secured. These marks in the case of each student in the group were compared with the marks given the same student the semester before, to determine whether they were lower, the same, or higher.[1] They were also compared with the average of the marks given the student the three preceding semesters before any of the girls had entered the co-operative plan. In the first table the comparison is made with the marks given the preceding semester when all the students were on full time. The first column under each subject indicates the percentage of non-co-operative students whose grades were less, the same, or more than the preceding semester. The same facts are shown for the co-operative students in the second column.

[1] The Pearson co-efficients of correlation between marks given students before the introduction of co-operative work and the term after its introduction are as follows:

	Co-ops.	Non-Co-ops.		Co-ops.	Non-Co-ops.
English	.39	.60	Typewriting	.02	.30
Bookkeeping	.07	.38	Geography and Law	.17	.65
Stenography	.21	.50			

English		Bookkeeping		Stenography		Typewriting		Commercial Geography and Law	
Non-co-ops.	Co-ops.	Non-co-ops.	Co-ops.	Non-co-ops.	Co-ops.	Non-co-ops.	Co-ops.	Non-co-ops.	Co-ops.
−48	17	30	46	57	68	48	34	42	34
0 30	27	10	5	8	15	22	12	8	10
+22	56	60	49	35	17	30	54	50	56

The second table is similar to the preceding except that each student's grades are compared with the average the same student received in the subject the three preceding semesters. As in the first table the percentage of non-co-operative students is shown in the first column, while the second column indicates the percentages of co-operative students.

English		Bookkeeping		Stenography		Typewriting		Commercial Geography and Law	
Non-co-ops.	Co-ops.	Non-co-ops.	Co-ops.	Non-co-ops.	Co-ops.	Non-co-ops.	Co-ops.	Non-co-ops.	Co-ops.
−72	29	37	64	52	76	62	51	52	49
0 3	10	3	2	5	5	13	10	5	5
+25	61	60	34	43	19	25	39	43	46

The first table shows that in the three subjects—English, typewriting, and commercial geography and law—a somewhat larger proportion of the co-operative girls than of the non-co-operative was given higher grades than in the same subjects the previous term. The second table indicates the same to be true of the co-operative girls when the average of the three previous semesters is taken instead of the grade for the preceding semester alone. In both tables in these three subjects a larger percentage of non-co-operative girls receives a lower mark.

In bookkeeping and stenography the co-operative girls compare unfavorably with the non-co-operatives. In both of these subjects students in school all of the time, the non-co-operative group, have done better work in so far as these marks measure achievement.

This is true in both the first and second table. The co-ordinator in Bushwick High School who is in charge of the co-operative work, explains the results as due to the fact that in bookkeeping during the sixth semester, the one in which co-operative work was introduced, the course requires little work during the school period, but makes heavy demands on the student's time outside of school hours. This larger amount of home work handicaps the girl who is giving every other week to an office position with the long hours required of her there. The stenography course in which non-co-operative students have apparently been more successful than co-operative students, is said by the co-ordinator to be the most difficult subject which the girls study. There is not much home work in this subject. Class dictation exercises form the principal part of the work. The students are given marks in stenography on the basis of the number of perfect transcriptions made from these class exercises. In this subject where class practise is of so great importance, students who have but half of the class periods are apparently somewhat handicapped.

In view of the fact that the girls who were on half time were doing work which seemed to be better than the work which students on full time were doing in three of the five subjects studied, the question was raised as to the relative ability of the two groups, the co-operative and the non-co-operative, when they were in school together as full-time students. The marks given these girls when they were all on full time were examined for the preceding semester and for the three preceding semesters. In each of the five subjects the results indicate that the students who were later to go into co-operative classes were given somewhat lower marks by the teachers than the students who were to continue on full-time work. The co-ordinator in Bushwick High School asserts that there had been no conscious attempt to select girls for co-operative work who were doing poorer work in class. He had had three criteria in choosing the girls who are to go into offices alternate weeks during their last semester in school. They must show improvement in their school work; they must have an attractive personality; thirdly, when a girl is unable to remain in school because of lack of necessary funds, she is given an opportunity

to do co-operative work and thus become in part self-supporting. The first of these three grounds for selecting co-operative students is the one least emphasized.

In Bushwick High School students who were selected to enter the co-operative course had not been receiving quite as high school marks as those who remained in school full time. After a semester of half-time work these co-operative students in English and typewriting did better school work than the non-co-operative students, and in commercial law and geography about as good work.

For the purpose of this study the only conclusion which it is desired to draw from the data is that in so far as this small group of girls is concerned, there is reason to believe that the co-operative system with but half time devoted to school work, has not seriously interfered with the students' success as measured by school marks.[1]

Washington Irving High School, New York

In Washington Irving High School there were in the senior class graduated in February, 1916, of the German commercial course, 60 girls who devoted alternate weeks to office work and to school work, on the co-operative plan. Most of the office work was done in the Board of Education Building, 59th Street and Park Avenue.[2] There was no compensation for this work. The Civil Service Commission does not as yet provide positions for students in co-operative courses. The girls were securing actual office experience of a kind which the school itself could not give. These 60 girls were doing co-operative work just as was the group in Bushwick High School, although the

[1] The following figures indicate that the classes in Bushwick High School commercial course at present are additional evidence of the above statement. Class VI in three sections is graduating in June, 1917. Class V in four sections is to graduate in February, 1918. The data are for the week ending April 20, 1917.

VI F	Co-operative	7 per cent of failures
VI G	Full time	11 " " " "
VI H	Full time	14 " " " "
V G	Co-operative	5 " " " "
V H	Full time	14 " " " "
V I	Full time	10 " " " "
V J	Full time	14 " " " "

[2] For a description of some of this work see appendix.

clerical group was not receiving wages for its work. In this course, part of the students were giving full time to school work and part were giving half time. There were 80 girls who were spending all their time on academic and technical school work. These 80 girls on full time and the 60 girls on half time were both doing the same school work.

