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BOSTON PUBLIC SCHOOLS

ANNUAL REPORT OF THE SUPERINTENDENT

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SCHOOL COMMITTEE
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BOSTON, MASS., December 31, 1915.

To the School Committee:

I submit herewith the thirty-fourth annual report of the Superintendent of Public Schools.

Respectfully submitted,

FRANKLIN B. DYER,
Superintendent of Public Schools.

IN SCHOOL COMMITTEE, January 31, 1916.

On motion, it was

Ordered, That this Board hereby adopts as its annual report for the current year the Annual Report of the Superintendent when issued.

CONTENTS.

	PAGE
I. Introduction	5
PART ONE.	
II. Significant Things Recently Accomplished or Under Way	5
1. Opportunities for Professional Activity on the Part of the Teachers	5
2. Improvement of Elementary Course of Study	6
3. The Normal School Reorganized	7
4. Recent High School Changes	8
5. Intermediate Schools	10
6. Prevocational Centers	10
7. Elementary Schools	11
8. Industrial Education	13
9. Vocational Guidance	14
10. Continuation School	15
11. Special Subjects	16
<i>a.</i> Music	16
<i>b.</i> Art	17
<i>c.</i> Manual Training	17
<i>d.</i> Cookery and Sewing	18
<i>e.</i> Physical Training	18
<i>f.</i> Medical Inspection	18
12. Evening School	19
13. Evening Centers	20
14. Summer Review Schools	20
15. Rapid Advancement Classes	21
16. Disciplinary Day School	21
III. The Work of the Assistant Superintendents	22
IV. An Important Step in the Training of Secondary Teachers	23
<i>a.</i> Plan for Training Young College Graduates for Service in Boston High Schools	23
<i>b.</i> Basis for Selection of Candidates	24
PART TWO.	
V. An Account of the Work in the Different Departments in our School System	26
1. School Hygiene	26
2. Educational Investigation and Measurement	28
3. Music	29
4. Practice and Training	33
5. Vocational Guidance	37
6. Extended Use of Public Schools	42
7. Manual Arts	44
8. Household Science and Arts	53

	PAGE
9. Kindergartens	56
10. Special Classes	64
11. Work with Physical Defectives	69
1. The Deaf	69
2. Under-nourished or Anæmic Children	69
3. Hospital Classes	70
4. Children with Defective Vision	70
5. Speech Improvement Classes	70
12. Salesmanship	72
13. Evening and Continuation Schools	77
VI. Conclusion	82

APPENDIXES.

A. Report of Department of Educational Investigation and Measurement	84
B. Report on the Intermediate or Junior High School	119
C. Report on School Centers	128
D. Educational Organizations, 1915-16	150
E. Local School Authors, 1914-15	153
F. Associations of Parents Connected with the Boston Public Schools, 1915-16	158

ANNUAL REPORT OF THE SUPERINTENDENT OF SCHOOLS.

INTRODUCTION.

The purpose of this report is to set forth to those interested in the educational phases of the work of the Boston schools, first, a bird's-eye view of the school activities that have recently received special attention and have been considerably changed; second, a somewhat detailed account of the work of the different departments for those who are interested in special activities. It deals with educational procedure and not with statistics or finances. The educational statistics of the schools will be found in the superintendent's statistical report of September. The costs are given in the business agent's financial report in April of each year.

PART ONE.—SIGNIFICANT THINGS RECENTLY ACCOMPLISHED OR UNDER WAY.

1. OPPORTUNITIES FOR PROFESSIONAL ACTIVITY ON THE PART OF THE TEACHERS.

(a.) Courses in the art of teaching have been offered in our school buildings by professors of educational departments of colleges in the last two years. Last year the courses were offered by Professors Moore and Holmes of Harvard and by Professors Norton and Fisher of Wellesley. These courses have been offered this year, and in addition Professor Inglis of Harvard has given a course for high school teachers on Methods in Secondary Education. The classes have been well filled, but their value is not limited to the number who are members of the classes, for each one goes to his own district and becomes a new center of distribution of the ideas and enthusiasm he has received.

In addition to these courses promotional courses dealing with the art of teaching have been given to the younger teachers who are preparing for their promotional examinations which come at the end of the second and sixth years. The courses in the past year have been given by Mr. Frank W. Ballou and

Miss Rose E. Carrigan during the months of October, November and December; Professor Norton, from January to April; Mr. Leonard O. Packard, Boston Normal School, from January to March; Mr. Samuel F. Tower, English High School, from January to March, and Prof. John J. Marshall, Boston University, from January to March. Courses were also given to the teachers of special departments.

