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SCHOOL DOCUMENT NO. 12—1934
BOSTON PUBLIC SCHOOLS

ANNUAL REPORT OF THE SUPERINTENDENT

DECEMBER, 1934



BOSTON
PRINTING DEPARTMENT
1934

Boston, November 19, 1934.

To the School Committee of the City of Boston.

I have the honor to submit herewith the fifty-second annual report of the Superintendent of Public Schools.

This report covers the school year ending August 31, 1934.

Respectfully submitted,

PATRICK T. CAMPBELL,
Superintendent of Public Schools.

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SCHOOL MEMBERSHIP

The following table shows the total registration, the average number belonging, and the average attendance of pupils in the Boston public schools during the school years 1931-32, 1932-33, and 1933-34.

	TOTAL REGISTRATION			AVERAGE MEMBERSHIP			AVERAGE NUMBER ATTENDING		
	SCHOOL YEAR ENDING JUNE 30			SCHOOL YEAR ENDING JUNE 30			SCHOOL YEAR ENDING JUNE 30		
	1932	1933	1934	1932	1933	1934	1932	1933	1934
Teachers College of the City of Boston.	567	600	600	558	572	560	539	545	538
High and Latin.....	30,244	30,921	32,478	27,992	28,080	29,137	26,151	26,007	27,027
Elementary Grades.....	99,855	101,111	99,778	92,301	93,496	92,774	86,515	87,152	86,654
Kindergartens.....	11,763	12,090	12,787	9,890	10,412	10,192	8,249	8,585	8,299
Totals.....	142,429	144,722	145,643	130,741	132,560	132,663	121,454	122,289	122,518
Special Schools.....	3,238	3,694	4,146	2,598	2,961	3,081	2,327	2,673	2,761
All Day Schools (except Continuation and Day School for Immigrants).	145,667	148,416	149,789	133,339	135,521	135,744	123,781	124,962	125,279
Evening High.....	8,643	8,886	9,085	5,242	5,513	5,338	4,250	4,382	4,214
Evening Elementary.....	5,012	4,415	4,673	2,989	2,655	2,582	2,503	2,230	2,138
Opportunity School *.....	451	.....	.....	271	.....	.....	232	.....	.....
Boston Trade School (Evening Classes).	1,328	1,212	1,304	801	739	799	659	610	649
Totals, Evening Schools.	15,434	14,513	15,062	9,403	8,907	8,719	7,644	7,222	7,001
Continuation School † ...	3,472	2,136	1,281	3,413	445	298	3,175	396	257
Day School for Immigrants.	874	751	645	498	459	393	411	379	327
Totals of all Schools.	165,447	165,816	166,777	146,653	145,332	145,154	135,011	132,959	132,864

* Temporarily discontinued.

† Represents number of children between the ages of fourteen and sixteen who are not enrolled in any regular day school.

FINANCIAL STATEMENT

The following table copied from the report of the Business Manager summarizes concisely the expenditures for maintenance of public schools; for repairs and alterations of school buildings; for the cost of land and new buildings (exclusive of interest, sinking fund and serial debt requirements); and exclusive of pensions to teachers and others, who are members of the Boston Retirement System; for the period beginning January 1, 1933, and closing December 31, 1933.

Salaries of administrative officers, clerks, stenographers, supervisors of attendance and other employees . . .	\$363,446 55
Salaries of principals, teachers, members of the supervising staff and others	10,981,533 66
Salaries of custodians and salaries of matrons	826,504 33
Fuel and light (including electric current for power) . . .	402,852 52
Supplies and incidentals	644,070 06
Pensions to supervisors of attendance and pensions to custodians	1,432 67
Pensions to veterans	5,673 38
Promoting the Americanization and better training for citizenship of foreign-born persons	25,777 86
Vocational guidance	46,885 55
Physical education (salaries of teachers, members of the supervising staff and others and supplies and incidentals — day schools and playgrounds)	205,982 90
Salaries of school physicians, salaries of school nurses and care of teeth	201,812 14
Extended use of the public schools (salaries and supplies and incidentals)	66,185 09
Pensions to teachers	127,301 61
Alteration and repair of school buildings, and for furniture, fixtures, and means of escape in case of fire, and for fire protection for existing buildings, and for improving existing school yards	1,009,145 91
Lands, plans and construction of school buildings	1,881,006 09
Totals	<u>\$16,789,610 32</u>

SCHOOL POPULATION

A study of the statistics of school population for the five-year period 1929 to 1933, inclusive, brings to our attention several problems of major importance. During this period the number of pupils in Grades I to VIII, inclusive, in September, 1929, was 89,163. The year 1930 reduced this total by 401 to 88,762. This decline was accentuated in 1931 by a loss of 1,305 pupils and was continued in 1933 by a reduction of 439, which brought the total elementary school population down to 86,342, and showed a total loss of 2,821 pupils, or an average loss of 705 each year.

The indications are that September, 1934, will show we have suffered even greater losses in these grades, and no one can with assurance predict the end of this movement. Many factors, doubtless, contribute to this result, but three are outstanding. The restriction of immigration — the continued growth of parochial schools — and the movement of residents from the older, more crowded parts of Boston Proper to the cities and towns of the metropolitan district. Other factors in this problem may be developments which lie deeper in our changing social development, for the great City of New York reports a loss in these grades of more than 20,000 pupils.

The loss of these 2,821 pupils has had a most disheartening effect upon the movement of the long list of eligible candidates awaiting appointment to our permanent service. Had the primary-elementary population remained static at the 1929 level we should have been able to appoint to our permanent service at least seventy teachers in addition to those who were appointed as replacements during that period.

As the numbers in a district decreased, the number of teachers allowed under the rules was correspondingly reduced, and the excess teachers in every case were transferred to districts which showed a growth or had vacancies in the teaching personnel caused by marriage or retirement.

The gravity of the situation is brought home to us very forcibly when we remember that the lists of candidates eligible for permanent appointment in these later grades contain the names of 580 young women, at least 530 of whom were trained in the Boston Teachers College. The future holds

for these neophytes little hope of admission to the profession for which they have through long years of work and study prepared themselves. At the rate at which we have been able to make appointments during this five-year period, it will require nearly twenty years to clear the lists if no new names were added in the meantime.

The School Committee in February, 1934, sought to help these candidates by extending the life of the certificates of all those on the list who had been graduated from the Teachers College, from six years to nine years. While this change will help somewhat in the case of candidates who were graduated in 1927 and 1928, it will increase the difficulties of the groups of later years by retaining for an additional three years in the upper reaches of the list those who because of earlier graduation and correspondingly greater experience have secured by re-rating places near the top of the eligible list.

With the foregoing picture in mind it is hard to understand the story of Grades IX to XII, the grades which include the last year of intermediate school and the years of the senior high school. In the face of the continued decline of the school population in the grades below the ninth, these upper grades have grown from a total of 30,172 in October, 1929, to a total of 37,630 in 1933, an increase for the period of 7,458 pupils, or an average in growth of 1,864 pupils in our four upper grades each year of the period from 1929 to 1933.

If we keep in mind that the average number of pupils in our high schools may be placed roughly at 2,000, it becomes evident at once that it would require at least three new high school buildings to accommodate these additional pupils properly. To put the case in another way,— at an average of thirty-five pupils per room it would require at least 213 additional home rooms for these added classes.

The case is not so desperate, however, as this would seem to indicate, for of these 7,458 additional pupils, 7,241 are already cared for in the ninth grade of the various intermediate schools. The construction of the Jeremiah E. Burke High School for Girls in Dorchester, which opened its doors in September, 1934, and the proposed construction of a new high school building in West Roxbury will relieve the most pressing of our problems of overcrowding in the high schools.

This constant increase of numbers in grades above the eighth is attributable to two major causes — the continued

decline of business activity, together with the provisions of the National Recovery Act which excluded from gainful employment all minors under sixteen years of age, has kept in these upper grades thousands of boys and girls who formerly left the classroom, many as soon as they had reached the legal age of fourteen, when they became eligible for part-time employment. The greater number closed their school careers as soon as they had reached their sixteenth birthday. To this must be added the tendency which has constantly increased since the war for parents to keep their children longer in school than formerly was the custom.

However, this influence for growth in the upper grades cannot continue much longer to overcome the losses in the lower grades. At no distant day this decrease in the primary-elementary grades must be felt in the secondary schools, and there, too, the number of pupils must soon remain static if it does not show gradually increasing losses.

This curious situation set forth above, a constant decline in one part of the system coupled with an unprecedented growth in another, warns us to proceed with caution in developing our physical plant. Manifestly, it would be unwise to construct new high school buildings to meet fully the present demands lest when the tide ebbs, as it surely must, we shall find ourselves with empty rooms or even empty buildings.

Despite the great loss in the lower grades, the committee is still forced to provide new elementary school buildings in the outer parts of the city where the growth is largely the result of the shifting of population from the older parts of the city. This will explain to the citizens the apparent anomaly of building new elementary structures when the numbers continue to decline. Vacant rooms and even vacant buildings in the older sections cannot provide seats for the children in the growing suburbs, and these children surely must be cared for.

The decrease on the one hand coupled with the increase on the other is already affecting seriously the choice of courses made by students in the Teachers College. Fully aware that there is little chance of permanent appointment in the primary and elementary grades, the students have deserted the courses leading to the elementary certificate.

In 1934 the Teachers College, instead of graduating 150 candidates as formerly into the ranks of the elementary group,

actually gave degrees to only seven for that service. Since the total number graduating from the college in June, 1934, was not appreciably less than the number who received degrees in the years immediately preceding, it must follow that the number of candidates who have been prepared for service in the intermediate schools and in the high schools is, and will continue to be, out of proportion to the needs of the service. The result certainly will follow that presently we shall be faced in these upper reaches of the service with the same problem of a growing number of intermediate and high school candidates which now faces us in the prior and current elementary lists.

Surely, we ought not to allow this situation to continue without an earnest effort to find a solution. Girls in the high schools who are preparing to enter Teachers College should be informed by their instructors of the conditions which render their employment as teachers most unlikely in the immediate future. Should we not at this time consider likewise the advisability of increasing the requirements for admission to the Teachers College, to the end that without violence to existing conditions the numbers admitted to the college may be gradually brought nearer to the demands of the service? The type of student trained for the service will be of the very highest type. Other cities have met this problem in different ways. The City of Detroit, which maintains a great city college, limits very carefully the number of candidates admitted to the training school in the city college. New York, on the other hand, has abolished three Teachers Colleges and has held no certificate examinations for three years.

ASSIGNMENT OF TEMPORARY TEACHERS

Under date of November 16, 1932, the Board of Superintendents adopted the following plan for assignment of temporary teachers and this plan was accepted by the School Committee:

Assignments of temporary teachers are to be made in accordance with the following:

A. HIGH AND LATIN SCHOOLS.

1. Holders of Certificate IV with a major examination in the subject to be taught. (See Doc. No. 5, 1932, pp. 10-16.)

2. Holders of the M. E. degree from the Teachers College of the City of Boston, qualified in the subject or subjects required.
 - (a) Prior list (Doc. No. 5, 1932, pp. 23-33).
(Subject to action of the School Committee as set forth in the Secretary's communications to Miss King of October 9, 1930, and October 9, 1931.) Those who have failed in the examinations lose right of precedence.
 - (b) Current list (Doc. No. 5, 1932, pp. 16-17).
 3. Qualified candidates on the examined list for temporary teachers.
 4. Other qualified candidates, preference being given to those who have previously rendered satisfactory service.
- B. INTERMEDIATE SCHOOLS.
1. Holders of Certificate XXXIII qualified in the subject or subjects to be taught. (See Doc. No. 5, 1932, pp. 36-42.)
 2. Graduates of the Teachers College of the City of Boston who hold the degree of B. E. or of B. S. in Education qualified in the subjects required, as named on the prior list (Doc. No. 5, 1932, pp. 23-25).
 3. Holders of Certificate IV with major in the required subject.
 - 3a. Graduates of the Teachers College of the City of Boston who hold the degree of M. E. qualified in the subjects required, as named on the prior list. (Bd. of Supts., 7-31-33.)
- C. ELEMENTARY SCHOOLS.
1. Graduates of the Teachers College of the City of Boston, who hold Certificate VIII (or Certificate X if service is to be in a grade below the fourth).
 - (a) Prior list (Doc. No. 5, 1932, pp. 25-36).
 - (b) Current list (Doc. No. 5, 1932, pp. 19-22).
 2. Other candidates (examined list) who hold the required certificates. (Doc. No. 5, 1932, pp. 43-47.)
 3. Other candidates, preference being given to those who have previously rendered satisfactory service.
- D. KINDERGARTENS.
1. Graduates of the Teachers College of the City of Boston who hold Certificate X.
 - (a) Prior list (Doc. No. 5, 1932, p. 45).
 - (b) Current list (Doc. No. 5, 1932, p. 44).
 2. Other candidates who hold the necessary certificate (examined list). (Doc. No. 5, 1932, p. 45.)
 3. Elementary prior list (Doc. No. 5, 1932, pp. 25-36).
 4. Other candidates, preference being given to those who have previously rendered satisfactory service.
- E. WORK IN SPECIAL SCHOOLS OR DEPARTMENTS.
- Horace Mann School for the Deaf.
Continuation School.
Boston Clerical School.
Day and Evening Industrial Schools.
Departments of
Household Science and Arts.
Manual Arts.