The first problem was to ascertain to what extent the two groups were equal in ability. It might be that only the brightest girls had been chosen to do co-operative work, or on the other hand, only the poorer girls, as seems to have been the tendency in Bushwick. For this purpose the grades given by the instructors for the semester ending June, 1915, in German, English, bookkeeping and stenography-typewriting were secured. During the semester covered by these grades none of the girls was at work. They were all devoting full time to the high school work, and the division into co-operatives and non-co-operatives had not been made. It will be seen from these tables (I and II) that the girls later to become co-operative students were a little superior to the girls who were to continue in school all the time. The median grade for the co-operative students in each subject is somewhat higher than the median grade for the non-co-operative group. The difference is not great except in stenography-typewriting and in each group there are a number of good students. The first column in Tables I and II indicates the girls later to become co-operative students; the second column the girls who were to remain on full time in school.

TABLE I.—GERMAN COMMERCIAL COURSE, JUNE, 1915.
WASHINGTON IRVING HIGH SCHOOL

	English		German		Bookkeeping		Stenography-Typewriting	
	Co-ops.	Non-co-ops.	Co-ops.	Non-co-ops.	Co-ops.	Non-co-ops.	Co-ops.	Non-co-ops.
1st quartile	70	65	65	65	65	65	70	60
Median..	75	72	72	70	72	70	75	68
3rd quartile	80	80	80	80	80	75	85	75
Average..	74.72	73.36	74.3	72.4	71.9	70.7	76.1	68.1
Av. D from median..	8.57	9.5	8.5	9.9	8.4	9.3	8.5	6.7

TABLE II.—PERCENTAGE OF STUDENTS IN EACH SUBJECT IN THE GERMAN COMMERCIAL COURSE JUNE, 1915, RECEIVING A GRADE BELOW 70, 70 TO 80, ABOVE 80

	English		German		Bookkeeping		Stenography-Typewriting	
	Co-op.	Non-co-op.	Co-op.	Non-co-op.	Co-op.	Non-co-op.	Co-op.	Non-co-op.
70–	22	32	37	40	33	40	22	51
70–80	41	31	28	28	39	38	38	31
80–	37	37	35	32	28	22	40	18

In German and bookkeeping in Table II there was a little difference in the two groups in favor of the co-operatives. In English 37 per cent of each group were above 80. In stenography and typewriting the difference is much more noticeable. But 18 per cent of the non-co-operatives were above 80 in their grades the semester previous to the opening of the co-operative plan. Of the co-operatives, 40 per cent were above 80. Apparently there was a conscious effort to pick out the good students in stenography and typewriting in selecting the girls who were to do co-operative work. This is also indicated by the difference in the median grades as shown in Table I. The non-co-operative group had a median grade in stenography and typewriting of 68; the co-operative group a median grade of 75. There were, however, even in the stenography and typewriting group a number of bright pupils who did not elect co-operative work.

That the co-operative students at the time the class was formed were somewhat better than the non-co-operative students as indicated by their grades is also shown by averaging the grades for each of the girls in English, German, bookkeeping, stenography-typewriting for the semester ending June, 1915. These averages were divided into quartiles with the result shown in Table III.

Sixty per cent of the girls to become co-operatives were in the upper half of the class as compared with 41 per cent of the non-co-operatives.

Admitting then that the two sections were not absolutely equal and that the co-operative group was a little better in German, English, and bookkeeping, and considerably better in stenography-type-

TABLE III.—AVERAGE OF GRADES FOR JUNE, 1915, GERMAN COMMERCIAL COURSE, WASHINGTON IRVING HIGH SCHOOL

Numbers without line—Girls who later became co-operatives.
Numbers with line beneath—Non-co-operatives.

70
70
70
70
70 71 80
70 71 80
65 70 71 80
65 68 70 71 80
65 66 68 70 71 73 78 80
65 66 67 68 69 70 71 72 73 78 80 81
61 65 66 67 68 69 70 71 72 73 74 77 78 79 80 81 82 83 84
61 63 64 65 66 67 68 69 70 71 72 73 74 76 77 78 79 80 81 82 83 84 85
54 59 61 63 64 65 66 67 68 69 70 71 72 73 74 76 77 78 79 80 81 82 83 84 85 92
54 59 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88

	Co-operatives	Per Cent	Non-Co-operatives	Per Cent
Lowest quartile	9	15	26	33
2nd quartile	15	25	20	26
3rd quartile	19	32	15	19
Highest quartile	17	28	17	22

writing as shown by the previous tables, let us examine the results of the semester's work when 60 of the girls were in school about half the time and 80 were in school full time. In order to get an idea of the relative standing of these two groups of girls their marks for the semester ending June, 1915, when they were all on full time, and for the semester ending February, 1916, when part were on half time, were compared.[1] Whether the girl received a higher grade, the same

[1] In the German commercial course, Washington Irving High School, the Pearson co-efficients of correlation between the marks given by teachers to pupils in June, 1915, when there was no co-operative work, and in February, 1916, when part of the girls had been in the co-operative course for a semester are:

	Co-operative	Non-co-operative
English	.38	.29
German	.38	.54
Bookkeeping	.15	.50
Stenography-typewriting	.22	.52

grade, or a lower grade than the previous semester was noted. In the following table, Table IV, the per cent of the class receiving a lower grade, the same grade, or a higher grade for February, 1916, is shown.

TABLE IV.—PERCENTAGE OF STUDENTS RECEIVING LESS, THE SAME, OR MORE IN FEBRUARY, 1916, THAN IN JUNE, 1915, WHEN ALL WERE NON-CO-OPERATIVE

	English		German		Stenography-Typewriting		Bookkeeping	
	Co-op.	Non-co-op.	Co-op.	Non-co-op.	Co-op.	Non-co-op.	Co-op.	Non-co-op.
−	72	62	28	11	37	36	78	32
0	15	11	15	14	15	21	5	9
+	13	27	57	75	48	43	17	59

It will be seen from this table that in English and German there was some difference in the work of the two groups in favor of the non-co-operative students. In bookkeeping, the students on half time actually did better than the students on full time. In stenography and typewriting there was poorer work done on the part of the co-operative group; 78 per cent of the co-operative students received a lower mark than the preceding semester, while but 32 per cent of the non co-operative students received less.[1] The marks, however, do not indicate that the girls on half time, at least in the German commercial course at Washington Irving High School, are greatly handicapped in their academic work.