(b.) *Participation in Educational Matters.*—The eight high school councils, representing each high school in the main subjects, held monthly meetings in which not only courses of study and text-books were discussed, but also educational procedure and original contributions to the teaching of the subjects. Four councils have been formed in the past year upon the transition from elementary to high school. These councils are composed of both high school teachers and teachers of the upper elementary grades, to develop courses that will be harmonious through the seventh and eighth grades and the first year of high school. An elementary text-book council, a council upon physical training in the elementary schools, and a large committee on primary educational materials have been formed. In addition there are forty committees, comprising about four hundred teachers, at work upon the elementary course of study. These councils and committees have been active and productive in the past year and their work is more and more forming the basis of our educational progress. They have demonstrated their usefulness and it is time to consider whether they should not be officially recognized, as are advisory committees of citizens on various school activities. This would be the next step in the evolution of a system which shall offer opportunity for individual initiative and expression, and give to teachers a larger participation in educational procedure.

2. IMPROVEMENT OF ELEMENTARY COURSE OF STUDY.

(a.) *Revision.*—It has been many years since the course of study in the elementary schools has been reconstructed. The accumulation of material in different subjects has become so great that to teach it all would lead to superficiality and confusion of thought. A drastic revision is now well under way. A syllabus for the first three grades is now in press. The grade syllabus clearly indicates the aim and the minimum requirements expected in each subject. The work is greatly simplified, some subjects presenting scarcely one-tenth as much material

as in the former course. A second part is added to each syllabus, containing lesson plans and copious suggestions clearly separated from the minimum requirements.

(b.) *Setting up Standards.*—An important part of the work accompanying revision has been the testing of results and setting up of standards already accomplished in the fundamental branches such as arithmetic, spelling, writing and geography. A department of educational investigation and measurement has been established, one of the chief duties of which consists in improving the common branches by testing results, suggesting remedies and again testing. The work in arithmetic, as shown by the tests, has been improved from 12 to 17 per cent in the fundamentals in the past three years. The work in spelling has been greatly simplified and recent tests show that the spelling in our schools is 20 per cent above the average. In writing we expect to show 15 per cent improvement this year. It is the purpose to set up reasonable standards of accomplishment in all the elementary subjects as definite ideals of attainment for the teachers. The professional attitude of our teachers is shown by the fact that they have entered into all of the above work voluntarily and have coöperated heartily in the critical study of their own methods and results.

3. THE NORMAL SCHOOL REORGANIZED.

An additional year has been added to the Normal School course and the entire three-year course has been organized upon a college of education basis, the subject-matter courses having been inspected and accredited by Harvard College for the Associate of Arts degree. The third year of the course is now in operation. A kindergarten-primary course of three years has been organized this year, preparing teachers equally for the kindergarten or primary department and thus removing the abrupt transition that exists at present between these departments. Modern language courses in French, Spanish and German have been introduced for training teachers of the upper grammar grades, and a course has just been put into operation for training Normal students who are college graduates for high school teaching. The physical training, music and art courses have been put directly in charge of those special departments. In short, the entire Normal School curriculum has been thoroughly reorganized and the training of teachers for our service has been radically changed.

4. RECENT HIGH SCHOOL CHANGES.

(a.) The Mechanic Arts High School is being reconstructed into an industrial school to prepare for industrial occupations outside of the trades. Three different committees on investigation recommended this change but it was not put into effect until last year. This year the second year of the course has been provided and next year the third will be. Extensive alterations and new equipment have been made necessary by an entire departure from the former course. Classes are organized now with twenty-four as a standard, two consecutive periods are given to each subject, the "study recitation" plan being adopted. The subjects are closely allied to the shop practice.

(b.) A Clerical School was established a year ago in the Roxbury High School for students beyond the second year of high school. The privilege of attending this school has now been extended to high school graduates. It is the purpose to provide in this school an opportunity for superior students to prepare for higher clerical service. Attainments are not measured by length of attendance but by proficiency as shown in speed and accuracy tests upon the business college basis. Practice is given the students in actual work connected with the department of educational investigation and measurement, and also as clerical assistants in elementary schools.

(c.) The High School of Commerce building has been completed and occupied this year for the first time. It is the most expensive high school yet constructed, having cost over \$700,000, and accommodating 1,800 students. It is already filled to its capacity.