Music.

Physical Education.

School Hygiene.

Special Classes.

Vocational Guidance.

1. Holders of qualifying certificates for service in the particular positions to be filled. (Doc. No. 5, 1932, pp. 15-16, and 46-56.)
2. Other qualified candidates.

F. SPECIAL POSITIONS, not specified in any list, *e. g.*, the schools at Deer Island and Spectacle Island, to be filled at the discretion of the Director of Practice and Training, subject to the recommendation of the Superintendent and approval of the School Committee.

G. DISPLACEMENT OF TEMPORARY TEACHERS.

As a result of appointments to permanent service, or from other causes, a candidate high on the lists sometimes loses her position through no fault of her own. Her right to replace girls below her on the same list must be considered with regard to the best service to the school and its pupils. If the girl of lower rank has been working in a school long enough to become acquainted with its organization and methods of procedure, and to have established herself in the good will and esteem of her pupils and the faculty of the school, a change is likely to be unfortunate. In such cases the Director of Practice and Training must have the consent of the principal of the school before displacing a teacher who has held a position for three weeks or more.

It is understood that a displaced temporary teacher of high rank must receive the first available long-term assignment.

It is also understood that, after a fair trial, a temporary teacher who fails to render service satisfactory to the principal may be returned by him to the Department of Practice and Training, and be replaced by the next available candidate.

A study of this procedure will disclose the fact that the more recent graduates of the Teachers College have very little chance of securing sufficient temporary service either to secure a re-rating or to satisfy the experience requirement demanded by the Board of Examiners. In a worse position we find those candidates for temporary work who are not on the certificate list and are graduates of other colleges than the Teachers College, for they could not be assigned to any temporary position until all the names on the lists herein specified had been exhausted.

This situation was a source of great dissatisfaction, particularly among the graduates of other colleges who pointed out that they, as lifelong residents of Boston, felt that they had an equal right with their friends and relatives who had

happened to be graduated from the Boston Teachers College. After a thorough investigation and long consideration, the School Committee, on the recommendation of the Superintendent and the Board of Superintendents, adopted an entirely new procedure in 1932. It was ordered that the Board of Examiners should hold an examination in the spring of every year for the graduates of other colleges who wish to become eligible for temporary service in one of our schools. To the successful candidates the Board of Superintendents issued certificates of eligibility good for one year. Under this plan, these young people would be obliged to pass the examination test each year.

While this satisfied the complaint of these graduates of colleges other than the Teachers College — that there had been no regular plan by which they might be selected — it still was unsatisfactory in that they were not on equal footing with the graduates of Teachers College and were obliged to prepare for a rigid test each year. A committee representing this group of young men and women presented their grievances to the School Committee, pointing out again that in their opinion it was unfair to continue the prohibitive advantage hitherto accorded to the graduates of Teachers College as against the graduates of other colleges who as lifelong residents of Boston felt that they should have at least an equal right with their fellows trained in the Teachers College.

Ten years, or even five years ago, this question would not have arisen since there was opportunity in our schools for temporary service for practically all the candidates on our Teachers College list and for the few graduates of other colleges who presented themselves. The economic conditions of today have complicated the situation. With the increase in the number of names on our examined lists and on the Teachers College lists eligible for service has gone step by step a decrease in the opportunities for temporary service in our schools, while at the same time the drastic curtailment of expenditures for education in not only this state but throughout the whole country has closed the natural outlet for the graduates of colleges other than the Teachers College.

As a solution of this very troublesome problem, the Superintendent suggested to the School Committee that the following plan be adopted for the regulation of the assignment to temporary service. The Committee agreed to the following procedure:

The rights of the holders of certificates of eligibility were recognized and it was agreed that such candidates should be assigned first to temporary work according to their standing on their lists of majors. All others who desire to qualify for temporary service, whether they are graduated by the Teachers College of Boston or by some other college, should take the qualifying examination which will be given late in May of each year. Each candidate will be required to pass an examination in his major field comparable in every way with the test set for the regular certificate examination for High School IV or Intermediate XXXIII. Twenty-five points will be granted for the Master's degree and twenty-five points for one year's teaching experience, or for a semester of teacher training experience under faculty supervision. To those who are successful in these tests the Board of Superintendents will issue a certificate valid for six years, so that the candidates may be relieved of the necessity of facing annual re-examination. Of course it will always be possible for a candidate to try to improve his standing by taking the examinations at any time he may choose.

Assignments for temporary service will be made from these examined lists according to the standing of the candidates under their major subjects after the lists of candidates eligible for permanent appointment have been exhausted.

In the unusual case that these lists of examined substitute candidates are exhausted in any given subject, other aspirants for temporary service may be considered.

BUILDING PROGRAM

In the report of the Superintendent of Schools for 1933 occurs the following statement:

"In 1933 the Committee agreed that no money would be appropriated from this land and building account save that required for the overhead expenses of the Department of School Buildings in order that no additional burden would be placed upon the taxpayer. The Committee did not, however, overlook the imperative needs of the city for increased housing facilities for the school children, but by careful study was able to appropriate for plans and construction the sum of approximately \$300,000 from balances left from the appropriations for previous items of construction. These balances enabled the Committee to authorize the construction of a four-room addition to the Robert Gould Shaw School and the

completion of the Randall G. Morris School in West Roxbury, and increase twofold the proposed addition to the Joseph H. Barnes building in East Boston, without adding a penny to the tax rate."

This action here quoted wiped out almost entirely the balances in the hands of the Department of School Buildings which the School Committee could transfer to new construction. With the opening of the new financial year in January, 1934, the Committee found itself in a very serious dilemma. On the one hand the Committee desired to relieve as far as possible the overburdened taxpayer upon whom the depression continued to bear most heavily, while on the other hand they recognized the demand for many new school accommodations. The Board of Apportionment, after considering the needs of every part of the city, submitted to the School Committee a list of thirteen projects which seemed to it, if not absolutely essential, at least most highly desirable if funds could be made available. After careful scrutiny of all the factors and after long debate, the Committee finally rejected all the proposed projects save two. At the meeting of April 9, 1934, the Committee appropriated for the construction of the first section of a thirteen-room elementary school on Baker street in the Beethoven District of West Roxbury, \$158,000. At the same meeting, an appropriation of \$160,000 was made for the construction of an addition to the East Boston High School. It was also found necessary to authorize an additional appropriation of \$249,250 by transfer of balances to carry out the provisions for the addition to the Joseph H. Barnes School in East Boston.

With the concurrence of the Mayor, the Committee therefore appropriated for new construction \$392,741.50 out of the \$1,253,746.53 which the Committee under the law might have placed on the tax rate for the year. The need of new construction was met also during the year by the allotment of \$2,000,000 from the Federal Public Works Administration for one intermediate school and for one high school. Of this amount, 30 per cent, or \$600,000, will be a grant from the Federal Treasury, the remaining 70 per cent must be raised by the issue of bonds of the City of Boston. Instead of depositing these bonds with the Public Works authorities at Washington, the Mayor felt that the city could make a better bargain by offering the bonds directly for sale from the City Treasury. With this \$2,000,000 the Committee proposed

to erect an intermediate school in South Boston and a senior high school in West Roxbury. After long and difficult negotiations with the Federal Public Works authorities, these projects were approved and the funds were allotted. The Committee thereupon appropriated from these funds \$800,000 for the construction of a forty-room intermediate school in South Boston on the site of the Shurtleff School. The plans for this building have been approved by all the agencies concerned and the contract will be awarded in the immediate future. It is our hope and expectation that this building will be ready to receive pupils at the opening of the school year in September, 1935.

The Committee likewise appropriated at the meeting of February 28, 1934, \$1,200,000 for a new high school in the West Roxbury district. Unfortunately there arose a great diversity of opinion as to the proper site for this new high school building. Many hearings were held by the Committee at which a bewildering diversity of desires on the part of the citizens of the district became evident. In the spring of 1934 the Committee voted to ask his Honor, Mayor Mansfield, to allow the Park Department to transfer to the School Committee sufficient land at Fallon Field, a public playground in Roslindale, for the site of a new high school building. Although the Mayor and Mr. Long, the chairman of the Park Commission, were eager to cooperate with the Committee, it was found that action by the Legislature was necessary before land taken for park purposes could be alienated to any other use. The enabling bill introduced late in the session was defeated and this most desirable site had to be abandoned.

Faced with the need of prompt action if the allotment from the Federal Public Works authorities was to be retained, the School Committee reverted to the plan originally authorized for construction in West Roxbury. This plan was in substance as follows: The building of the Washington Irving Intermediate School to be used for a senior high school, for which purpose it was originally built; to construct a new intermediate school to replace the Washington Irving Intermediate School building, and as a part of a general project to remodel the Robert Gould Shaw building so that here we should have another forty-room intermediate school.

All the State and Federal agencies concerned were won over to this plan and after the City Council and the Mayor had approved, the Committee, on October 15, 1934, appropriated

\$800,000 for a new intermediate school in the Washington Irving District and \$325,000 for remodeling and enlarging the Robert Gould Shaw building. The site for the new intermediate school has been selected and the plans approved by the Superintendent of Schools have been submitted to the Federal authorities. A small land-taking will be necessary at the Robert Gould Shaw building and the plans for this project have been approved by the Superintendent of Schools and now await only the approval of the Federal authorities. We expect that the plans for these two projects will soon be released and that contracts for construction will be let in time to have these two buildings open for pupils by September 1, 1935.

In addition to the new buildings provided for by the School Committee in the budget of 1934, several buildings authorized in 1933 or 1932 were accepted from the Department of School Buildings and placed in service. These were the Jeremiah E. Burke High School for Girls in Dorchester which opened its doors for nearly 1,700 pupils in September, 1934. The addition to the Joseph H. Barnes Intermediate School in East Boston makes possible a provision for 350 pupils who have been unsatisfactorily housed. The addition to the William Barton Rogers Intermediate School in Hyde Park adds eighteen rooms and enables us to provide here for more than 500 pupils of the ninth grade who were overcrowding the accommodations at the Hyde Park High School building. The second addition to the Randall G. Morris School will provide four additional rooms as soon as the need is apparent.

BUILDINGS COMPLETED DURING SCHOOL YEAR 1933-34.

PUBLIC LATIN SCHOOL ADDITION — (40 Classrooms).

Appropriations:

August	10, 1931, Plans, construction and furnishing,	\$850,000 00
November	14, 1932, Transferred from	60,000 00
April	9, 1934, Additional appropriation	800 00
		\$790,800 00

Finally accepted August 18, 1933.

RANDALL H. MORRIS SCHOOL ADDITION (First Addition — Four Classrooms).

Appropriations:

July	22, 1932, Construction	\$70,000 00
	Furnishing	2,500 00
		\$72,500 00
July	13, 1933, Transferred from	20,000 00
		\$52,500 00

Finally accepted September 8, 1933.

RANDALL G. MORRIS SCHOOL ADDITION (Second Story — Four Class-rooms).

Original appropriation made July 13, 1933.

Appropriations:

Construction	\$43,000 00
Furnishings	2,000 00
	<hr/>
	\$45,000 00

Finally accepted April 20, 1934.

WILLIAM BARTON ROGERS SCHOOL ADDITION (Eighteen Classrooms).

Original appropriation made July 22, 1932.

Appropriations:

Construction	\$279,500 00
Furnishing	17,500 00
	<hr/>
	\$297,000 00

Finally accepted May 7, 1934.

JOSEPH H. BARNES SCHOOL ADDITION.

Original appropriation made July 22, 1932.

Appropriations made:

Land	\$48,300 00
Plans	17,595 00
Construction	277,555 00
Furnishings	11,250 00
	<hr/>
	\$354,700 00

Accepted for occupancy September 13, 1934.

JEREMIAH E. BURKE HIGH SCHOOL.

Original appropriation for land (\$36,000) was made by the School Committee May 15, 1929.

Appropriations made:

Land	\$41,264 20
Plans	74,500 00
Construction	1,087,712 77
Furnishings	74,741 50
	<hr/>
	\$1,278,218 47

Finally accepted December 29, 1933. Building occupied September, 1934.

ROBERT GOULD SHAW SCHOOL ADDITION (Four Classrooms).