The average for each girl in English, bookkeeping, German and stenography-typewriting was secured for the semester ending February, 1916, when 60 of the girls had been on half time in school. These averages were divided into quartiles, and the results are shown in the accompanying chart. An examination of these averages shows that teachers considered that the girls on full time in school were doing better school work than those on part time. It is also evident that the girls who were doing the poorest work were full-time girls. Five

[1]It is to be remembered that the co-operative girls received higher marks the previous semester, and that there was, therefore, more opportunity for the non-co-operatives to improve.

of them are lowest in the averages secured. There are more marks below 60 for girls on full-time work, while but one mark below 60 is given to a girl on half-time work. Girls on half time are more likely to be found in the middle quartiles. Seventy-four per cent of the girls who were working on half time are in the two middle quartiles, while but 40 per cent of the girls on full time are in these two quartiles.

TABLE V.—AVERAGE OF GRADES FOR FEBRUARY, 1916, GERMAN COMMERCIAL COURSE, WASHINGTON IRVING HIGH SCHOOL

Numbers without line—Co-operatives.
Numbers with lines below—Non-co-operatives.

							71																	
				68			71																	
				68			71																	
				68	69	70	71		73															
				68	69	70	71		73		75													
			66	67	68	69	70	71	72	73	74	75	76											
			66	67	68	69	70	71	72	73	74	75	76											
			66	67	68	69	70	71	72	73	74	75	76		78									
			66	67	68	69	70	71	72	73	74	75	76		78									
			66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81						
		65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81						
61	62		65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82		84		
61	62	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	86	

	Co-operatives	Per Cent	Non-co-operatives	Per Cent
Lowest quartile.....	14	23	21	26
2nd quartile.....	23	39	12	15
3rd quartile.....	15	25	20	25
Highest quartile.....	8	13	27	34

This may indicate that co-operative work tends to make it impossible for the bright students to do exceptionally good work, but that the motive given to school work by contact with a position in the industrial life of the community tends to keep the girl with little ability from dropping behind her class. These graphs show that at least so far as the German commercial course in Washington Irving

High School is concerned, there is a tendency on the part of the co-operative girls to do little school work meriting either exceptionally high or exceptionally low grades.

Summary

The marks co-operative students are given in school do not indicate that half time outside of school handicaps their work to a great extent. Apparently co-operative work results in students doing average school work and tends to eliminate exceptionally good as well as exceptionally poor work. This is indicated in the grades for Washington Irving commercial course. In Bushwick High School this is not so apparent except in the case of stenography and book-keeping. The co-operative system is new in New York schools and is still the cause of much discussion. It is probable that marks given students are unconsciously influenced by the favorable or unfavorable attitude of the teacher toward the system. This is truer in certain schools than in others. The co-operative system points to a method by which schools could provide for part of the students who must support themselves, and the marks studied indicate that considerable time may be devoted to activities outside the school without materially affecting school work.

CHAPTER V

THE HIGH SCHOOL AND THE STUDENT WHO MUST WORK

That some high schools are aware of the number of students who are partially or wholly self-supporting is shown by the investigations they have made, some of the results of which are presented in this study. In a few cases organized efforts have been made to assist the large group of boys and girls who must work while in school. In the present chapter the methods used in a Seattle and in a New York high school in helping students to find positions will be briefly described, and a plan suggested for the work in New York City high schools.

In the Broadway High School, Seattle, the organization for assisting students who must work[1] "consists primarily of a Girls' Club and a Boys' Club, each under the supervision of faculty members. The Girls' Club adviser has one teacher who gives one period each day to the placing of girls who need to work for part school time. In doing this she is very careful to get full information about the student who needs the place and then makes careful inquiry into the homes desiring girls to work. The Boys' Club follows somewhat the same procedure. The head of the commercial department has placed some students during the time they are attending school. This work gives a closer association with students who need assistance. The community is quite ready to co-operate with the school when in need of positions for students. By working in co-operation with the pupil, school work is not seriously affected; in fact more attention is paid to these pupils and their school work because of a knowledge of their condition and need of assistance."

Two cards are kept in the Girls' Club. One contains the result of the investigation of the position for which a girl is wanted. Ques-

[1] From a letter describing the work in Broadway High School, Seattle.

tions are asked as to whether the employe is to eat with the family, number of hours required on school days, Saturdays and Sundays, religion, arrangements for outdoor exercise, and the kind of room to be given the girl. In addition, the employer is asked to furnish references. The other, the permanent card kept for the girl, contains together with her school record, a statement as to whether she is self-supporting, her employment record, personal appearance, reliability, and character.

De Witt Clinton High School is organizing an employment office as part of the Students' General Organization where part-time positions can be found for students. For several years there has been interest in this school in the problem of the boy who has to work while attending school and at least three attempts have been made to ascertain the size of the problem. In the spring of 1917 one of the instructors was assigned to the task of organizing the placement bureau. He was not relieved of his academic classes, and what has been accomplished has been done in addition to class work with the assistance of two competent students.

Before Easter, 1917, postals were sent out to milliners and florists in which it was stated that boys in the high school were desirous of securing work during the Easter holidays. Positions were secured for 200 boys as a result of these 400 postals. The salary paid averaged $1.50 a day. There have been in addition numerous requests for boys to do part-time work since Easter as a result of these postals.

When a request for help is telephoned De Witt Clinton High School, a card is filled out with the firm's name, address, and business. The hours required are ascertained, the compensation to be paid, and the qualifications demanded of the boys are also entered on this card. There is a place for the names of the boys recommended, a record as to whether they secure the position or not, and a blank space for remarks.

A second card is filled out giving the location of the firm, hours required, nature of work, salary, age applicant must be, and any other requirements the employer may have made. These frequently include race. This card is posted on the bulletin board.

When a boy comes to the office and states that he wants to apply for the position he is given a card of introduction to the firm, and to this card is attached another which the boy must fill out and return to the office, stating the results of his application.

In addition to a permanent file of firms applying for help, another file of names of boys who have secured work is kept. On these cards are the boy's name, class, address, and blanks for the names of employers with length of employment, salary, reasons for leaving, and a permanent record of scholarship.