(d.) Coöperative industrial courses have been organized in Hyde Park High and in the Dorchester High School. After the first year, students give week-about to shop and school, receiving their shop practice in actual industries and their school duties in close connection with shop needs. These industrial courses enable the students to receive apprenticeship pay for their shop work and give them their practice under actual commercial conditions.

(e.) Salesmanship courses have been organized in nine high schools, sufficient stores coöperating to provide two days a week of practice for 300 girls. The school course includes not only salesmanship but textiles, color and design, com-

mercial arithmetic and accounting, commercial law and similar studies. The combination of theory and practice should produce a superior quality of salesworkers.

(f.) Commercial courses of general high schools have been reorganized, giving a definite outcome in bookkeeping or stenography or merchandizing as the student may elect. Strong emphasis is being placed upon the special phase as the course develops.

(g.) Backward children especially in the first year of high schools have been given special treatment under teachers assigned to the schools for this purpose. These "hospital classes" are saving many children from failure and giving relief to the overcrowded classes.

(h.) Junior assistants (apprenticeship teachers) have been appointed for the first time this year. This is the first effort that has been made to train teachers for our own high schools. These apprentices are given work under heads of departments and are carefully supervised not only by them but by the department of practice and training. The apprenticeship is of two years' duration at a nominal salary and the result should be a superior quality of teacher.

(i.) Military drill is now receiving critical attention. The advisory committee on military drill, consisting of recognized experts, has submitted a report calling for radical revision and an increased amount of attention to hygiene and sanitation, to the physical development of the individual, and to field and wood craft, with a corresponding reduction of close drill. As far as possible their recommendations will be complied with.

The overcrowding of our high schools has now reached a serious crisis. Our membership is now 17,800, an increase of nearly 5,000 in five years, for which only two new high schools have been provided up to date, with a capacity less than 3,000. We therefore have nearly 2,000 children who are not satisfactorily housed. The number to a class has been increased from 27 five years ago to 31 at present. This, as an average for all the city, is as high as is tolerable, and further provision will have to be made either by the erection of new high schools or by associating the first year of high school with the seventh and eighth grades elementary, as suggested under the following topic.

5. INTERMEDIATE SCHOOLS.

In twenty districts, classes have been organized in foreign language in the seventh and eighth grades. In many of these, modifications have been made in the English and mathematics. Councils of teachers from high and elementary schools have been appointed to develop high school preparatory courses in foreign language, English, mathematics and elementary science, covering the seventh and eighth grades elementary and the first year of high school. Students are permitted to choose at the end of the sixth grade between the high school preparatory course and the conventional common branch course. The majority choose the former. Provision has been made to recognize with high school credit the work done in foreign language, and is under consideration for other subjects. The students in the intermediate classes have been subjected to the same tests in common branches as the other children and have invariably made excellent records, showing that they are losing nothing of the essentials.

The principals of the elementary schools and also of the high schools testify that the spirit, ambition, working ability and general proficiency of the children who have gone through the intermediate classes are distinctly noticeable and commendable. By adding to the new buildings to be constructed in elementary districts, the children in these districts may be redistributed so that in many cases a distinct intermediate department consisting of the present seventh and eighth grades and first year high school can be organized. In one year we should be able to provide for one thousand first year students in this manner, giving them the same course as in the high schools, at much greater convenience to themselves and with much less expense to the city.

6. PREVOCATIONAL CENTERS.

In eight parts of the city, centers have been established for children over twelve years of age who have motor rather than scholastic tendencies. These are in addition to the original classes which existed in several districts as a specialized form of manual training. At these centers a considerable variety of industrial equipment is provided to interest the children in discovering their special aptitudes, whether in wood, iron, sheet metal, bookbinding, electrical wiring, and so on. In

two years of varied pre-industrial work of this character, especially if the child is taken through a considerable range of activities, he should be able to discover what specific calling he should prepare for.

The academic work is closely associated with the industrial work and a course for teachers in academic branches is to be provided to train them for this form of teaching, which is highly specialized. Another center in the heart of the city, preferably at the old Brimmer School, is greatly needed with a wider range of activities than we have been able to place in any of the centers up to date.