Appropriations May 15, 1933:

Plans	\$3,300 00
Construction	55,000 00
Furnishings	2,500 00
	<hr/>
	\$60,000 00

Accepted for occupancy November 2, 1933. Finally accepted November 7, 1933.

LAND AND BUILDING APPROPRIATIONS, 1934

Administration expenses	\$73,351 75
Rent of hired accommodations	23,599 00
Jeremiah E. Burke High School, furnishings	74,741 50
Beethoven District, elementary school on Baker street:	
Plans	\$9,000 00
Construction	145,000 00
Furnishing	4,000 00
	<hr/>
	158,000 00
East Boston High School Addition:	
Plans	\$9,000 00
Construction	145,000 00
Furnishing	6,000 00
	<hr/>
	160,000 00
	<hr/>
Total appropriated	<u>\$489,692 25</u>
P. W. A. Appropriations:	
Shurtleff Intermediate School	\$800,000 00
Washington Irving Intermediate School	800,000 00
Robert Gould Shaw School Addition	325,000 00
	<hr/>
Total	<u><u>\$1,925,000 00</u></u>

PROJECTS UNDERTAKEN UNDER THE CIVIL
WORKS ADMINISTRATION AND UNDER
THE FEDERAL EMERGENCY RELIEF
ADMINISTRATION

In the fall of 1933, the Federal Government, alarmed by the slowness with which the program of the Public Works Administration was developing, established under the general authority of the Public Works Administration a civil works program designed to assist in the carrying out of needed public works that could be quickly organized. From this agency the School Department, through the Department of School Buildings, received several allotments totaling \$708,727.70 to be expended for the employment of workmen and purchase of materials for repairs to school properties. Much satisfactory repair work in our school buildings was carried out under this program, supervised by Mr. Drummey, Superintendent of Construction, and his assistants.

It was believed that funds from this source could be expended also for the employment of unemployed teachers in our school service. With the approval of the State Emergency Commission, the Superintendent, with the assistance of the Depart-

ment of Practice and Training, devised a plan that provided work for every candidate whose name appeared on our eligible lists. By Friday, December 1, 1933, every detail had been worked out and each teacher had received her assignment for Monday morning, December 4, 1933. Noon of Saturday, however, brought from Washington a reversal of the approval given to the project by the State Commission. It was then too late to reach the candidates and to cancel their assignments.

It was a great disappointment that Federal authorities were unable to allow this use of the civil works money, as it promised to enable us to do a great deal of special work in all the schools, work which cannot be financed under our usual school budget.

We did not, however, fail completely to receive an allotment from the C. W. A. Through the cooperation of Mr. William W. Drummey, Superintendent of Construction, who agreed to furnish from his budget the necessary materials, Miss Cleaves, Director of the Department of Manual Arts, was able to employ a number of artists and woodcarvers in projects for the schools. In an appendix to this report will be found a detailed statement of this project presented by Miss Cleaves.

We were also able from the C. W. A. funds to pay for the services of seven young men and women, trained cataloguers, to undertake the cataloging of the books in the libraries of the high schools. These cataloguers were assigned to the Teachers College, the English High School, the Public Latin School, the Brighton High School, the Girls' High School, the Dorchester High School for Girls, and to the Hyde Park High School. This work, which is still in progress, has been very well done and will be of very great value in making the books of the various libraries available for the use of the pupils.

FEDERAL EMERGENCY RELIEF ADMINISTRATION PROJECTS

Early in 1933, the Federal Government set up the Federal Emergency Relief Administration to take over the functions of the Civil Works Administration with a much broader scope. Under this new authority the sum of \$80,000 was allotted to Massachusetts for the relief of unemployed teachers. This sum was allocated by Dr. Payson Smith, Commissioner of Education, to cities and towns of the state in proportion to

their school population. To Boston was assigned \$11,159.83 a month, beginning January 22, 1934. It was expected that this project would run only through March or April, but it actually continued to function to the end of the school year in June.

Unfortunately, instead of placing upon the State Commissioner of Education the responsibility for the proper disbursement of these funds to the best advantage of the teachers and of the schools, the Federal authority directed that the funds be used for projects that were not a part of the ordinary program of the city or town school organization. This order cramped Boston in proportion to the extent that her ordinary rich program of educational activities provided for projects in the evening schools and the school centers. It was found that Boston could engage in only two projects under this allotment; adult education during the day and care of children of pre-school age, that is, from three to five years of age.

The first of these projects was placed under the general direction of Assistant Superintendent Michael J. Downey, with Mr. Edward J. Rowse, Commercial Coordinator, in immediate charge of the school, which was set up in the Continuation School building.

The pre-school centers were supervised by Miss Susan Ginn, Director of the Department of Vocational Guidance. Fortunately, the Federal authorities allowed the local superintendents to determine the need of the teacher for relief, so that we were able to employ a large number of young women from our eligible lists who were sadly in need of this small income.

A detailed account of each of these projects will be given in the appendix of this document by Mr. Rowse and by Miss Ginn.

SCHOOL LUNCHEONS

The problem of providing mid-day luncheons for pupils in the secondary schools has been a subject of discussion in the School Committee for more than forty years. Even in the late 80's, the high school pupils who had previously brought their luncheons from home were in ever-increasing numbers seeking an opportunity to buy their noontime meal at the school. The answer in some schools was to allow the pupils to purchase their luncheons in nearby stores; in others to allow the janitors to sell to the pupils the sort of luncheon that appealed most to them. Neither of these plans, however, solved the problem

satisfactorily. The kind of food served and the conditions surrounding the service were alike unsanitary and unhealthful for growing boys and girls.

In the early 90's a group of public-spirited persons began to agitate for better conditions, and secured the appointment by the School Committee of a subcommittee on hygiene and the passage of an order, "That only such food as was approved by the School Committee should be sold in the city schoolhouses."

About 1894 the School Committee invited the owners of the New England Kitchen to take over the project of furnishing school luncheons in all the high schools. This organization financed the project and carried it out as a private enterprise to the satisfaction of all parties concerned for thirteen years.

In September, 1907, the Women's Educational and Industrial Union took over the activities of the organization known as the New England Kitchen and entered into an agreement with the School Committee, "With respect to the luncheon service in the several public normal, Latin and high schools." This agreement, signed by Mary Morton Kehew for the Union, Charles W. Parmenter for the Head Masters Association, and by James J. Storrow for the School Committee, was to take effect September 11, 1907, and "to continue as long as the Union may desire and the service furnished by it shall be satisfactory to the School Committee." The Union undertook to carry on this project as a piece of social service without profit to itself. The School Committee agreed to furnish the fixed equipment at the various lunchrooms, and supply heat, light and janitorial service. For more than ten years the success of the Union in this field seems from our records to have been unquestionable. For the first period of approximately eleven years the Union had made no profit and it suffered no loss. However, as the number of schools to be served increased, and since the equipment at the individual schools was inadequate for the preparation of the luncheons, the Union had constructed on Broadway a thoroughly equipped central cooking plant; the cost was financed by gifts from friends of the Union, by the sale of bonds, and by a substantial donation from the Rockefeller Foundation.

In 1924 two troublesome questions appeared in the correspondence between the School Committee and the Union; the cost of transportation of the prepared food to the schools and the agitation to extend the service to the intermediate schools

about to be placed on a one-session basis. Under date of September 30, 1924, the Director of School Luncheons for the Union wrote as follows to the Superintendent of Schools, Dr. Jeremiah E. Burke: "Our prices at the high school counters are now approximately the same as are charged in Philadelphia. I mention that city because the standards there are uniformly higher and the prices lower than in most large cities. In that city, however, no transportation or overhead costs are paid for out of the school luncheon receipts as is done in Boston. If the cost of transportation can be paid for in some other way, our organization is willing to try out for a year at least the service of food in intermediate schools when the necessary equipment is provided. The cost of delivery would be about \$2 per day per school according to the figures given to us by Healy's Express Company, a firm which has done our work for many years. If the School Committee would consider the payment of this expense our organization is willing to assume the responsibility for any deficit in the food service. As you know we had a deficit of nearly \$5,000 for our fiscal year ending October 1, 1923. The year now closing will show no balance but may show a small deficit."

On May 18, 1925, the Director in describing the difficulties, pointed out as one of the causes of the trouble, "maintenance of counters in small schools and annexes. These are undoubtedly necessary but cost a great deal in proportion to the number of students. If more of these small counters are added the result will be disastrous to the whole system. Since the city bears no expense for equipping and maintaining kitchens in the schools it seems not unreasonable that it should bear some part of this burden of the smaller units. If the transportation expense or a part of it could be paid from school funds we could serve the intermediate schools."

The School Committee in conference, June 8, 1925, was of the opinion that the cost of transportation should not be assumed by the Committee and suggested that the deficit be avoided by a slight increase in the luncheon rates. As we have noted, the Union at first was decidedly unwilling to undertake the task of serving intermediate schools on the ground that sales in these schools would not be sufficient to pay for the service, and would thus increase the burden already placed on the larger boys' schools which had been carrying the girls' schools and the smaller mixed high schools for some years.

The Union felt that it was unfair to expect the pupils of these larger schools to make any greater contributions for the maintenance of the whole system.

In the spring of 1924, however, the Union did extend its luncheon service to the intermediate schools by opening the counter in the Theodore Roosevelt School in Jamaica Plain. Meantime, the masters of the Washington Irving, Robert Gould Shaw, Frank V. Thompson and Bennett Schools had established luncheon service at their own schools through individual caterers for whom they undertook to be responsible, and this plan has been maintained constantly in these schools.

The service to the intermediate schools continued to be the most troublesome issue between the Union and the School Committee until finally the Committee in conference, September 21, 1926, ordered, "That a survey be made by the Board of Superintendents and the Business Manager of the present system of providing luncheons for pupils in the intermediate schools, and that a report in detail be submitted to the School Committee." This Survey Committee on December 1, 1926, submitted to the School Committee a lengthy report covering the whole problem of school luncheons in Boston.

From 1926 to 1933 the Union provided luncheon service for the Teachers College, all the Latin and day high schools, Boston Clerical School, Boston Trade School, Continuation School, the Annex of the Girls' High School on Massachusetts avenue, the Annex of Roxbury Memorial High School for Girls at the Clerical School Building, the Annex of the Dorchester High School for Girls at the Henry L. Pierce building, together with eleven intermediate schools, a total of thirty-three schools.

The difficulties and perplexities of the problem pointed out above were, of course, greatly intensified by the financial collapse of 1929 and the extreme depression which has followed. While prices of raw food materials declined, the buying power of the pupils declined even more rapidly, and the task of carrying the smaller units became increasingly difficult. Finally, after a conference with the Superintendent, the Director of School Luncheons for the Union withdrew the service from the Annex of the Charlestown High School in the Frothingham building, from the Annex of the Dorchester High School for Girls in the Henry L. Pierce building, and from the Donald McKay Intermediate School in East Boston. The head

master of the Dorchester High School for Girls was able to secure the services of a competent woman who has been able to provide the luncheons of the Henry L. Pierce building on a satisfactory basis largely because she has no transportation costs, and can prepare much of the food in the school lunch-room. At the Frothingham Annex and the Donald McKay School, the School Committee, through the Superintendent and the Director of School Hygiene, has been able to provide healthful and satisfactory luncheon service through the employment of luncheon attendants.

Another and wholly unlooked for drain on the resources of the Union began to take effect in 1930 from the ruling of the Supreme Court that the School Committee could no longer provide athletic wearing apparel from the appropriation for the Department of Physical Education. In order to outfit, even poorly, the various athletic teams, the head masters of the different boys' high schools began to sell candy to the students for the benefit of the athletic treasury, and the masters of the girls' schools turned to the same project in order to secure funds for their ever-increasing welfare problems. To complicate matters even further, there was always an increasing dissatisfaction on the part of the pupils in some schools with the prices and the menus of the Union. All these factors resulted in an increasing annual deficit in the school luncheon service of the Union.

The School Committee discussed every phase of the situation at several conferences and in 1933 ordered the Superintendent to conduct a survey of the accounts of the luncheon service. To make this audit the Superintendent appointed Mr. Foster of the Jeremiah E. Burke High School, Mr. Hoffacker of Boston Clerical School and Mr. Fellows of the High School of Commerce. The service of this committee deserves the appreciation and thanks of the Committee as expressed in its vote of thanks for the thoroughness and excellence of the work in which the Committee received the fullest cooperation of the officials of the Union. The report made it clear that the Union had been fair and even generous to the School Luncheon Department in apportioning the common expenditures. Investigation made clear, however, that because of the annual deficits the School Luncheon Department of the Union was insolvent. Of course, we cannot expect the Union to continue this service on such a basis, and the time cannot be

far distant when the Union will be forced to withdraw entirely from the project. The solution of this situation is one of the major problems which must receive the attention of the school authorities in the immediate future.