Though this plan has opened up many opportunities for boys who desire to assist in supporting themselves while attending school, there are certain weaknesses in it which are recognized by the school. The present plan is better than the former one by which boys frequently went from store to store looking for work, and took the first position which was offered them without the opportunity of securing the advice of a representative of the school. Under the present plan the teacher in charge of this work interviews and knows the scholarship standing of those students going out into part-time positions secured through the office. He is also able to watch the effect which outside work has upon scholarship through the permanent record card kept for each boy who is working. The teacher in charge of this placement work is unable, however, to know many of the boys personally. He is teaching his own classes during the day, and has but a brief interview with the boys who must work. There is little opportunity to ascertain what the home conditions of the boy are or to secure further information concerning the position than is given by the employer over the telephone. The short interview which the boy has with the teacher in charge does present an opportunity for a little advice, but such advice is necessarily based on a very limited knowledge of the situation. The present plan, however, is a great advance over the former in which there was little recognition of the working boy's problem. The school now realizes that there is a problem to be dealt with, and in the bureau organized has shown an interest in dealing with it.

The problem would seem to be threefold. There is, first and fore-

most, the welfare of the boy to be considered. Some of the positions which high school boys are filling are positions in which they earn less than they should for the amount of time they give. In finding part-time positions for school boys an important consideration is the amount the boy earns. One of the first essentials in placing a high school boy in a part-time position would seem to be a study of his home to determine to what extent self-support on his part is necessary. If the boy has to be absolutely self-supporting, or has to pay his board, he must be found a position where the remuneration is sufficient for this purpose. The welfare of the boy demands that this fundamental need of sufficient income to maintain his standard of living be met. If the necessary income cannot be gained from a part-time position, and there is no scholarship fund available, it would seem to be the duty of the adviser to show the boy the necessity for postponing his education until such time as he has sufficient funds unless the co-operative classes meet his needs.

Many boys are giving so much time to their outside work that little time for school work and less for recreation remains. There is some indication that some boys who work more than twenty hours a week are handicapped in their school work, and boys who are employed in remunerative positions for more than ten hours a week have their recreation cut to about one-half that of the other boys. Boys applying for positions should be advised regarding the number of hours they are to engage in work outside school. The school should also ascertain the number of hours students are working at home or in positions they have secured without the help of the school. Where it is necessary, students must be told to devote fewer hours to outside work. If the school assumes the responsibility for assisting boys in finding positions where they may work part time—and it is difficult to see how under the present situation in some of the high schools in New York City she can avoid this responsibility—then she must also be ready to assume responsibility that the boy's health is not impaired by excessively long hours. The school cannot justify the long hours which some of the boys at present are giving to part-time positions. In some cases the remedy is apparent. Where boys

are working long hours and are earning very low wages, the school should advise a change in work.

From the standpoint of the boy there is also the necessity for placing him in a part-time position where, in addition to running into no moral or physical danger, there may be so far as possible educational value along the lines of his vocational interests. Seventy-one per cent of a group of high school boys who had found positions for themselves and reported, stated that the thing they were doing had no connection with what they intended doing in later life. Only 6 per cent of the boys answering the question described the work they were doing as the same kind of work they intended entering in later life. The teacher in charge of the placement work can do much to remedy this condition by ascertaining boys' interests and by securing opportunities for employment along the lines of these interests. The success of co-ordinators in some of the co-operative classes in the high schools of New York City is an indication of what might be done in this work in academic schools. A position as office boy in a doctor's office might be given to a boy who was planning under this arrangement to enter medicine.

From the standpoint of the school there is the necessity for seeing that the boy in his efforts to support himself is not so handicapped that he is unable to meet the class requirements. Doubtless through the teacher in charge of placement a more sympathetic attitude toward students who are required to work might be shown by some of the class-room teachers than is occasionally the case at present. However, the school has a right to expect that outside work shall not seriously interfere with the work required of students in school. That there is in most cases little danger of this in vocational courses, at least, is indicated by the study of the co-operative students in Washington Irving High School and in Bushwick High School, and by the study of the students in academic courses who are working outside of school hours in De Witt Clinton. The greater elimination of working boys deserves attention of high school authorities.

Lastly, from the standpoint of the employer,[1] there are certain

[1] Data are not presented on this point because of the size of the problem and the difficulty of securing information.

considerations. He has a right to expect that the school will send him a student who is really interested in working. He has a right to expect that the boy will give good service for the money received. The danger in the present method employed at De Witt Clinton High School from the employer's standpoint, is that boys who have no real need or intention of earning their way through school may see the notices of positions on the bulletin board and apply for them, in the hope of securing an easy place where there will be a high remuneration for little effort expended.

The present system in De Witt Clinton High School fails to meet the responsibility which should be felt for the boy's welfare. Under the arrangement whereby a teacher giving full time to school work is employed to do the placement and advisory work outside of class hours, there is no opportunity for ascertaining home conditions of the boy, or for consultation with parents to determine to what extent self-support is really necessary. The impossibility of knowing the boys one has to deal with when so little time can be devoted to the work, makes a consideration of the boy's part-time position in the light of his future vocation very difficult. Some attention can be given to the number of hours required of the boy who is offered a position, but little can be done for the boys who are at present at work and whose interests demand attention. Under the present system it is possible, through the marks given the students in different subjects, to note the effect upon his work of part-time employment, but there is little time for consultation with teachers and students regarding the class-room work. The teacher in charge has no opportunity to investigate the position to which the boy is being sent, and when the boy applies for the position no more is known regarding it than is learned over the telephone. The school cannot feel that it has met its responsibility to the employer, a responsibility which requires it to send him a student who is actually desirous of working, nor is there any possibility of ascertaining later how successful the boy has been in his position.

To provide for a more efficient system of placement work in part-time positions would require that practically the entire time of a man

or woman in a high school be devoted to the work, with such assistance as might be needed. He would have the child, the family, the teacher, and the employer to deal with. Application for a part-time position would in most cases necessitate a study of the home and the family of the boy to determine to what extent the boy must be self-supporting. Acquaintance with the boy and his teachers would indicate what kind of work the boy was fitted for. Interviews with the employers before and after the boy secured his position would show the kind of position, the type of boy wanted and, later, the success of the boy in the position. The teacher could furnish information as to the boy's scholarship. The man in charge of this work with students who are at least in part self-supporting, would have a position which would be comparable to that of the co-ordinator in a co-operative course. The co-ordinator's emphasis is on vocational training, though the opportunity for self-support is a factor considered. The position in an academic high school would emphasize the opportunity for self-support, giving as much consideration as was possible to vocational training.