Classes of a prevocational type for girls have likewise been established in nineteen districts. These, however, give the student but two hours a week of specialized work in sewing or cookery or general household arts, while the work for boys gives two hours per day. It is possible that if the intermediate schools are developed they will provide for four classes of students: the high school preparatory, including foreign language; the business or commercial course, including more attention to the common branches, and the prevocational or pre-industrial courses for boys and girls.

On the other hand, in many districts there will be but few of the latter two classes and it will be likely that the centers that have been established will be needed for a long time.

7. ELEMENTARY SCHOOLS.

In addition to the revision of the elementary school course and the development of the intermediate and prevocational plans in the upper grades, attention should be called to the development of:

(a.) *The Work with Special Classes.*—The first special class for mentally defective children was formed in the City of Boston in 1888. In 1911 there were eleven such classes. At that time the present supervisor was appointed. There are now fifty-five special classes, of about fifteen pupils each. Two centers have been established for the older pupils, one for boys at the George T. Angell School, now occupying all but two rooms in this building, and one for girls at the Rutland Street School, occupying the entire building. When the special class has done all it can for these children they are brought from all over the city to these centers.

In these schools a great variety of pre-industrial work is

given, intended to equip these children to go out at the age of sixteen and become self-supporting. It will be necessary, however, for a follow-up teacher to be appointed to look after them for a period of years, for while they may be given the power of self-support the power of self-control will come slowly. Through the invaluable assistance of Dr. Walter E. Fernald, of Waverley, a course of training has been given to our special class teachers, and they are placing the work for these children on as high a plane as can be found in any city.

It is intended to establish at once two classes for institutional cases in the heart of the city. It is impossible to get these children into our overcrowded state institutions and they must be separated from normal children.

(b.) *The Work with Physical Defectives.*—In addition to the school for the deaf and the fifteen open-air classes for anemic children, we have established (1) four centers for children with defective speech, including twenty-eight groups and 375 children from twenty districts. By the end of this year we hope to have remedied stammering and other speech defects in at least 600 cases, and to have established two more centers for the treatment of the many children who are now upon the waiting list; (2) two classes for defective vision of those who are not institutional cases. These are provided with expert teachers trained in Perkins Institute and with an equipment especially designed for treating children who have some vision though extremely defective. These children have also the attention of a special physician. Another center is needed; (3) tubercular children at the Mattapan Hospital are provided with two teachers and open-air equipment by the School Committee.

(c.) *The Kindergarten.*—Perhaps no department has made greater progress than has the kindergarten department in the last few years. A course for the training of teachers for both kindergarten and primary has been provided at the Normal School which, it is hoped, will eventually break down the abruptness of change from one department to the other. Many kindergarten teachers have assisted in the primary instruction in the afternoons, thus carrying the spirit of the kindergarten over into the primary. The attendance in the kindergartens has greatly increased this year. The number of home visits has increased from 18,000 to 23,000 this year, and more than 600 mothers' meetings have been held. This

shows what a bond of union the kindergarten is becoming, not only between the home and the school but in the school itself.

8. INDUSTRIAL EDUCATION.

The many phases of industrial education have been united and organized under Assistant Superintendent Thompson. All state-aided work is under his supervision. This amounted in the past year to something more than \$55,000.

(a.) The Boston Industrial School for Boys has outgrown its old quarters and will probably go into its new building in Roxbury next September. We hope then to be able to accommodate from 400 to 600 boys and give them a choice among eleven different trades. The building when equipped will cost about \$350,000 and will be one of the greatest trade schools in the country.

(b.) The Trade School for Girls on Massachusetts avenue was enlarged by one building last year but the number of students, about 700, already exceeds its capacity. One colony of this school has been established in the North End, bringing the opportunity almost to the homes of the children. It is hoped we may provide at once for additional colonies in other parts of the city in which preparatory work may be done and from which the student may pass to the main school for finishing for the trade. It is also highly desirable that a colony be formed in the neighborhood of the appropriate industries for the training of power-machine operators.

(c.) A coöperative plan by which children receive their industrial training in actual industries is in operation in the Dorchester and Hyde Park High Schools. By slight modifications these may also become state-aided schools. The two plans, coöperative and distinctly trade school, are supplementary to each other. They are not in conflict. Each plan should be preserved and developed. The coöperative plan lends itself best in those districts which are in the near vicinity of great industrial plants, while the trade schools provide for a multitude of opportunities where coöperation could hardly be arranged.