In order to prepare in part for a possible taking over of this activity the School Committee voted that the Superintendent should organize the school luncheon service in the Jeremiah E. Burke High School under the direction of the school authorities. With the aid of the Director of Household Science and Arts, the Superintendent was able to complete the arrangement and to open the lunchroom at this school on September 12, 1934. The Business Manager has set up a procedure to care for the accounting of the finances of this new venture which we have reason to hope will be nearly if not wholly self-supporting. From this experiment we shall learn much that will be of great use if the School Committee is obliged to take over the whole task of furnishing luncheons to all the secondary schools.

Although, as we have pointed out, the difficulties of the Union have been greatly intensified by the business depression of the last five years, the present situation differs only in degree from the conditions which faced us in 1926, at which time the Board of Superintendents filed with the School Committee the report of investigation of the school luncheon problem. No better solution has been offered than the one suggested on page 8 of this outstanding document from which the following paragraphs are quoted. "We cannot regard the present arrangement as adequate for the needs of the system as a whole, and if the School Committee in 1907 had made provision for developing a system of lunchrooms under its own direction and control we might now have an equipment equal to the best in other cities. The initial cost of building and furnishing kitchens and lunchrooms is great, but the experience of most cities indicates that for an entire system to be controlled by the school authorities is better than one controlled entirely by a private agency, and that where distances are great and transportation is expensive, individual school plants are preferable to the central kitchen system. We are convinced that Boston should begin at once to develop under the direction of the School Committee a comprehensive system of school lunchroom service for intermediate and elementary schools, for high schools hereafter established, and ultimately for all our schools. This service should be in charge of one person,

under the direction of the School Committee, and the final aim should be an organization similar to that of Philadelphia. The establishment of such a system must be gradual, and we need not attempt to include the existing high schools as long as the present arrangement of the Women's Educational and Industrial Union remains satisfactory to both parties. Ultimately a Director of School Lunches should have general control of this department, employing all assistants under a procedure approved by the School Committee and purchasing all supplies subject to the control vested in the Business Manager. We should advise that the city pay the salary of the Director of School Lunches, on the ground that much of this work is an educational service, and that all further expense of maintenance be met by receipts. It would seem that this work might well be placed under the Department of Household Science and Arts, but experience elsewhere indicates that while a large amount of valuable cooperation may be expected from this department it is better to have the school luncheons under an independent head. We further recommend that the Department of School Buildings be asked to provide adequate kitchens and lunchrooms in all new high and intermediate schools, and to improve as far as possible the conditions in existing schools."

It remains for us to determine as accurately as possible the cost of providing the necessary additional equipment in each of the thirty or forty buildings to be served to the end that we may be able to decide whether we can at this difficult period undertake this most desirable program.

SURVEY OF INDUSTRIAL EDUCATION

In May, 1932, under authority granted by the School Committee, the Superintendent appointed a committee of five to survey the whole field of industrial education in Boston and to make such recommendations for the improvement of this service as their judgment should indicate. In order that the problem might be viewed without that prejudice that must affect those directly engaged in the field of industrial education, the members of this committee were selected from fields outside of our own school department. The chairman, Dr. William H. Timbie of the faculty of the Massachusetts Institute of Technology, is widely known as an expert in the field of cooperative industrial education. Mr. J. Arthur

Moriarty, President of the Boston Central Labor Union, brought to the councils of the committee not only the views of organized labor but the rich results of a lifetime spent in the industrial field. Mr. Robert O. Small, Director, Division of Vocational Guidance in the State Department of Education, gave to the investigation a breadth of view not possible for one whose experience covered only a single community. Mr. Fred G. Smith of the faculty of the Harvard Graduate School of Education has long been recognized as a leader in the field of industrial education and an advanced and sure guide in developing new and better approaches to this work. Mr. George C. Thomas came to the Committee through the generous courtesy of the United Shoe Machinery Company, in whose service he has had a leading part in training under actual industrial conditions the graduates of industrial schools of the state. Mr. Edward J. Rowse, Commercial Coordinator in the Boston public school department, was added to the Committee to act as clerk and to conduct such investigations as the Committee might desire. Mr. George F. Hatch, Assistant Director in the Department of Manual Arts, was for a time relieved of his regular duties to make for the Committee a study of the industrial opportunities in Boston and in the metropolitan district.

The Committee held meetings each week throughout the school years 1932-33 and 1933-34, devoting to the work many hours of their personal time with only one thought, the improvement of opportunity for the children of Boston who must prepare themselves for the industrial field. It should be noted with deep appreciation that, with the best will in the world, none of the members of the Committee could have contributed this most valuable service to the Boston schools had not their own organizations relieved them of many of their regular duties that they might take on this burden for the public good.

The Committee made a most thorough study of the physical plant and the actual work of the schools, not only by personal visits but also by careful study of the reports of these schools through many years. The study conducted for the Committee by Mr. Hatch combed the industrial opportunities of the metropolitan territory with great care and skill. Upon these visits and in the information gathered by its various agents the Committee has based its findings and recommendations.

The introduction to the report of the Committee states that "studies were made of forty-five skilled trades, together with occupational trends, withdrawals from school, pupils' reasons for electing trade courses, occupations of graduates of trade courses, employers' reactions to trade training, and the cost of trade training." The material gathered as a result of this investigation, however, is so extensive that it has been thought wise to postpone the printing of this portion of the report to a later date when the cost may be borne more easily. Meantime, this valuable material, in typewritten form, will be available for those who may wish to study the problems covered therein.

The Committee finds few features of the present organization of industrial education in Boston that are open to adverse criticism. For the improvement of the service, however, the Committee offers thirteen definite recommendations which will be carefully studied by the School Committee and put into force whenever the Committee has seen fit to adopt them.

Mr. J. Arthur Moriarty, although he concurs in the general report as presented by the Committee, desired to add a supplementary report to emphasize certain aspects of the situation which to him appear to be of vital importance. This supplementary report is but another evidence of the care which the individual members devoted to this public service. A study of this addendum will doubtless in some measure modify the course followed by the School Committee in putting into effect the recommendations of the report.

The School Committee and the Superintendent desire to record here their deep appreciation of the unselfish devotion of the members of this Committee in carrying out this difficult task, which must be an outstanding contribution to the welfare of our children, at so great a charge on the time and strength of the individual members. The report of the recommendations and findings of the Committee will be found in the pages of the appendix to this document.

Respectfully submitted,

PATRICK T. CAMPBELL,
Superintendent of Public Schools.

APPENDIX TO REPORT OF
SUPERINTENDENT PATRICK T. CAMPBELL

OPPORTUNITY SCHOOL FOR THE UNEMPLOYED

An Opportunity School for Unemployed Adults was conducted under the direction of the School Department from February 12 to June 14. Supervision, housing and equipment were furnished by the School Department. Salaries of teachers and supplies were provided by Federal funds under the F. E. R. A. in Education.

The project was organized with the double purpose of providing employment for unemployed teachers and of furnishing vocational, avocational and cultural instruction for unemployed adults.

The school was conducted at the Continuation School from 2.30 to 5.30 daily and during most of the time employed twenty teachers. Twenty-eight different teachers were employed at some time during the period that the school was in operation, the sources being as follows:

From the Regular Boston Certified Lists	3
From the Boston Substitute Lists	18
From Other Sources	7

Instruction was given in the following subjects:

<i>Shop</i>	<i>Commercial</i>	<i>Academic and General</i>
Mechanical Drawing.	Shorthand.	Trigonometry.
Woodworking.	Typewriting.	Algebra.
Woodcarving.	Office Machings.	Geometry.
Printing.	Bookkeeping.	English.
Auto Mechanics.	Salesmanship.	Public Speaking.
Power Stitching.	Arithmetic.	French.
Dressmaking.	Commercial Art.	Spanish.
		Art.

There were scattering requests for many other subjects for which there was not sufficient demand to warrant organizing classes. Some of these subjects were:

History.	Other Languages.	Electricity.
Current Events.	Music.	Machine Shop Practice.

The greatest demand was for typewriting, office machines and stenography. Classes in bookkeeping, power machine stitching, dressmaking and auto-mechanics were also well attended. Academic subjects were in little demand.

In woodworking and in dressmaking the pupils furnished their own materials. In power stitching one hundred and fifty dresses were made for the Red Cross. The materials for these dresses were furnished by that organization.

Many of the pupils came to the school for the purpose of acquiring a new vocational skill, as typing, shorthand or the operation of office machines. A large number came to extend or increase a knowledge or a skill which they already possessed. Some, however, came to the school to find a pleasant and profitable pastime for unemployed hours. (Woodwork, art, French.)

There was a constantly changing school population, both pupils and teachers leaving the school as they were able to find employment. Many pupils found employment as a direct result of the training which they received at the school. In addition to this vocational training the school made a worthwhile contribution to strengthening the morale of a thousand unemployed residents of Boston.

FEDERAL EMERGENCY RELIEF ADMINISTRATION
PRE-SCHOOL EDUCATION

JANUARY TO JUNE, 1934

Under the authority of the Federal Emergency Relief Administration eight pre-schools or nursery schools were established, under the direction of the Superintendent of the Boston Public Schools, in the eight health centers in Boston.

Through the cooperation of the Health Department of the City of Boston the solariums, formerly used for children with tubercular tendencies, were turned over to the School Department for the use of these pre-schools. Doctor Wilinsky and his assistants in charge of these centers cooperated to the fullest extent in making the work a success. The services of the doctors and nurses were given freely in caring for the health of the children. The nurses in charge of the centers gave helpful advice and encouragement in furthering the work. The units involved are as follows: The Charlestown Health Unit, East Boston Health Unit, North End Health Unit, Roxbury Health Unit, South Boston Health Unit, South End Health Unit, West End Health Unit and the Whittier Street Health Unit.

The units were turned over to the pre-schools on Monday, January 22, 1934. That same day eight managers were appointed to take charge of the units. On Wednesday, January 24, the children reported for the first time. One group of children attended in the morning from nine to twelve o'clock, and another group attended in the afternoon from one to four o'clock. The managers were on duty the entire day, while one group of assistant teachers served in the morning, and another group in the afternoon. On January 24 eleven teachers began their work. Due to the very stormy and bitterly cold weather endured during the latter part of January and during February, the attendance of the children of necessity was more or less irregular. On the other hand in most of the units there was a steady increase in attendance, so that the latter part of February there was a total attendance of 225 children under the care of eight managers and twenty assistant teachers. The number steadily increased through the rest of the year and on June 21, 1934, when the pre-schools closed

there had been registered 641 children with a daily average attendance of 268. At the close of the pre-schools there were eight managers in charge and thirty-two assistant teachers. The total pay roll for the period amounted to \$8,926.32.

While it is true that the children were in the pre-school but three hours a day the necessity for a mid-morning and mid-afternoon lunch was most apparent, for some of these children were undernourished. Milk and crackers were decided upon for the lunch. Many of the children had to be taught to drink milk. As the Federal Emergency Relief Administration did not provide funds for food it was necessary to confer with the Public Welfare Department, the Health Department and the Boston School Committee, all of which were in accord that they were not in a position to supply the money for this food. Through Assistant Superintendent Brodhead an appeal was made to the Junior Red Cross. The result of this was a gift of \$100 toward the food. On Monday, February 26, graham crackers and milk were served to all of the children for the first time. The four largest milk companies of Boston were approached to supply the milk; namely, the H. P. Hood & Sons, Inc., Herlihy Brothers, Inc., Noble's Milk, Inc., and the Whiting Milk Companies. They very graciously agreed to deliver milk at the units at a very much reduced rate. All four companies deserve public commendation for their fine spirit in sharing in this plan to give nourishment to the children. At the close of the year the Emergency Relief Administration paid the balance of the milk bill. The cracker bill was met by the voluntary contributions of parents.

The Junior Red Cross, aside from the gift of \$100 for food, has contributed dolls, stuffed animals, and picture books which were made on the City of Boston playgrounds last summer. In addition to this, departments in the school system have contributed to our success. The Department of Manual Arts, besides painting boxes for the children in bright colors, made wooden toys for their use. The woodworking shops of the Dorchester High School for Boys and the Boston Trade School generously sent us small blocks made from left-over materials. The High School of Practical Arts contributed stuffed toys and bean bags. Several business concerns cooperated in our plan. For example, the S. S. Pierce Company and the Boston City Club collected empty cigar boxes which were sealed and painted for blocks for the children. The Blacker and Shepard Company

sent us fair-sized pieces of wood for building purposes. The Health Units permitted us to use the wagons and kiddie-cars in their possession and the cots and blankets for the children's rest period.

The success of the pre-schools depended very largely upon this splendid cooperation of every one concerned. The spirit everywhere was one of helpfulness. The work of the eight managers and their assistants, all of whom were taken from the list of unemployed teachers in Boston, is to be commended; that it was most successful may be best shown from the reports of those in charge of the Health Units. In every case there was genuine regret when the decision was made to close the units for the summer and a query as to whether they would be opened in the fall.