The general plan of organizing in the academic high school a bureau to meet the problem of self-support, in charge of a trained social worker and placement secretary, would necessitate inter-high school relations to secure maximum efficiency. There is little attempt at co-operation between the high schools which at present maintain employment secretaries in connection with their vocational courses. One school may secure positions formerly held by students in another school by providing help at a lower rate per hour. Where there are more calls for students to work than there are students desiring to work, as was the case in De Witt Clinton High School in the spring of 1917, the surplus positions are lost because no arrangement exists by which these positions can be turned over to another school. There is no provision by which opportunities for work might be given the students of the high school nearest the position.

It would seem possible to develop under the associate superintendent in charge of part-time co-operative and continuation classes under the Department of Education in the City of New York, a

movement to centralize the work with self-supporting students in all the high schools of the city. This office already has established the necessary relations with industrial and commercial establishments for the placing of students in the co-operative courses. The co-ordinators are in touch with business conditions and are following students in their positions and insuring them the maximum opportunity for training. Co-ordinators already have found positions which are not available for co-operative students but which might be filled by students who desire to work outside of school hours. There is no method at present by which these positions and the students who must in part support themselves can be brought together. A bureau organized in the central office with which the co-ordinators are in close contact would make available such positions to high schools and would utilize co-ordinators in securing further opportunities for high school students to work.

An experiment has just been started in the office of the associate superintendent in charge of part-time co-operative and continuation schools to place students for the summer of 1917. The large number of men leaving for war service has created a demand for high school students to fill positions. A co-ordinator has been appointed to co-operate with the high schools, ascertain what opportunities for employment exist, and try to fill them. The work is planned for the summer only. Superintendent Maxwell addressed a letter to all the high school principals requesting that they forward lists of names of students desiring to work during the summer. Many applications for positions have been received by the co-ordinator in charge. During the first week 150 placements were made.[1] There was in each case an investigation of the position and an interview with the student placed, either through a teacher in the building or through the co-ordinator himself. Many of the industrial establishments taking students for the summer have been co-operating with the schools under the co-operative system.

A continuation of this plan during the school year, with the development of a local bureau in each school, would make possible

[1] Data secured from office in Brooklyn of the Department of Education.

sympathetic, intelligent treatment of the problem of self-support. Assurance could be given that a position offered to a student was with a reliable firm, where there would be fair treatment and no exploitation of him because of the necessity he was under of finding remunerative work outside of school hours. The personal relations which have already been established by co-ordinators with employers would be an asset in opening opportunities for students outside of school hours. A central office force co-operating with the co-ordinators could supervise the work of students as is done now in the case of co-operative students. Finally, through the local bureau and through the central office, there could be very definite co-operation between the school, the family, and the employer.

CHAPTER VI

SCHOLARSHIPS

The problem of the large number of high school students who are employed in part-time work is not solved by the development of employment offices in high schools for the purpose of placing students in positions to prevent their exploitation. The appointment of special members of the staffs of high schools to advise with students who must be in part self-supporting is not a solution of the problem. Both methods, together with co-operation with the present administrative organization of the co-operative classes in New York, would assist students who are working while attending school. The problem of the working student, however, is more fundamental than either of the above solutions would seem to indicate.

A study of the number of students who are working, the kind of work they are doing, their remuneration, and the number of hours they are employed outside of the school leads one to the question, Is not the work done in order to secure funds actually handicapping the student in his course to such an extent as to render him of less value to society? The present study has not answered that question, nor are any data at hand which will answer it. The investigations previously described indicate that students working outside of school hours are doing generally as efficient school work as those not working. As has already been suggested this may be due to the fact that the boys in high school who are supporting themselves either wholly or in part are a selected group. The data already presented indicate that there is more elimination among the students who are working outside of school hours than among those who are not working. It may be that the marks working students secure are not a measure of their real ability. These marks are the result of work carried on in

spite of great handicaps in many cases, and were the student free to devote all his time to his studies, it might well be that his school work would be greatly improved.

Another problem which has frequently been considered by the writer and upon which there are no data, is the effect of long hours of outside work on the health of the student. Students who are working have been shown to have much less recreation than those who are not working. This is just as true of hours spent in the gymnasium and the athletic field as of recreation less valuable from the standpoint of physical development. And again there is no method of measuring the loss in the development of the social life of the boy due to the fact that he is unable to participate in as many school activities as the boy who does not work. Many interviews with students made the writer feel that an enormous amount of energy is being used in earning small amounts of money, and that this energy might be expended frequently in some direction which would mean more to the individual. This seemed especially true in the case of many foreign-born boys. Their contacts with other students in school activities outside the class room would seem to be well worth emphasizing, for frequently there is no other opportunity to come in touch with American life. At least two of the boys who were interviewed regarding their athletic activities replied that they engaged in none, as athletics did not bring in any financial return. Altogether it may well be that the student who is self-supporting in the secondary school thereby makes himself a less efficient future member of society.

In the United States secondary education is free to all. We have indicated our belief that for every one who can profit by a secondary education, free opportunity should be offered, but at the same time to a certain extent we are actually selecting those who are to profit by it from the upper economic classes. Where the student comes from a family which is unable to give clothing and living expenses for more than the period of compulsory school attendance, society provides no organized means of carrying him on to higher education no matter how promising he may be. A theory that education should be free to all does actually result in failing to provide means by which

those of the lowest economic classes can continue in school, unless they are able to support themselves wholly or in part.

In England, although secondary education is not free, there is a recognition that ability wherever it may be, should be given an opportunity to develop. Free places are very generally provided in secondary schools. All state-aided secondary schools with a few exceptions are required to provide 25 per cent of their places free, and the actual number of free places in secondary schools receiving grants from the government was 33 per cent of the attendance in 1913–14.

Moreover, in England a system of maintenance grants has been developed for children of limited means. In 1911–12 there were 38,000 scholarships for general education not of a technical nature, and of these, three-eighths, or 13,250, carried maintenance allowances in addition. Under this system a child beginning at the age of eleven or twelve may be given a scholarship with a small maintenance allowance, and if his school work merits it, be granted further scholarships carrying larger maintenance allowances until he has completed the university.

There are two theories upon which the award of scholarships might be made. The grant might be a reward for special ability and industry, the prize to be obtained only by special effort and self-denial. On the other hand, the scholarships might be freely bestowed on all who show a fair measure of capacity and attainment. The latter policy is the one held in issuing scholarships for secondary education in England, and is especially marked in the distribution of scholarships by the London County Council.