(d.) *Evening Industrial Work.*—The industrial work in the evening schools has been divided, and the distinctly trade part which goes properly with the two industrial schools has been made an integral part of their work with the same teachers and equipment. The other industrial state-aided work, con-

sisting of household arts courses, painting and design, and so on, is still associated with the evening schools. The work is arranged in short unit courses.

(e.) The conversion of the Mechanic Arts High School into an industrial school not for the trades, but for the distributive side of industry, is only in the second year of its new course and it is too early to predict just what position it will take in fitting into industrial conditions. It is a matter of great importance in industrial education especially that we should keep clearly in mind the opportunities in different industries. This requires thoroughgoing surveys of industrial needs which are kept up to date. Such knowledge is necessary if vocational guidance is to be given intelligently.

9. VOCATIONAL GUIDANCE.

The department of vocational guidance has been organized with an acting director and two special assistants. In addition, counselors without pay have been continued in each elementary district, and vocational guidance instructors have been appointed in the Industrial School for Boys and the Mechanic Arts High School. These instructors have long existed in the High School of Practical Arts and the Trade School for Girls and have demonstrated their value. The High School of Commerce and some other high schools also have vocational advisors that are giving part of their time to such duties. In each evening school there is also a vocational advisor who communicates directly with the department of vocational guidance.

In the elementary schools vocational counsel plays its chief part in assisting parents and children to select intelligently the course of study. As the intermediate plan develops in the seventh and eighth grades it becomes necessary for children to choose among the two to four courses, and as the children leave the elementary school it becomes necessary for them to choose their secondary school intelligently. As our secondary schools are highly specialized this becomes a matter of grave importance.

As we do not have many who drop out below high school age the matter of finding work for children below the high school is a very minor duty, but as children become fifteen or sixteen years of age a great many of them drop out. We have about 4,000 children between fourteen and sixteen who go to

work. It therefore becomes a very important part of vocational counsel in the high schools to see that the children receive that advice which will keep them in school until they are properly prepared or, if they must go to work, receive such counsel as will direct them into the channels which will be most suitable and profitable for them. The special assistants of the department are assigned to the high schools to look after this large group.

The department is developing along all three functions: first, advising children with regard to school opportunities; second, ascertaining the opportunities for work in the city and advising the children concerning them; third, placing children in positions and following them up to see that they are properly adjusted, in conjunction with the Continuation School.

10. CONTINUATION SCHOOL.

Our Compulsory Continuation School was organized in October one year ago. All children who go to work between the ages of fourteen and sixteen must attend this school four hours a week. The course that is given is either prevocational in character or is closely related to the occupation of the child. When the child is in a position that is in line with his future life occupation, all the energies of the school are bent on training him to make the most of his opportunities where he is. When, however, the child is in an occupation that offers no future for him, he is given a prevocational course in order that he may discover himself and his work.

This school is passing out of the experimental stage into an assured position of importance in the school system. It has been thoroughly investigated by three distinct committees: the investigating committee appointed by the Finance Commission, the investigating committee appointed by the Chamber of Commerce, and the advisory committee on industrial education. All these committees have reported favorably upon the school and have given it the stamp of their high approval.

About 4,000 children are in the school, so that it is possible to organize groups of very many kinds. Shop work and class work are closely associated. It is a part of the teacher's duties to keep in close touch with the employer. Teachers are allowed two hours a day for this purpose, so that every teacher in the Continuation School is also a vocational coun-

selor and "follow-up" worker. When children are out of employment they may attend the school six hours a day in order to prepare themselves for other work and the school assists them to find employment, often placing from twelve to twenty children a week, and thus acting as a very important aid to the vocational guidance department.

11. SPECIAL SUBJECTS — MUSIC, ART, MANUAL TRAINING, COOKERY AND SEWING, PHYSICAL TRAINING, MEDICAL INSPECTION.

(a.) *Music*.—An advisory committee of musicians of recognized ability was appointed a year ago. This committee has done a great amount of work and its recommendations have been uniformly followed. The course of study in music has been very greatly simplified and in the three primary grades has been reduced to its lowest term. Fifty rote songs have been provided for the primary schools with a very small amount of instruction on notation in the last half of the third grade. Selections from the text-books have been made for Grades IV. to VIII. preliminary to the preparation of an exact course of instruction which is nearing completion for Grades IV. to VI.

An evening chorus of about 200 has been organized as the Boston Choral Society under the leadership of the acting director of the department, for pupils of evening schools, evening centers and citizens in general. This promises to develop into two societies — one for advanced work.