The interest and the cooperation of every one concerned in the project has been most satisfying.

PUBLIC WORKS OF ART PROJECT
1933-1934

Through the government employment of artists the Boston Public Schools have acquired many works of art, which will be of lasting inspiration to students, teachers and all who see them. While the schools have acquired many casts and prints for decorative purposes, the cost of original works of art has usually been prohibitive. It is, therefore, with special pleasure that we accept the work of living artists employed first under the Public Works of Art Project and now under the E. R. A.

Every effort has been made to keep the work on the highest possible level and to make each project appropriate in subject matter, scale, color and design. To this end the Director of Manual Arts has conferred with masters and teachers in regard to specific wall spaces and desirable themes. The New England Committee of Museum directors, during the first year, passed upon the ability of all artists on the P. W. A. pay rolls, thus securing skilled workers. So far as possible the director kept in touch with each artist as the work developed, initiating projects based on the artists' special abilities and of the greatest possible educational interest.

The most ambitious projects are the mural decorations for the assembly hall of Teachers College. Two large panels symbolizing the development of transportation are nearing completion and when placed on the walls will add much to the interest and charm of the room.

In the Brighton High School library the walls are enriched by an impressive frieze representing the evolution of the book. The rich tones of the woodwork are repeated in every part of the decoration, giving strength and unity to the whole room, while vividly portraying the impressive history and modern processes of book making. The imagination and skillful research involved in these murals must impress even the most casual visitor with the fact that drawing and painting require far more than mere physical effort. The artist must, of course, have ideas as well as power of expression. These murals show both.

The same may be said of the murals in the South Boston High School, where a graduate of the school has continued a

scheme of decoration generously begun some years ago. These panels in the assembly hall represent the interests of South Boston with their local historic background. The decorative quality of the designs is particularly pleasing in tone and pattern. The teaching of these panels is not listed in the curriculum, but they quietly lend to the youth of South Boston a worthy reason for being proud of their section of the city. Unless patriotism and sturdy self-respect begin at home they seldom get very far. It is this peculiar appropriateness of message and beauty of interpretation which make original mural decorations so much more valuable to schools than any other form of picture. The government has helped us to make a beginning which should lead to new effort on our part to enrich our educational buildings with works of inspiring content and beauty of treatment designed especially for spaces to be filled.

A charming "Sea Fantasy" for the corridors of the Norcross School has been delayed by the serious illness of the artist, but when completed it will be worth a pilgrimage for all who love color and the mysterious beauties of the sea, as suggested by the tropical fish and water plants. The South Boston Aquarium suggested this theme.

Some excellent portraits of masters have been done in oils and in sculpture. These lend much to the dignity and fine tradition of each school and it is refreshing to have them made while the master is still very much alive, instead of a glorious memory. Masters are naturally hesitant about initiating such enterprises, but once convinced that it is for the best interests of the school they have found the experience of some interest and the results of real value.

A few copies of the Museum of Fine Arts paintings have been made, but most of the work is original, and at present no copying is permitted.

Woodcarvings and glazed tiles are among the projects still under way, while the number of small pictures in color and black and white bring the actual number of items up to three hundred or more. Some work is still being done under the E. R. A. and many interesting things are happening. The distribution of pictures to the schools is necessarily delayed for want of suitable framing which was not provided by the government, but progress is now being made in school shops. Some of the woodcarvers are also making frames with material provided by the School Committee.

One outstanding characteristic among the artists is their anxiety to fully earn their small weekly allotment. Most of them work overtime and carry on long after they are off the pay roll in order to complete work which could not be finished in a specified time.

Thirty-six or more artists have been employed on work for the schools, some for long periods, some for only one or two small projects. The director has personally interviewed most of them and in many cases has laid out projects and directed the work as it proceeded.

The work now being done by E. R. A. workers is less pretentious, but it is hoped that many water colors, oils, etchings, block prints and lithographs will soon be properly framed and placed in class rooms and offices, or circulated for study by Art Appreciation classes.

RECOMMENDATIONS AND FINDINGS, SURVEY COMMITTEE ON TRADE INSTRUCTION

PART I — RECOMMENDATIONS

1. We recommend that the trade and the continuation school instruction in the Boston public schools be continued. The outstanding reasons for this recommendation are:

The schools are doing excellent work and are meeting a definite need. A high percentage of the graduates have found jobs at good wages and have lost a relatively small amount of time due to unemployment. The net cost per pupil to the City of Boston for the trade and the continuation school instruction is less than in the regular high schools. Continuing this program does not necessitate large outlay for additional equipment since these shops are already equipped. Approximately 1,200 boys and girls would be deprived of all high school instruction if these trade courses were eliminated.

2. We recommend that the School Committee continue the present plan of locating trade units at high schools.

The regular high school equipment, atmosphere and association afford definite educational advantages to pupils who pursue trade courses in this environment. On the other hand, the presence of trade courses in the regular high schools aids in giving the schools a cosmopolitan and a democratic air. It tends to instill, in all the pupils, respect for manual labor and a realization of the necessity of fundamental processes. The necessary definiteness of trade instruction serves as an incentive to better academic teaching. To a large extent these advantages would be forfeited by concentration of trade instruction in a single centralized school.

3. We recommend that intermediate vocational courses be established to provide for the education of a large group of boys and girls who either do not desire or are unable to complete four-year trade courses, and who are now interfering with the instruction of the first and second year classes of the present program.

These courses should aim to develop skill in, knowledge of, and wholesome attitude toward a variety of semi-skilled industrial processes and jobs, or simple domestic and personal service jobs and activities. They should aim to develop skill and knowledge which will assist minors to secure such jobs as are most likely to be open to them. This program should build up a strong general educational foundation and should enable the pupils to make a wise choice for later training. There should be a definite effort made to divert pupils away from those trades where unemployment is prevalent.

4. We recommend that the organization of the intermediate courses be centered fundamentally at the Continuation School building.

Expansion of the present part-time plan of the Continuation School into full-time opportunities could advantageously be adopted for these intermediate courses.

5. We recommend that, with the introduction of intermediate vocational courses, admission to the unit trade courses be limited to pupils who indicate a desire to complete these courses, and who, in the opinion of the school authorities, will profit by completing such courses.

6. We recommend that courses for electricians be greatly diversified. Less emphasis should be placed upon house wiring and maintenance of power apparatus, and more time should be devoted to the installation and servicing of the more modern electrical equipment, such as oil burners, electric refrigerators, radio apparatus, display lighting, air-conditioning equipment, and domestic electrical appliances.

7. We recommend that the curriculum at the Trade School for Girls be expanded at once to include the following:

- (a) Scientific care of skin and scalp.
- (b) Laundering, cleansing and mending.
- (c) Units of training in home cooking, special diets and cooking for invalids.

8. We recommend that the curriculum at the Boys' Trade School be expanded to include new courses as fast as the need for such courses appears.

Statistics indicate a present need for young men trained as bakers, chefs and cooks. A committee should be

formed at once for the special study of this need. This committee should consist of representatives of the trade (employers and employees) and representatives of the school system. A standing advisory committee might well be appointed to study further needs.

9. We recommend that a study be made of all the trade courses (particularly masonry, carpentry, painting, welding and plumbing) in order to determine better methods of organization of units of study within the trades, better methods of selecting recruits for these courses, the proper period of training, the desirable size of units, and the best method of placement of those trained.

10. We recommend that special precautions be taken that neither the pupils nor the graduates of trade courses be exploited by employers.

Organized labor has expressed its willingness to cooperate in any program which will prevent the exploitation of boys and girls at the expense of adult workers.

11. We recommend that existing advisory committees on trade courses be reorganized in order that the schools may be more definitely linked with organized industry and the trades. This reorganization would provide for:

a. The appointment of separate advisory committees consisting of five members for each trade department now or hereafter established in the trade and cooperative schools. (Whenever a trade department is established in more than one school there should be but one advisory committee for that trade.)

b. The presence on the committee for each trade of two representatives of management in the trade, two representatives of labor in the trade and one citizen not connected with the trade, all of whom should be nominated by the Superintendent of Schools and elected by the School Committee.

c. The appointment of department heads in each school as members *ex officio* of the respective committees without power to vote, and the extension of an invitation to directors and headmasters concerned to attend all meetings of advisory committees.

d. The appointment by the Superintendent of Schools of one of the *ex officio* members of each committee to serve as executive secretary, who should be responsible for calling meetings of this committee and for making reports to the Superintendent.

There should be at least three meetings of each committee each year, the annual meeting for organization occurring early in November.

The duties of an advisory committee should be to visit, to inspect and to become familiar with the conduct of the departments to which they are appointed, and to make such suggestions and recommendations relating thereto as they deem expedient. They should have authority to invite into consultation such persons as they may deem necessary to study specific related problems. Whenever changes or additions in equipment or content of the course are contemplated, the opinion of the advisory committee should be sought.

12. We recommend the extension to other trades of the apprenticeship plan as carried on in connection with the sheet metal training at the South Boston High School.

Representatives of organized labor expressed their approval of this plan as more definitely linking the schools with organized industry and the trade. This committee believes that this is a most effective method of furthering this type of trade training.

13. We recommend that the administrative organization of all industrial day schools (cooperative courses, industrial departments, the trade schools, the continuation school and intermediate vocational courses, if established) be simplified and correlated.

The responsibility for the administration should be centered in one full-time properly designated official, directly responsible, through an assistant superintendent, to the Superintendent of Schools.

Certain complications involving differences in length of school day, salary schedules and certificate requirements should be adjusted as promptly as possible. The details involved in these problems are not properly within the function of this survey committee.

PART II — SUMMARY OF FINDINGS

In Part II of this report, short paragraph summaries of the findings of the survey are presented.

A. Some Significant Facts

1. In Boston 11,000 Pupils Leave School Annually to Enter Employment

Approximately 5,500 Boston boys and about the same number of girls terminate their schooling annually. They end their education at different stages of the educational system beyond the sixth grade. Of these 11,000 boys and girls, nearly 2,000 have received some form of trade training in addition to their regular school work.

2. They Must Either Secure Employment or be Supported by Others

Practically all these young people hope to enter employment of some kind. The statement is sometimes made that certain occupations are overcrowded and therefore boys and girls should not be trained for these occupations. But the fact remains that those young people are terminating their schooling and they must find a place in some remunerative employment or become dependents.

3. They Are The Children of Manual Workers

More than 80 per cent of the pupils of trade classes are the sons and daughters of industrial and other workers who wish to keep their children in school in order that they may be trained as earners and producers.

4. Trade Training Holds Pupils in School

Twelve hundred boys and girls now in school would not have continued in school beyond the grammar grades had it not been possible to obtain trade training in addition to the regular school work.

In addition to the value of the trade training received by all pupils of the trade courses, we must not overlook the value which this prolonged general education has for these 1,200 pupils. If trade training had not existed in Boston these pupils report that they would have received neither the general benefits of continued education nor the special benefits of

training which aims to prepare them to earn a living. They would have left school at an early age without marketable skill and without the basic training for citizenship. The parents of these pupils corroborate these statements.

5. The Community Has Certain Trade Training Needs

An important object of this survey was to determine the trade training needs of the community and to indicate the employment opportunities for which trade training may advantageously be given in the schools.

For these purposes forty-five skilled occupations were selected for special study. Those occupations were selected in which the number of persons employed has increased and in which the scope and subject matter of the necessary training might make suitable additions to the school curriculum.

B. Employment Conditions in Certain Selected Trades

1. Trades for Which Training is Given in Boston Schools

a. Auto Mechanics.

Investigation shows that the number of graduates of auto mechanics courses in the Boston area is about 15 per cent of the number estimated to be required each year to supply the needs of this trade.

The estimated number of new employees likely to be needed annually is 656; the average number graduating annually for the past five years from auto mechanics courses is 89.

Sixty-two per cent of the graduates of the auto mechanics courses in the classes 1927 to 1932 of the Boston vocational schools found employment in the trade at graduation.

Graduates of courses in auto mechanics who replied to questionnaires have spent 69 per cent of the aggregate time since graduation in the trade. Wages are comparatively good. In general, employers look with favor upon the auto-mechanic training given in these schools.

b. Airplane Mechanics.

There are about 200 registered airplane mechanics in Massachusetts, 70 per cent of whom are in the Boston area. Many of them are pilots who are also registered as mechanics. The actual number varies greatly with the season of the year.

In the summer months there are often as many more unlicensed mechanics employed to assist in repair work.

In this field, as in all others, there have been many experienced and licensed men who have been unable to find employment in the last three years.

The class of 1931 was the first class in this trade to graduate at the Boston Trade School. These graduates have seen nothing but depression years. The percentage of placements and the percentage of time since graduation spent in the trade is accordingly low.

c. Machinists.