The two principles which seem most fundamental in the awarding of scholarships and maintenance funds in England are those of adequacy and the financial ability of the parent. Students holding scholarships to which maintenance funds are attached are prohibited from holding any other scholarship at the time, nor can such students take any employment outside of their school work. Beginning with a maintenance grant of about $30 while the scholarship holder is from eleven to fourteen years old, the amount increases to $90 from

the age of fourteen to sixteen, and from $100 to $125 the following three years. These are the grants of the London County Council and vary in different parts of the country. These amounts vary also to correspond with differences in the income of parents.

The second principle, the financial ability of parents, is fundamental to the entire system of granting maintenance funds. In theory, assistance is not to be granted unless the family of the boy is unable to support him. In some parts of England parents must assure the local authorities of this fact, and in still other places an investigation is made to determine the financial standing of the student's family. In general where the parents' income exceeds two thousand dollars no assistance is given the child, and the amounts cited in the preceding paragraph are for children whose parents have an income of less than eight hundred dollars.

As has been pointed out at the beginning of the chapter, we do not know in the United States what the cost to society and to the individual may be of our system of free schools and the accompanying self-support on the part of many students. The expenditure of much effort, the possible impairment of health, the cutting down of leisure hours, and the impossibility of identifying oneself with extra-curricular activities because of long working hours outside the class, doubtless result in handicapping many students in their later achievements. Some become discouraged, and the higher elimination among working students is probably in part due to this.

We have recognized in our higher institutions the need for scholarships sometimes carrying maintenance funds. These are awarded on the theory that society as a whole will benefit by the student entering the profession for which he is preparing, that the money cost of the scholarship or fellowship will be returned to society in the service later to be rendered by the individual. Recognition of the handicap of outside work for scholarship holders is at least occasionally indicated by the prohibition of other employment. We do to a certain extent in higher education recognize the advisability of picking men and women of ability and giving them free a higher education.

In England there is the same recognition of the necessity for securing the ablest members of society regardless of their economic standing for the professions. However, much more emphasis is placed upon this policy than in the United States, and the entire scholarship system is frankly stated to be for the purpose of securing trained leaders in government positions and in professional callings. With this in mind the ablest in the elementary schools are chosen and given opportunities to continue their studies even though from poor homes. This would seem to be a much more consistent policy than is that of New York City. Here the child from the poor home earns his way through high school. He may be offered, to be sure, an occasional scholarship with maintenance in our higher institutions.

APPENDIX

HIGH SCHOOL STUDENTS IN NEW YORK

Earnings Per Hour	De Witt Clinton	Wadleigh	Girls' Eastern District	Boys' Eastern District
$0.01–0.05	3	0	0	1
0.06–0.10	49	6	15	17
0.11–0.15	83	4	11	13
0.16–0.20	69	5	2	18
0.21–0.25	52	11	5	25
0.26–0.30	10	1	5	5
0.31–0.35	10	2	3	5
0.36–0.40	16	3	1	4
0.41–0.45	9	1	3	2
0.46–0.50	22	9	16	14
0.51–0.55	1	..	2	1
0.56–0.60	3	..	..	2
0.61–0.65	4	..	..	2
0.66–0.70	4	..	1	..
0.71–0.75	7	1	1	1
0.76–0.80	2	..	..	..
0.81–0.85	0	..	..	..
0.86–0.90	1	..	..	..
0.91–0.95	1	..	..	..
0.96–0.1.00	5	7	1	..
1.10	..	..	..	1
1.22	1	..	..	..
1.37	1	..	..	..
1.40	1	..	..	..
1.50	..	1	..	..
1.66	1	..	1	..
1.70	1	..	..	..
1.75	..	1	..	..
2.00	..	..	..	1
2.37	1	..	..	..
2.70	1	..	..	..
4.00	..	1	..	..
6.00	..	..	($3.00 for one-half hour)	1

SUMMER WORK OF 84 DE WITT CLINTON STUDENTS

Hours per Week	Number of Boys	Salary per Week	
1– 10	6	$1.50	1
11– 20	5	2.00	1
21– 30	9	2.50	3
31– 40	1	3.00	5
41– 50	32	3.50	1
51– 60	22	4.00	10
61– 70	1	4.50	2
71– 80	2	5.00	9
81– 90	3	5.50	4
91–100	1	6.00	25
101–110	1	6.50	2
..	..	7.00	7
..	..	8.00	3
..	..	9.00	1
..	..	10.00	4
..	..	12.00	1
..	..	14.00	2
..	..	15.00	1
..	..	35.00	1
..	..	50.00	1
			84

Median, $6.00
Quartile, 4.25
Quartile, 6.75
Average, 6.79

WORK WHICH BOYS WORKING FOR WAGES ARE DOING

	Eastern District	De Witt Clinton
Teaching	58	27
Newspaper	43	35
Musical work	19	2
Lighting lamps	9	..
Library work	25	..
Work in stores	58	14
Order, delivery boy	48	1
Clerk	16	..
Pawn broker's shop	1	..
Office	..	4
Collecting, soliciting	4	2
Typewriter	3	..
Pasting, cutting, clipping	1	..
Bookkeeping	6	2
Office boy	2	..
Address envelopes	1	..
Show-card writer	1	..
Messenger	3	..
Telephone	4	..
R.R. mail clerk	1	..
Post-office clerk	1	..
Collecting advertising	1	..
Dental laboratory	1	..

WORK WHICH BOYS WORKING FOR WAGES ARE DOING (Continued)

	Eastern District	De Witt Clinton
Assistant insurance agent	1	..
Distributing circulars	1	..
Collecting books	1	..
Writing bills	1	..
Waiter	9	..
Manager restaurant	1	..
Lunch room	3	..
Carrying breakfasts	1	..
Coat-room boy	5	..
Bell-hop	3	..
General work	3	..
Renting umbrellas	1	..
Painting	2	..
Peddling apples	1	..
Printing	1	..
Beating rugs	1	..
Selling stamps	1	..
Milk wagon	1	..
Acolyte	1	..
Chauffeur	3	..
Selling candy, theater	1	1
Bowling alley	1	..
Usher	4	..
Tending furnace	1	..
Barber	2	1
Brush boy, barber shop	1	..
Camera work	1	..
Spin wool	1	..
Carry trunks	1	..
Paper boxes	1	..
Blocking gloves	1	..
Detective	1	..
Mechanical work	1	..
Pasting paper on umbrellas	1	..
Selling golf balls	1	..
Advertising boy	..	4
Factory	..	3
Collecting life insurance	..	1
Writing letters	..	1
Display covers	..	1
Look over books	..	1
Cleaning	..	1
Tire on auto	..	1
Stage work	..	2
Amateur actor	..	1
Serve summons	..	1
Housework	..	1
Overhaul sewing machine	..	1
Preaching	..	1
Express	..	1
Carrying coal	..	1
Subscriptions for magazines	..	1
Chop wood	..	1
Cashier	..	1
Cleaning store	..	1
Setting up pins	..	1
Electrical work	..	1