Twenty violin classes have been organized in elementary schools, one assistant instructor being assigned solely to orchestra and violin classes. At the general rehearsal of these classes last May there were 300 young violin players.

A plan has just been put into operation to give credit in the high schools for outside study in applied music, two diploma points a year being allowed students who comply with the conditions. The Normal School course in music is being brought into harmony with the new order of instruction so that future teachers will have a clear understanding of it. Numerous teachers' meetings are being conducted by the special staff in different parts of the city.

A united effort is being made to reconstruct the course in music from bottom to top in harmony with the suggestions of the advisory committee.

(b.) *Art*.—An advisory committee on art was appointed about a year ago. This committee is making a detailed study of art in the elementary schools but has not at this time reported. It is believed, however, that in harmony with the revision of courses in all the other subjects their report will strongly favor simplification and revitalization of the fundamental principles of art teaching.

The art school of the Museum of Fine Arts has coöperated with the high schools in giving a course in vocational art to selected high school students, the high schools accrediting such work to the extent of five diploma points a year, making it equivalent to any other study. The plan is to select from the 6,000 eighth grade children who pass to high schools the twenty or more children who appear to be highly gifted in art. The selection is made by the staff of teachers in the art department who have taught and observed these children for many years. These children are recommended to the art school and if they are not able to pay the tuition of \$25 a year, scholarships are provided through friends of the art school. Forty scholarships have been provided this year and the course is now in its second year. The advisory committee on art and many others have visited and inspected the work and have pronounced it truly remarkable. It seems to me of great importance to the future of art in this city, and not only of art but of all artistic production, that this experimental school should have as favorable conditions as possible for development.

(c.) *Manual Training*.—The manual training department in our schools is placing less stress upon sloyd and giving a much larger percentage of time to practical work of a larger character and to handicraft of wider variety than formerly. In the eighth grade about 25 per cent of the work of the boys is done for the Schoolhouse Department or on projects that have school use. Also small printing presses are introduced and sheet metal, cement work and many other activities in different shops. Many of these shops are now open at eight o'clock in the morning, thus affording an opportunity for three classes a day instead of two, as formerly. This leads to an economy of shops, two shops doing the work formerly done by three. It also enables us to secure men who are equipped for practical work, without additional cost to the city. In the high schools conventionalized manual training is being supplanted by strictly industrial courses which, it is hoped, will eventually become coöperative in plan.

(d.) *Cookery and Sewing*.—The tendency in this department is also strongly toward the useful. In nineteen schools classes of a prevocational type for girls have been established, giving them specialized courses in sewing with machines, in cooking as for a household, and in general household arts. The plan of giving school credit for home duties performed by the students is being encouraged. Cookery courses are in process of development in several of the general high schools. All the work in high and elementary schools, including the High School of Practical Arts, has been organized this year under the director of this department, so that unity and harmony may confidently be expected in the development of the work in household science and arts.

(e.) *Physical Training*.—With the loss of our highly esteemed director of the department of school hygiene, who was called to a state position of importance, the department has been divided for the present into two parts, physical training and medical inspection. The physical training part includes military drill for boys in high school, gymnasium work for girls in high school, athletics in high school, elementary games and gymnastics and playgrounds.

The subjects now receiving closest attention are military drill, as described elsewhere, and the development of athletic contests, so that every individual in the schools will be stimulated to reach certain physical standards in different grades. This is a very important addition to the former athletics and games and is in accord with the policy that is being put into effect in the fundamental branches such as writing, arithmetic and spelling. A minimum standard of attainment is being set up and each child is to be tested at stated intervals, and if he falls below the standard, suitable remedies are to be provided and his case is to receive special consideration.

(f.) *Medical Inspection*.—By arrangement with the Mayor and the Health Department, the medical inspection so long and ably conducted by the city department has been discontinued. The School Committee has appointed a director of medical inspection and has chosen forty school physicians from the civil service list. This brings the whole department of hygiene and sanitation under school control. The plan has just gone into operation, but the value is already in evidence in the very helpful reports that are made by the school physicians upon

conditions of housing and sanitation that need remedying. The work of the forty nurses is also under the control of the director, so that there will no longer be overlapping of duties of nurses and physicians. This may rightfully be considered one of the important progressive movements of the year.