Census reports show that the number of employed persons in the Boston area listed as machinists decreased sharply (37 per cent) from 1920 to 1930.

In spite of an apparent overcrowding of the machinist trade, the percentage of placements of graduates of the machine shop course has been greater than that of any other trade course. Replies from graduates also indicate that the amount of time spent by them in the trade is high and that wages are comparatively good.

There is a general demand in industry for young men trained in the operation of basic machine tools. Many graduates of machine shop courses find employment in allied trades where machine shop training is a prime necessity, but they are not listed as machinists. The automobile repair industry is an outstanding example of this.

d. Cabinet and Furniture Makers.

The number employed as cabinet and furniture makers in the Boston area declined 10 per cent from 1920 to 1930. In spite of this decline a high percentage of public school graduates of the cabinetmaking courses from the classes of 1927 to 1932 found places in the trade, and high wages were reported by the few who filled in this section of a questionnaire.

The reports of graduates as to the amount of time spent in the trade since graduation indicate either much time lost by unemployment or many changes to other occupations.

Reports from the cabinet and furniture makers' trade indicate a strong tendency toward the return of fine cabinet-making to the Boston area, especially in small shops.

e. Printers.

Estimates indicate that twice as many new employees are required annually in the printing trades of the Boston area as are graduated each year in the area from the trade courses in printing.

A high percentage of graduates of the printing courses of the Boston schools found employment in this trade. For the Boston Trade School the percentage (67 per cent) is higher than for any other course in which the number of graduates is large enough to make the figures significant. Of the graduates who replied to questionnaires the percentage of those who are at work in the trade for which they were trained is greater for the printing course than for any other course. Also the percentage of time spent in the trade since graduation is highest for the graduates of the printing course.

On January 1, 1933, 87 per cent of the graduates of the class of 1931 of the cooperative printing course at Roxbury Memorial High School reported that they were at that time employed in the printing trade. The average wages of the graduates of the class of 1931 were higher than the wages of the graduates of any of the cooperative schools from which a sufficient number reported to make the figures significant.

f. Electricians.

The number in the Boston area graduating annually from electrical courses is six times the estimated number of new employees that will annually be required to enter the trade as classified in the census. In spite of this the percentage of graduates placed in the electrical trade annually from 1927 to 1932 was about the same as in the other trades. The percentage of time (44 per cent) spent in the trade since graduation by those who replied to questionnaires is lower for this group than for any other course graduating a significant number annually.

In the past the trade teaching in electrical courses has been confined mostly to house wiring and to the installation and maintenance of electric generators and motors. There has developed an additional modern need for a combination of foundation training in electricity and specialized training in new types of electrical equipment. The manufacture, servicing and repair of electric refrigerators, oil burners, neon signs, radio, moving picture equipment, automobiles, air-conditioning

apparatus, and other practical applications of electricity call for increasing numbers of trained men.

g. Sheet Metal Workers.

About 63 per cent (62.9 per cent) of the graduates of sheet metal classes (1927-32) found places in the trade at graduation. Graduates of the sheet metal course who replied to questionnaires indicate that 53 per cent of the time since graduation has been spent in the trade.

h. Plumbers.

The number of plumbers employed in the Boston area decreased slightly during the decade 1920-30. When allowance has been made for this decline only 40 per cent of the estimated number of recruits needed annually in this occupation are being trained in Metropolitan Boston. In spite of this seeming lack in the number being trained, placements of graduates of the plumbing course at the Boston Trade School have been low (35 per cent), and graduates report a small percentage of time since graduation (43 per cent) spent in the trade.

i. Painters.

There was a large increase (45 per cent) in the number of painters employed in the Boston area in the decade 1920 to 1930. Estimates indicate that a large number of recruits (356) will be required to enter the occupation annually. In spite of this apparent field for employment, only three pupils a year have graduated from the painting and decorating course at the Boston Trade School. Of the few who have graduated the records are high for placement in the trade (83 per cent) and for the percentage of time since graduation spent in the trade (67 per cent).

j. Patternmakers.

Statistics show a decline in the number employed as patternmakers in the Boston area. Also the number being trained is five times the estimated number that can be absorbed in the area.

The number of patternmakers being trained in the Boston public schools is insignificant, inasmuch as in the Boston system patternmaking is not organized as a separate course but is incidental to cabinetmaking and machine shop practice.

k. Other Trades for Which Training is Given.

The numbers graduating at the Boston Trade School from the courses in drafting, masonry, carpentry and welding are so small that the reports concerning the employment of graduates mean little. The estimates indicate that in normal times a large number of new employees should enter the building trades annually. The custom seems to be, however, to enter these trades through some apprenticeship plan.

l. Dressmakers and Milliners.

In the Boston area there has been a decline (1920-30) of 40 per cent in the number employed as dressmakers and a decline of 45 per cent in the number employed as milliners. In spite of this, girls from these courses at the Trade School for Girls find employment in about the same proportion as do girls from other courses. Graduates of these courses place high value on the homemaking and personal usefulness of the training.

m. Power Stitching.

In the Boston area there was an increase (1920-30) of 23 per cent in the number of women employed as clothing makers. The course designated as "Power Stitching" prepares for this occupation.

Forty-two per cent of the graduates of the power stitching course at the Trade School for Girls found employment in the trade. This percentage is higher than that of any other course in the school.

n. Housekeepers, Stewardesses, Restaurant Keepers and Cooks (Female).

Each of these groups in the Boston area increased during the decade 1920-30. Fifty per cent of the women in the Boston area who are employed in occupations for which training is given at the Trade School for Girls are engaged in food occupations. In spite of this, only 9 per cent of the graduates of this school are from the catering course. Also the graduates of this course are less than 9 per cent of the average number of recruits estimated to be needed annually to enter food occupations in the area.

Thirty per cent of the graduates (1928-32) of the catering course at the Trade School for Girls found employment in

restaurants, tea rooms, hospitals, and other commercial food establishments. This percentage is low but the homemaking value of the training is inestimable.

2. Trades for Which no Training is Given in Boston Schools

There are many occupations for which the Boston schools do not offer training, but for which an employee must receive training in order to enter the occupation advantageously.

The following list includes occupations of this type which have shown a decided increase (1920-30) in the number employed:

	Number Employed in Boston Area. 1930.	Percentage of Gain, 1920-1930.
For men:		
Bakers.....	3,276	27
Barbers.....	3,985	27
Chefs and cooks.....	5,074	49
Dyers, cleansers and laundry operatives.....	3,516	113
For women:		
Dyers, cleansers and laundry operatives.....	3,315	60
Hairdressers and manicurists.....	2,290	170

a. *Bakers, Chefs and Cooks (Male).*

There was an increase of nearly 40 per cent in the number of men employed in the Boston area as bakers, chefs and cooks in the decade 1920-30. Investigation shows a demand for men with a thorough training in the preparation of foods. There are no schools in the East where this training can be obtained and experts in these trades are reluctant to share their knowledge with learners. It is therefore difficult to become a skilled baker, chef or cook. In these occupations employment opportunities are good and wages are high.

It is estimated that the cost of the equipment required to install an adequate course in the preparation of foods at the Boston Trade School would be about \$9,000.

b. *Scientific Care of Skin and Scalp.*

The increase (1920-30) in the number employed as manicurists and hairdressers in the Boston area was greater than in

any other female occupation studied (170 per cent). The Boston telephone directory lists over 1,100 shops for the care of the skin, nails and hair.

Courses in the scientific care of skin and scalp have been offered in many of the large cities of the United States for many years and three cities of Massachusetts have recently organized such courses in their public schools.

The estimated cost of installing such a course at the Trade School for Girls is about \$5,000.

c. Cleansers, Dyers and Laundry Operatives (Female).

The number of women employed in laundries and cleansing establishments in the Boston area increased 60 per cent from 1920 to 1930.

Many girls enter the Trade School for Girls in order to qualify for remunerative employment in the shortest time possible. The amount of training required for laundry and cleansing operatives is relatively small and many girls who lack the essential qualifications for other trades could qualify for this work.

With the facilities which the Trade School for Girls already possesses, it is estimated that the equipment necessary for such a course could be installed for about \$500.

C. The General Distribution of Workers: The Demand for Skill: The Supply of Young Workers

1. The United States Census (1930) Figures Were Used as a Basis

An understanding of the occupational and industrial make-up of the community is necessary in determining the training needs of the community. To get this information and to determine the employment opportunities in the different trades, certain statistical studies have been made of the employment data published in the United States Census of Occupations. These data seemed adequate for this survey.

To test the validity of this assumption, census figures for the printing industry were checked by visits to all printing shops in the area. The figures thus obtained show a 12 per cent variation from the census figures. This variation being easily accounted for, we have assumed that census figures for other occupations are as precise as they are for printing, and that this basis is a sound one.

2. Large Numbers Are Employed in Manufacturing and Mechanical Industries

In Massachusetts, manufacturing and mechanical industries employ more than three times as many persons as are found in any other employment group, and nearly as many as are found in all the other groups combined (42.6 per cent).

In Boston also, the manufacturing and mechanical industries absorb by far the largest group of skilled male workers (47.3 per cent.) Of skilled female workers, clerical occupations absorb the largest number (36 per cent), and manufacturing and mechanical industries absorb the second largest group. (25.1 per cent.)

3. Graduates of Trade Courses Are Not Flooding These Industries

A follow-up of graduates (1930) of all high and trade schools in Boston shows that only about 18 per cent of the boys and 24 per cent of the girls had entered or expected to enter industrial employment.

Trade training at present is concerned with those manual occupations only which are classed as skilled or semi-skilled. They comprise only a part of our industrial employment. In Boston we find 67.1 per cent of male employees and 76.8 per cent of female employees classed in the skilled, semi-skilled, supervisory or professional groups.

If in Boston 11,000 boys and girls are annually ending their schooling to seek employment, and if the ratio of skilled and unskilled employees is to remain the same as at present, approximately 3,690 (67.1 per cent of 5,500) boys and 4,224 (70.8 per cent of 5,500) girls may be expected to enter skilled occupations each year.

D. Employment Trends and Tendencies

1. The Relation Between Population and Employment.

Population in Massachusetts increased 11.1 per cent (1920-30); employment increased only 5 per cent. Population in Boston increased 6.7 per cent while employment increased only 1.5 per cent.

The corresponding figures for the United States as a whole are 16.2 per cent and 17.3 per cent.

In the United States as a whole, employment increased

faster than population, while in Massachusetts and Boston, employment increases have not kept pace with population increases.

While there has been (1920-30) a net gain of 5 per cent in Massachusetts employment figures for those engaged in all types of employment, and in Boston a net gain of 1.5 per cent there has been a noticeable decrease in the percentage of workers classified as employed in the manufacturing and mechanical industries. If increases in this group had kept pace with population increases, there would have been 18,000 more persons employed in these industries in Boston and 204,000 more in Massachusetts than the 1930 census figures show.

2. Gains in Employment in Boston

Outstanding gains in the number employed in Metropolitan Boston in the ten-year period (1920-30) have occurred in the following skilled occupations:

For Women:

Clothing makers.

Hairdressers and manicurists.

Laundry operatives, dyers and cleansers.

Restaurant keepers.

For men:

Auto mechanics.

Bakers.

Barbers.

Chefs, cooks.

Laundry operatives, dyers and cleansers.

Mechanics.

Painters and glaziers.

Plasterers and cement workers.

Pressmen and plate printers.

Roofers and slaters.

The census classification of employees in electrical trades does not reflect the extent to which electricity has been employed in industry through its use in the automobile, moving pictures, oil heaters, electric refrigerators, advertising signs, etc. Neither does the census classification indicate the increasing part sheet metal is playing in the decoration and finish of buildings.

3. Losses In Employment In Boston

Outstanding decreases in the numbers employed in Boston during the ten-year period (1920-30) have occurred in the following occupations:

For women:

- Dressmakers and seamstresses.
- Laundresses (domestic).
- Milliners.
- Shoe and leather operatives.

For men:

- Blacksmiths, forgers, hammermen and welders.
- Boilermakers.
- Iron, steel and other metal workers.
- Machinists, millwrights and toolmakers.
- Molders.
- Shoe and leather operatives.

4. Employment Requirements in Boston

Based upon the average annual expansion or shrinkage during the ten-year period (1920-30) and the probable replacements due to retirement and death, estimates indicate that the following occupations require the greatest number of new employees annually.

Males	Females
Carpenters.	Clothing makers.
Mechanics.	Housekeepers and stewardesses.
Printers.	Hairdressers and manicurists.
Laundry, cleansing and dyeing operatives.	Laundry, cleansing and dyeing operatives.
Painters and glaziers.	
Barbers.	
Chefs and cooks.	
Bakers.	