WHAT HIGH SCHOOL GIRLS DO TO EARN MONEY WHILE IN SCHOOL

	Wadleigh	Eastern District		Wadleigh	Eastern District
Teaching	25	20	Housework	8	8
Music	17	21	Wash windows	1	..
English	2	5	Sewing	2	..
Hebrew	..	2	Waitress	5	5
Dancing	2	1	Minding baby	..	1
Sewing	2	..	Play for dances	1	1
Store	7	21	Play for society	1	..
Saleslady	3	9	Posing	1	..
Wrapper	..	1	Embroidery	1	..
Clerical	..	6	Dressing	1	..
Cashier	1	3	Paint cards, color negatives	1	..
Typewriting	..	1	Serve as maid	1	..
Cash girl	1	..	Prize for suffrage speech	1	..
Office work	8	3	Millinery	1	1
Stenography	1	..	Assist dentist	..	1
Circulars	1	..	Write composition	..	1
Address envelopes	1	3	Knitting	..	1
Bookkeeping	1	..			
Auditing	1	..			

NUMBER OF TIMES RECREATION ACTIVITIES WERE ENGAGED IN DURING WEEK

Number of Times	Boys not Working	Boys Working 10 Hours or More for Pay	Less Than 10 Hours for Pay	10 Hours or More Without Pay	Less Than 10 Hours Without Pay
0	..	3	1	..	1
1	..	2	..	..	..
2	2	6	1	1	..
3	3	4	1	1	1
4	6	3	..	3	..
5	2	..	..	1	1
6	4	..	..	3	..
7	5	2	..	..	1
8	5	1	2	3	3
9	7	1	3	2	2
10	4	3	1	..	1
11	9	1	2	1	1
12	4	..	2	..	2
13	1	4	1	1	3
14	3	..	1	1	2
15	4	..	1	1	1
16	3	..	1	..	1
17	2	..	..	..	1
18	1	..	..	..	1
19	1	..	..	..	1
20	1	..	..	..	..
21	..	..	..	2	..
22	..	..	..	..	1
23	..	..	..	..	..
24	..	..	2	..	.
25	..	..	..	..	..
26	..	..	..	..	..
27	..	..	..	..	..
28	1	..	..	..	..

RECREATION OF 161 DE WITT CLINTON BOYS DURING ONE WEEK

Activities	Working Boys	Boys Not Working	Per Cent of Boys Working	Per Cent of Boys Not Working
Movies	28	39	36	47
Theater	34	45	44	54
Pool	6	6	8	7
Dancing	9	16	11	19
Walking	57	68	73	82
Clubs	44	44	56	53
Gymnasium	21	21	27	25
Swimming	18	23	23	28
Athletic act	28	41	36	49
Cards	8	11	10	13
Checkers	25	10	32	12
Football	1	4	..	..
Chess	5	4	..	..
Dominoes	4	2	..	..
Bicycling	5	4	..	..
Reading	2	2	..	..
Skating	2	2	..	..
Street play	2	..	..	..
Tennis	1	1	..	..
Handball	..	1	..	..
Violin	1	..	..	..
Lottoes	1	2	..	..
Basketball	1	..	..	..
Croquet	1	..	..	..
Games at home	4	4	..	..
Soccer	..	1	..	..
Golf	..	1	..	..
Recreation center	..	1	..	..
Billiards, home	..	1	..	..

Of the boys who were working, 5 mentioned no recreation during the preceding week; 1 of the boys who were not working reported no recreation.

Kinds of Work Co-operative Students are Doing

The descriptions of the kinds of work co-operative girls are doing are presented because of the bearing they have on the success of co-ordinators in finding opportunities for students. Both the dressmaking and the commercial groups were from Washington Irving High School. Several of the girls in the dressmaking class have given their opinion of the co-operative course. The commercial course students are working in the Department of Education, and a description of the work done in two of the offices is attached.

That these girls consider this work in the offices of the Department of Education of value is evidenced by the fact that they are glad to devote every other week to it, although as yet there is no compensation provided.

Students in Dressmaking Course—Mary P.: At C's I have gained a great deal in sewing especially on the finishing of skirts. At M's I have done embroidery, which I did not care for much although I have accomplished a great deal in embroidery. In N's I finished linings, embroidered, and various other things. To me the co-operative work was very interesting and I learned much.

Rose K.: I found it a big experience going out working. I've learned the various things one has to go through in the business world. I also found that I had to follow directions the first time they were given. I also feel that I work much quicker now. I've gained speed. My opinion of co-operative work is good. It teaches one accuracy, speed, self-control, and many other things.

Katherine J.: I feel as though I gained a great deal in the six months I worked, for one thing experience. Another thing I gained is to concentrate and listen to given directions and be able to carry them out carefully without having them repeated. My opinion of this work is most favorable because it gives a girl an idea of what work is and prepares her. There are numerous little things in the way of sewing that could not be taught in school because of the lack of time. I really think that this plan should be continued.

Wilhemina K.: I gained six weeks' experience in the shop. I learned how the shops are run and the different things a beginner must do. I learned how to do things a little different than in school, but still have the same result. I think this co-operative course is a good one because the girls get an outside experience.

Martha H.: At Miss H's place I didn't gain very much. I learned how to make fancy beaded ornaments. At the other two places I received the knowledge of making and winding lampshades, also putting on linings on the shades. My opinion of this co-operative work is that I think it a benefit to every girl who goes out to these shops. I found the lampshade work very interesting, just by glancing up at intervals at my neighbors, although it was tiresome winding the shades almost two continuous weeks. I believe I should be able to make a lampshade if I attempted it.

Henrietta M.: I learned how to make satin linings with net sleeves to complete the whole thing. At A's I learned how to make lampshades, bind corners, line and trim the shades in all shapes.