E. Trade Training Facilities.

1. Trend in Boston's School Enrollment

In the last twenty years the population of Boston has increased 16 per cent. Public school enrollment has increased 35 per cent. Grades I to VIII, inclusive, increased 5.6 per cent while Grades IX to XII, inclusive, increased 166 per cent.

2. Trend of Enrollment in Manual and Industrial Courses.

In the last ten years enrollment in Mechanics Arts courses in Grade IX of the general high schools has decreased 37 per cent; in Mechanic Arts High School 8 per cent; in the High School of Practical Arts, 17 per cent.

In this time enrollment has increased 207 per cent in the cooperative courses, and 152 per cent in the Boston Trade School (Boys); in the same time it has decreased 10 per cent in the Trade School for Girls.

The net increase in enrollment in all these manual courses in high and trade schools during the ten-year period has been 25 per cent, while in other high school courses the enrollment has increased 39 per cent. Enrollment in manual courses has not kept pace with enrollment in general high school courses.

3. Training for the Trades: In Boston Schools

a. *Trades for which Training is Given in Boston, and the Locations.*

Trade courses are offered in the Boston Trade School (Boys), in the Trade School for Girls, and in district high schools.

For Boys: Trade School.	For Boys: District High Schools.
Airplane mechanics.	.....
Auto mechanics.	Auto mechanics (Brighton).
Cabinetmaking.	Cabinetmaking (Dorchester).
Carpentry.	.....
Drafting.	.....
Electrical trades.	Electrical trades (Charlestown).
Machine shop practice.	Machine shop practice (Hyde Park).
.....	Machine shop practice (East Boston).
Masonry.	.....
Painting, interior decorating and paper hanging.	.....
Plumbing.	.....
Printing.	Printing (Roxbury Memorial).
Sheet metal trades.	Sheet metal trades (South Boston).
Welding.	.....
For Girls: Trade School.	
Catering.	
Commercial art.	
Design.	
Dressmaking.	
Embroidery.	
Millinery.	
Power machine operating.	

Some opportunities for trade training are found at the Continuation School. Shop work in the intermediate schools is in no sense trade training and therefore forms no part of this survey.

b. The Time Organization of these Schools.

The trade courses at the trade schools are all-day courses with full time at the school.

The trade courses in the district high schools were originally organized on the cooperative plan. Under this plan the students spend alternate weeks in cooperating shops, the weeks in school being spent on trade-related studies and on academic studies.

During the period of business depression it has been necessary to vary the plan somewhat by having some of the pupils spend the alternate weeks in school shops instead of in cooperating shops.

c. The Continuation School.

The Continuation School was established to meet the provisions of the law requiring employed minors over fourteen years and under sixteen years of age to attend day school at least four hours per week. Shops were installed in the Continuation School so that these boys and girls could receive instruction which would help them to become better fitted for employment in which they may engage.

The business depression and codes forbidding the employment of children under sixteen years of age have made it necessary to change the original plan, but Continuation School pupils still work in private domestic service and at home.

At present the building is used to house not only the Continuation School but also an Opportunity School for high and intermediate school pupils, the South End Intermediate School, a Day School for Immigrants, an Annex to the Girls' High School and the Opportunity School for Unemployed Adults.

4. Trade Training in Other Municipalities

In addition to the trade training given in the Boston public schools, trade courses are given in State-aided schools in eight other cities of Metropolitan Boston. In the area there are also private schools offering courses in many different trades.

5. Factors in the Organization of Trade Instruction

a. *The Management.*

The executive organizations of the Trade Schools and the Continuation School are simple. Each school has a principal who is directly responsible to an assistant superintendent of the Boston schools.

The executive organization of the cooperative courses is complicated. Here we have a school within a school. The course is in charge of the coordinator, who, with the teachers, is responsible to the head master of the school in some things and to the Associate Director of Manual Arts in other things.

b. *The Time Factors.*

Seven hours constitute a school day in the trade schools, while in the cooperative courses the length of the school day is five and one-quarter hours.

The division of time in trade schools and cooperative courses is approximately 50 per cent in the shops, 30 per cent in trade-related subjects, and 20 per cent in academic subjects, including citizenship and physical education.

c. *Size of Classes.*

The shop work and the related work classes are limited to from fifteen to twenty pupils. In academic work the average number in classes is about thirty-six.

d. *Shop Work.*

Productive work, conforming to commercial standards, makes up the program of most of the school shops. In certain trades it has been impossible to find productive jobs to cover all the desired elements of instruction. Exercise work is then substituted.

e. *Group Activities.*

The opportunities for school activities and recreation are the same for students of trade courses as for the students of other courses.

f. *Teachers.*

Appointment of teachers is made from the top of a rated list, based on examination, experience and training. Several years of actual work at the trade in commercial shops are required of all teachers of shop work and related subjects. In general,

teachers of trade classes must have had eight years of experience at the trade. Certain stipulated substitutions make it possible to reduce to four years the shop experience required for minor positions.

g. Placements.

Efforts are made to find positions for graduates of all trade courses. It is not expected that these pupils will graduate as journeymen workers. Investigation shows that the trade training enables the pupils to be placed advantageously and with immediate trade assets.

Immediately after graduation of the classes of 1927-32, inclusive, 82 per cent of the graduates of the cooperative courses and 45 per cent of the graduates of the Boston Trade School found employment in the trades for which they were trained. This difference in employment in these two types of schools is the natural result of the different plans of training. The cooperative student is already in a job at the time of graduation and the tendency is for him to remain in the employ of the firm unless his services are unsatisfactory. On the other hand, the graduate of the Boston Trade School must seek a job at the time of graduation. He is usually without actual employment experience and is unknown to employers.

h. Advisory Committees.

The Boston School Committee appoints advisory committees for each of the Trade Schools and the Cooperative Schools. The members of these committees are carefully selected from experienced and skilled workers in the trades being taught in the respective schools. In a few cases they have functioned satisfactorily but in most cases they have been of little constructive aid to the schools.

F. The Pupils Involved

1. They Remain in School to Secure Trade Training

A survey, as previously stated, shows that about 800 boys and 400 girls now in trade and cooperative schools would not have continued in school beyond the grammar grades had it not been possible for them to obtain trade training in addition to the regular school work.

Twenty-eight per cent of the boys taking trade courses and 68 per cent of the girls in these courses reported that they would have left school if no trade courses had been offered.

2. Their Reasons for Electing Trade Courses

Questionnaires, filled out by pupils in trade courses, indicate conclusively that they elect trade courses because of their interest in the kind of work these courses offer. Questionnaires sent to and filled out by parents of pupils in these courses confirm this conclusion.

A large percentage of the pupils reported that their greatest joy came from doing things with their hands. Most of the pupils and parents expressed the belief that the pupils had acted wisely in choosing trade courses in preference to academic courses and also that satisfactory trades had been chosen.

Twenty per cent of the girls at the Trade School for Girls said that the most attractive feature of the trade training which they were receiving was its homemaking and personal use value.

3. Withdrawals from School: Minors Fourteen to Sixteen Years of Age

Under normal pre-depression conditions Boston offered an annual opportunity for the employment of about 8,000 minors fourteen to sixteen years of age. About 7,700 minors are now in school on full time who would be in employment if former conditions prevailed. They are remaining in school because of the lack of employment opportunities and because the law requires them, if unemployed, to remain in school on full time until they are sixteen years of age. They are not in school with a strong desire for further education or with any well defined objective.

These minors are found distributed through the upper grades of the intermediate schools, in the first years of the high schools and particularly in the vocational schools. No special programs have been provided for them in any of these schools. They are assigned to the regular classes, following programs planned particularly to serve a different type of pupil.

Of the minors (14-16) to whom working certificates have been issued in Boston in the last thirteen years, 41 per cent were at least two years below normal in their school work. Only 7 per cent of the general school population of Boston is retarded to this extent. It is evident, therefore, that retarded pupils in large numbers left school to enter employment.

A study of the withdrawals from trade courses for boys revealed the fact that 62 per cent of the entering group studied

remained in school only one year or less. Being interested in immediate employment, these minors, in increasing numbers, have enrolled in trade school courses; courses which were planned for the type of minor who would pursue the work seriously and persistently to the completion of the course. They have crowded the classes, found the aim beyond their ambition and the goal too remote, and have dropped out as soon as they were freed by law from school requirements.

These boys who are thus forced to remain in school and are entering the trade courses in such large numbers may be divided into two groups.

Group 1.— Those who are seriously interested in securing employment as skilled workers, have well-defined choices, and will remain in training until they have completed a prescribed course in preparation for advantageous placement in the trade chosen. (About 50 per cent of those who enter.)

Group 2.— Those who are interested in securing employment but are not serious or settled in their choice, and will not or can not remain in training much beyond the age of sixteen. (About 50 per cent of those who enter.)

One group cannot profit or properly be served by the program planned for the other group. The present unit trade organization meets the need of the first group. The second group can profit best by a vocational program designed especially for their needs and capacities, organized along general lines, with training planned for a shorter period and for the definite purpose of placing these students in industry at a level within their attainments.

G. Employment History of Graduates

Courses in auto mechanics, electrical trades, machine shop practice and printing have shown the greatest increases in number graduating annually in the Boston area.

The graduates of cooperative courses and of the Boston Trade School were asked to fill out a questionnaire asking specific questions relating to their employment. In spite of the fact that this was asked for at a time when employment was near its lowest point, the following percentages of graduates of cooperative courses who replied to questionnaires were working.

	Percentage of Graduates Who Replied.	Percentage of Graduates Who Replied Who Are Employed	Percentage of Graduates Who Replied Who Are Employed at Trade.
Printing.....	100	91	83
Auto mechanics.....	97	71	63
Sheet metal trades.....	100	62	62
Machine shop practice.....	59	75	43
Cabinetmaking.....	33	66	40
Electrical trades.....	37	56	32

For graduates of the cooperative courses the percentages of time since graduation, which the students who replied to questionnaires had spent in the trade for which they were trained, range from 79 per cent for graduates of the auto mechanics course to 32 per cent for graduates of the electrical course.

For the Boston Trade School, in courses for which the number of replies was sufficiently large to make the answers significant, the range of time spent in the trade was from 63 per cent for printers to 11 per cent for airplane mechanics.

Graduates of the cabinetmaking cooperative course report the widest range of wages and also the highest mid-wage. The number reporting in this group, however, is too small to make this wage figure significant. Of the trades reported upon by a number of graduates large enough to be significant, the wages of auto mechanics were the highest.

The employment status of graduates of the Trade School for Girls in the classes 1924 to 1932, inclusive, is as follows:

	Number Graduated 1924-1932.	Percentage Employed as Trained.
Art.....	67	53.7
Power stitching.....	1,066	44.0
Dressmaking.....	2,477	41.3
Millinery.....	865	37.5
Catering.....	513	32.7

The additional homemaking value and the personal use of the training in dressmaking, millinery and catering cannot be measured. It is large and should not be forgotten in considering these employment figures.

H. Employers' Reactions to Trade Training

Seventy per cent of the firms interviewed reported that boys who have been trained in trade courses are more proficient, more versatile and more dependable than those employees who have been trained in the firms' own shops for the same length of time.

Twenty-six per cent of the firms interviewed reported that school trade training for boys fully meets their needs, 59 per cent reported that it partly meets their needs, 85 per cent are favorable to it and 15 per cent reported that it does not meet their needs to any appreciable degree.

Lack of work was given by 60 per cent of the employers as the most common reason why graduates of trade courses have left the firms' employ. Other reasons assigned were: (a) to secure better jobs (21 per cent); (b) inefficiency (16 per cent); and (c) unsatisfactory attitude (3 per cent).

The most common criticism of girls trained in school trade courses was that they lacked speed.

I. Conferences With Labor Representatives

Conferences with labor representatives brought out the fact that they are in favor of fundamental trade training in the public schools, with related work and of training in the general subjects which form an important part of these courses. The general principle was laid down that trade training without shop practice is futile.

The danger of exploitation of cooperative students and of graduates from trade courses was pointed out. It was also recommended that graduates of trade courses should be made to understand that they do not graduate as full-fledged journeymen.

Productive work by pupils in the full-time vocational schools was looked upon with disfavor by the labor representatives because they believe it takes work away from regular journeymen. However, it was pointed out in conference that an exact record of productivity in these schools shows that the amount of commercial work that would be produced by the

skilled workers, withdrawn from the trades to teach trade classes, far exceeds the production by the trade pupils that these skilled workers teach.

The labor group expressed their willingness to cooperate with the School Department at any time in studying trade training needs and in planning trade courses.

J. The Cost of Trade Training

The cost of trade training naturally falls under two heads — the cost of capital outlay, including equipment, and the cost of maintenance.

The equipment is in place, is paid for and is being used effectively. The net annual cost per pupil (1931-32) for the different cooperative courses ranges from \$95.58 to \$155.70, with an average of \$129.81. For the Boston Trade School this cost is \$108.89 and for the Trade School for Girls the cost is \$84.37. The average annual net cost per pupil for high schools of the city, not including the cooperative courses, is \$153.70. There is a difference, in favor of the trade courses, of nearly \$24 per year per pupil for the cooperative courses, of nearly \$45 per pupil for the Boston Trade School and of over \$69 for the Trade School for Girls.

MODERN FOREIGN LANGUAGES

Until the year 1934 the Modern Foreign Language Department of the City of Boston had never given a city-wide examination in the modern foreign languages taught, French, German, Italian and Spanish. At the close of 1933, with the approval of the Superintendent of Schools, Mr. Patrick T. Campbell, preparations were made to give city-wide examinations in the first year of the study of the languages.

Pupils studying the foreign language in the eighth grade and those in the beginners' ninth grade, whether in intermediate or high schools, would be the ones examined.

The main purpose of the examination was to find out whether the fundamentals required by our course of study were being uniformly taught in the first-year work.

What are the fundamentals that pupils studying modern foreign languages should be taught in the first year?

1. Practical use of vocabulary and correct pronunciation.
2. Ability to form connected sentences, transposing simple thoughts from the mother tongue into the foreign one.
3. Comprehension of easy reading suitable to the first year.
4. Practical application of the study of some of the verbs required in this Unit.
5. Knowledge of the fundamental inflections of the language.
6. The sum total of the teaching exemplified by answering in the foreign language simple questions using the conversational method.

This examination was to be a test of knowledge acquired through intelligent teaching on the part of the instructor, and study and comprehension on the part of the pupil. Nearly all forms of the so-called modern type of tests were discarded. In the opinion of many experienced teachers, the "true and false" questions are pernicious; because, in a subject such as a modern foreign language, only true and correct forms should be put before the eye and mind of the pupil either in print or by word.

The checking up of words of somewhat similar meaning and spelling was discarded, because this also is confusing.

The date chosen for the examination was the middle of May, when the year's work was near its completion. Teachers and pupils were told early in January that an examination on the fundamentals of the first-year work would take place. They all went to work with great eagerness, and when classes were visited their enthusiasm was very noticeable.

As the time drew near the instructors were told to eliminate all fear from the minds of pupils. Fear when present in examinations very often paralyzes the mind of even the brightest pupils. Pupils were told that this examination would not affect one iota their standing in the class, their passing or not passing; that it only meant a recapitulation of the work to see how well they could remember. The reports received from all schools showed the wisdom of this allaying of fear.

Examinations for French, German and Spanish were prepared by the director. Italian was omitted at this time, because, as it is a new subject in Boston, the course of study in this language was in the hands of the printer. Consequently the teachers of Italian had no written rules for the work.

The examination was given in every school on the same day, each school taking the last sixty minutes of the session. It may seem, in view of how easy the examination appears, that sixty minutes was too long a time to give; but the idea was that even the slowest pupils would have time to think and exert their minds to produce something that would show the progress made in the subject. The best students could, and did, finish the examination in about thirty minutes; the average ones in about forty to forty-five minutes; and the slower students took the full time. All presented some work because they had time to think. In the high schools the work was done more quickly than in the intermediate schools.

Examination papers contained directions at the beginning of each question. The teacher in charge was not to give any explanation or enter into any discussion.

NUMBER OF PUPILS EXAMINED IN ALL TYPES OF SCHOOLS

French	German	Spanish
9,262	1,035	3,058

GENERAL AVERAGE IN HIGH SCHOOLS

French	German	Spanish
66.4%	60.0%	69.2%

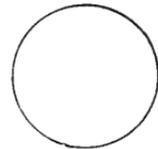
GENERAL AVERAGE IN INTERMEDIATE GRADES

	French	German	Spanish
8th Grade.....	74.0%	52.5%	83.6%
9th Grade.....	63.7%	38.6%	80.0%

It will be seen that pupils who took the first year of the language during the seventh and eighth grades obtained higher averages than those taking the language in the ninth grade, either in the high or intermediate schools. Two factors contribute to this: First, the longer and more thorough teaching; second, the fact that only those children who come from the sixth grade with marks of B or better in English, history and geography are allowed to take the foreign language, while in the ninth grade it is an elective in both types of schools.

Here follows a French examination paper and its key. The papers in Spanish and German follow the same general lines. A key for marking follows the examination.

BOSTON PUBLIC SCHOOLS
FRENCH FIRST UNIT EXAMINATION
MAY, 1934



Name.....
 First Name. Middle Initial. Last Name.
 Age last birthday (in years).....
 School. (Give full name.).....
 Grade VIII, IX, X, XI, XII. (Check the grade you are in.)
 Name of your French teacher.....

Read carefully all directions. Do not hurry. Write clearly and distinctly. Do not erase. If a mistake is made, draw a line through the incorrect form and write the correction beside or above the crossed out word.

7. lire Rosalie, la leçon, s'il vous plaît.
 8. venir Pierreà l'école cinq jours par semaine.
 9. vouloir A quelle heure vous venir ici demain?
 10. aller Tous les dimanches nous faire une petite visite à
 notre grand'mère.

IV

15 points.

8 minutes.

On the blank line under each sentence copy the sentence replacing each underlined word with the feminine form.

1. Mon père est bon.

2. Son frère n'est pas heureux.

3. L'oncle de Louise est vieux.

4. Son fils est très beau.

5. Le cousin de Raoul est canadien.

V.

15 points.

8 minutes.

Write the answer to each question on the blank lines underneath the question. Use complete sentences in your answer. Write out the words when numbers are required, i. e., quatorze, not 14.

1. Combien de frères et de soeurs avez-vous?

2. Quel jour de la semaine et du mois est-ce aujourd'hui?

3. A quelle heure avez-vous commencé cet examen?

4. Combien de jours y a-t-il dans le mois de février?

5. Trouvez-vous cet examen très difficile?

VI

5 points.

5 minutes.

Write the plural form of each word opposite the singular form. Pluralize the article also, when there is one.

1. l'oeil
2. beau
3. le fils
4. l'oiseau
5. la salle de classe

BOSTON PUBLIC SCHOOLS
KEY FOR FRENCH FIRST UNIT EXAMINATION

MAY, 1934.

I. (20 points.)	
Le père et la mère regardent leur enfant.	3 points
Le médecin arrive et la mère lui dit :	3
"Monsieur le docteur, donnez-moi votre chapeau si'l vous plaît.	4
Entrez vite et regardez notre pauvre petit Jean.	3
Il est très malade.	2
Il ne mange pas.	2
Quand je lui parle, il ne me répond pas."	3
	20
In any sentence take off one point for a mistake of any kind, up to the limit of credit allowed.	
II. (35 points.)	
1. Les crayons dans mon pupitre sont très longs.	7 points.
2. Nos livres de français sont verts, jaunes et bruns.	7½
3. Mes petites sœurs vont à l'école tous les jours.	9
4. Mon ami Martin a un (grand) (gros) chien noir.	6
5. Il y a sept cahiers sur ma table.	5½
	35
III. (10 points.)	
1. étudient <i>or</i> ont étudié <i>or</i> étudieront.	1 point.
2. finissez.	1
3. mettent <i>or</i> ont mis <i>or</i> mettront.	1
4. m'appelle.	1
5. mangeons <i>or</i> avons mangé <i>or</i> mangerons.	1
6. écrivez <i>or</i> avez écrit <i>or</i> écrirez.	1
7. lisez.	1
8. vient.	1
9. voulez.	1
10. allons.	1
	10
IV. (15 points.)	
1. Ma mère est bonne.	3 points.
2. Sa sœur n'est pas heureuse.	3
3. La tante de Louise est vieille.	3
4. Sa fille est très belle.	3
5. La cousine de Raoul est canadienne.	3
	15
V. (15 points.)	
1. Answer to question	3 points.
2. Answer to question	3

3. Answer to question	3
4. Answer to question	3
5. Answer to question	3
	<hr/>
	15

In any sentence take off one point for a mistake of any kind, up to the limit of credit allowed.

VI. (5 points.)

1. les yeux.	1 point.
2. beaux.	1
3. les fils.	1
4. les oiseaux.	1
5. les salles de classe.	1
	<hr/>
	5

COMMERCIAL EDUCATION — CITY-WIDE EXAMINATIONS

During the past year city-wide examinations in bookkeeping were continued. The results were very satisfactory. Last year the examinations were given in June and this year they were given in May. This affords an opportunity for remedial teaching during the entire month of June.

In addition to the bookkeeping examination a city-wide test was given in Stenography I. (Grade XI). The examinations in stenography consisted of one hundred words taken from the first thirty-one units in the Gregg Shorthand Manual. The average score was 78 per cent, but some schools maintained an average of 90 per cent; one school securing an average of 93 per cent.

These city-wide examinations have led to a system of periodical departmental examinations. This system deserves a great deal of commendation. At stated intervals teachers of commercial subjects are asked by the head of the department to prepare an examination suitable for testing the work of the pupils at that stage of advancement in the subject. These tests are mimeographed by the head of department and distributed on a prearranged day to all pupils taking the subject. In some cases the examinations are corrected by the head of department; in other cases by a group of teachers other than those teaching the subject, the results being returned to the teacher concerned.

These departmental tests act as a most efficient periodic check on the pupils. The pupils are enthusiastic about their marks and the results of the examination are incentives for better work by the pupil and remedial teaching by the teacher. This system is now used in most of our high schools and it is a distinct contribution to definiteness in the teaching of commercial subjects. The result of this system of testing has been the elimination at an early date of those who seem unable to profit by the instruction. It has also brought about a better trained candidate for promotion to more advanced work.

The elimination of pupils who seem unable to profit by instruction in Stenography I. is especially deserving of attention.

This elimination has made demands for other opportunities of training in the commercial course. This has been met to a great extent by means of courses in office practice with major emphasis on dictating machines. Pupils lacking the ability to master stenography often find it possible to master the typewriter and other office machines. The mastery of the typewriter, accompanied by skill in the use of dictating machines, offers an opportunity for a pupil which is not ignored in our commercial courses.

OFFICE PRACTICE COURSES

The course in office practice has been divided into two distinct divisions. The first division consists of an acquaintanceship with the machine so that a boy or girl entering a business office will have some idea of how to use the machine and to what use it is put. The first division requires a shorter time of training. Attention is paid to the major commercial subjects taken by the pupils. For example, pupils taking bookkeeping are given longer practice on bookkeeping and its allied machines. Those taking secretarial training are given longer periods on dictating machines, duplicating machines and filing.

The second division consists of a skill in the use of certain machines. This skill must be commercially marketable, that is, a skill which approximates the requirements made by the manufacturers of commercial equipment before recommending a candidate for a position. The second division is a major subject requiring full time and a great deal of practice during school hours.

Due to the depression, recent surveys have not been undertaken regarding the opportunities for vocational work after graduation from an office machine course. The surveys undertaken four years ago showed possibilities of employment greatly in excess of expectations. As soon as the depression is over, city-wide surveys will be undertaken by the Director of Commercial Education to ascertain just what opportunities there are in the various occupations requiring the use of commercial machines. In the meantime every reasonable opportunity will be given to the commercial pupils to train themselves on these commercial machines in anticipation of the resumption of normal business.

STUDY OF OFFICE MACHINES.

During the past year a study has been conducted at the Roxbury Memorial High School for Girls by Frederick G. Nichols, Professor of Commercial Education at Harvard University. The subject of the study was "Measuring Results in the Teaching of Clerical (Machines) Practice." Recent surveys indicate that there is a strong trend towards the use of office machines both in large and small offices. "This development," states Professor Nichols, "can no longer be ignored by commercial educators."

The experiment consisted in a series of tests affecting 500 pupils in the commercial course. No attempt was made to control the organization of classes, the instructional materials presented or the teaching methods used. At the conclusion of each period of instruction, approximately eight weeks, an attempt was made to measure the results. Tests were given in November, March and June. The tests were based on the instruction material actually used in the course and nothing was included that had not been taught.

That the results of the study were satisfactory is indicated by a quotation from Professor Nichols' report: "There is reason to believe that the quality of instruction is above the average, the equipment adequate, the department head, supervisor and principal are keenly interested in this type of training (Office Practice) and have given it every chance to succeed. The grade of student does not differ materially from that found in the average city high school. In short, we have in this high school situation a most favorable environment for the development and maintenance of sound machine clerical courses. It is expected that the experiment will be continued this year."

AGE REQUIREMENT

The average boy or girl is less than eighteen years of age upon graduation from high school. At present, greater maturity is demanded by business. This requirement has been met by the establishment of a one-year post-graduate course for boys at the High School of Commerce. At the Boston Clerical School a girl after graduation from high school may spend one or two years in preparing herself more advantageously for business. The High School of Commerce likewise gives a Boston high school boy graduate an opportunity to prepare himself for business or to do the equivalent of one year of junior college work in a college of business administration.

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