Millie D.: I feel that I gained very much from the co-operative work. I know I can go and apply now as an experienced lampshade

maker. I liked the work very much, but I should like much better a dressmaking establishment. I don't think I should like to work at lampshades after I leave school.

Hilda K.: I gained self-reliance, some experience in finishing, and an idea of lampshade making. I also learned at what prices the various articles are sold. My opinion of the work is excellent in that it helps in securing positions after graduation. I suggest that more places be found for colored girls. Such was my experience.

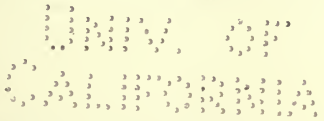
Helen H.: I gained a great deal by going to the shops, namely, finishing to every detail, how to press velvet correctly, various kinds of embroidery. My opinion is that I am very much in favor of the co-operative work, though it is quite strenuous. My idea on this subject would be to extend dressmaking course for another term. The girls would then have a chance to discuss thoroughly their experience and drill on the weak points. This I think would make them better fit for business.

Ethel R.: I gained practical experience, ideas for dresses and the way to act business-like. I think that the work I did is all right while in school because the girls are gaining experience all the time, but I think it very unsatisfactory work for a high school graduate, and quite a number of girls continue doing this work after graduation because they have become used to the finishing of dresses and never aspire to anything higher or more worth-while.

Students in Commercial Course—In the first office students were given the following dictation: Letters, reports, resolutions, calendar, testimony, and minutes of meetings. The work given them to typewrite consists of dictated matter, copied letters, reports, legal matter, minutes, extracts from board journal, board calendar, resolutions, estimates for contracts, testimony, speeches, addressed envelopes, tabulations, filled in circulars, forms, etc., and cutting stencils. In addition, the girls were given other office work as follows: Reading to clerk for correction of minutes, communications, etc., pasting minutes in a book and indexing them, pasting clippings in a book, assorting legislative bills, sending blanks to principals, folding circulars, telephoning, mimeographing, operating telephone switchboard.

In the second office girls took dictation of reports, letters, and minutes of meetings. They were given the following typewriting: Dictated matter, copied letters, reports, lists, statement of expen-

ditures, etc., statements showing number of admissions, transfers, discharges and records of newsboys' badges, filling in forms, cards, etc., addressing envelopes and cards, tabulating, and cutting stencils. Girls were also expected to file correspondence, attendance cards, and employment record cards, and check addressed envelopes with index cards. Other office work given them was comparing lists, etc., for verification; folding circulars and preparing them for mailing; counting cards, etc.; checking names and finding cards for them; using billing machine; telephoning, and mimeographing.



QUESTIONNAIRE USED IN STUDY

Indicate how long you have had the position reported,.....years,.....months,.....days.

If you work for wages please indicate

What months,	how many days,	number of hours daily,	what did you do,	how much did you earn?	employer's name,	employer's business.
July, 1915						
August, 1915						
September, 1915						
October, 1915						

If you do not work for wages please indicate

What months,	how many days,	number of hours daily,	what kind of work,	for whom?
July, 1915				
August, 1915				
September, 1915				
October, 1915				

If you tried to get a job last summer indicate below what you did to get one:

Registered at an employment agency
Asked teacher to find me a place
Asked friends
Answered advertisements
Called on employers
Advertised
Through family influence

What were you doing on the hours indicated below during the past three days?

	Yesterday,	Day before yesterday,	Day before that.
Before 7 A.M.			
7 to 8			
8 to 9			
9 to 10			
10 to 11			
11 to 12			
12 to 1			
1 to 2			
2 to 3			
3 to 4			
4 to 5			
5 to 6			
6 to 7			
7 to 8			
8 to 9			
9 to 10			
After 10			

After you leave high school, check on the list below what you intend doing:

Go to college.
Go to some other school; if so, what kind of school?
Go into an office; if so, what kind of office?
Go into business; if so, what kind of business?
Go into some other kind of work; if so, what?

Is the work you are doing outside of school

Of no help in what you intend doing after you leave High School?
The same kind of work you expect to enter later?
Somewhat like the work you will enter?
If it will help your future work in some other way, what is that way?

If you were born abroad, how many years have you been in this country? In this city?

What language do you speak at home?

What is your father's occupation? Does he own his business?

How many older brothers and sisters have you?

What does each do?

In what grade was each when he left school?

Do you live in a flat or a private house? If a flat, how many rooms?

Do you occupy the whole house, or do you rent part of it?

Check below recreations you have had the past week giving number of times engaged in

Movies
Theater
Pool or billiard hall
Dance hall
Walking
Name any other engaged in.
Clubs
Gymnasium (outside of school hours)
Swimming pool
Athletic field
Games at home

QUESTIONNAIRE USED IN STUDY

Name.....Age.....School.....

Address.....Father's birthplace?.....Your birthplace.....

How many terms have you been in high school?.....

Kindly fill in the following blanks if you have done any work other than school work the past week

	Work for wages the past week Kind of Work	No. Hours	Amt. Received	Work without wages the past week Kind of Work	For whom	No. Hours
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						
Sunday						

How do you use your money?.....

If you have been working for wages the past week, please state how you secured your position.

.....

Please fill in the last grades you received in the subjects you were taking last term.

English.....Latin.....Modern Languages.....Mathematics.....Science.....History.....

VITA

The author, WALTER WILLIAM PETTIT, was born in Fredonia, New York, August 9, 1882. He received his early education in the public schools of his home town, graduating from the Fredonia State Normal School in 1901. He entered Teachers College in 1909, received the degree of B.S. two years later and the degree of Master of Arts in 1912. In 1914–15 he was in residence as a graduate student in Teachers College and continued his studies in that institution during 1915–16. He spent the summers of 1910 and 1912 at the University of Chicago and 1914 and 1915 at Columbia University.

In 1901 he was appointed as teacher in the Bureau of Education in the Philippine Islands and remained there until 1909, the last four years being in charge of the Provincial High School of Bulacan. From 1911 to 1913 he was principal of the Elementary Technical School, Evanston, Illinois; 1913–14 field secretary of the Playground and Recreation Association of America; 1915–16, associate in the New York School of Philanthropy; 1916–17, assistant to the Ambassador, Petrograd, Russia; 1917–18, assistant director of the New York School of Philanthropy; 1918–19, U. S. Army.