12. EVENING SCHOOLS.

The evening schools this year have fallen off about 10 per cent in membership though but little in attendance. The decrease is due to the lack of immigration. Our laws require the attendance of illiterate minors until twenty-one years of age and with the cessation of immigration we have had but few new entries of foreigners compared to the number who are passing the age of twenty-one. We are feeling as never before, however, the importance of thoroughly Americanizing our foreign population, not only by instruction in the English language but by careful instruction in the duties of citizenship and the character of American life and ideals. It will be our own fault if these people do not make good American citizens, for they come here with the best intentions and with full belief in this country.

Classes in citizenship have been organized in all of our evening schools in conjunction with our course for foreigners, to give specific training for those who take out naturalization papers and to bring strong influence to bear on all to do this. It is hoped that these classes for foreigners may be continued through a much greater period each year, and it would be well for one school to continue all the year.

A course has just been established for training teachers of evening classes for foreigners, recognizing that the teaching of adult foreigners is a very difficult and distinct problem. The course is to consist not only of lectures and studies but actual observation, practice and criticism in teaching adult foreigners. Those who take this course will be given preference in appointment and it is expected that we shall rapidly build up a highly efficient staff of evening teachers. The schools for adult foreign women are found to meet with better success in afternoons than in evenings. It has also been found necessary to have some classes for men in afternoons. These classes are grouped as a part of the continuation schools instead of evening schools, but both are under the same department.

13. EVENING CENTERS.

The evening or community center work has now developed to such proportions that I have asked the director to make an extended report upon the principles which are governing the development and upon the progress that is being made in this department. This report will be found in Appendix C, page 128.

There are now seven well developed centers with an attendance upon clubs totaling nearly 100,000 and a total attendance upon all exercises of more than 200,000 per year. As the centers are in operation about 100 nights a year it can be seen that the attendance would average 2,000 a night. Special attention is also called to the fact that the principle of self-support and self-development is being more and more clearly recognized.

14. SUMMER REVIEW SCHOOLS.

The summer review schools, which were organized two years ago, had an attendance last summer of 5,469 in the elementary and 515 in the high school. Of these, 3,751 (68 per cent) in the elementary and 389 (75 per cent) in the high school made up their deficiencies and were admitted to the next higher grade. The reports from those who were promoted show that somewhat more than 70 per cent of them are sustaining themselves in the higher grade.

The summer schools are in session forty days and take only pupils who have failed in not more than two subjects. The work done in these schools is of a very superior character as the teachers are carefully selected from the same grades of the day schools which they are to teach in the summer schools. The groups are much smaller than in the regular schools so that very much more individual attention can be given. There will always be captious critics of this and all other plans to help along the backward child and give additional time to the slow child. It is natural that the teacher higher up should feel that only highly able and thoroughly proficient children should be promoted. There is no intention on the part of summer schools to promote those who are evidently incompetent. This is shown by the weeding-out process of the summer schools; of the 5,469 taking the course only 3,751 were promoted. But the summer schools are conducted upon the belief that children who have partly failed should have special considera-

tion and special assistance and then if there is a fighting chance for the child in the higher grade he should be given that chance. The teachers of our summer schools are the same teachers as of our day schools, and if after forty days of careful study it is their opinion that a child is entitled to promotion, the promotion follows and the percentage of our failures, which was formerly 11 per cent on the average for a series of years of all our children in the elementary schools, is now considerably reduced.

15. RAPID ADVANCEMENT CLASSES.

Corresponding to the attention that is given to slower children, ten classes have been formed for children who may move more rapidly than the average. These children do three years' work in two years, thus saving themselves one year of the course and the schools one year of expense. These children have been followed up in the high schools and almost without exception have been found to sustain themselves well, a large number of them being honor pupils. The rapid advancement plan will receive strong impetus if the intermediate plan, already mentioned, is carried out to include the first year of high school. In large districts it will not be difficult to select a class that will readily complete in two years a sufficient amount of the first year of high school to enter the second year, and, by carrying an additional course, easily graduate in three years, thus saving one year after entering the seventh grade or the first year of the intermediate department.

16. DISCIPLINARY DAY SCHOOL.

Last year the Parental School, which was costing the city more than \$50,000 a year, was abandoned and the children were distributed among our public schools. As the need arose, a disciplinary day school has been formed in the Quincy District. In this school are assembled those truant and incorrigible children that the school principal finds not amenable to ordinary school discipline. At the present writing there are only seventeen in this school, under one teacher. Many of these are given special industrial work in the Quincy prevocational center. A letter was recently sent to all principals asking whether they had any children who should be assigned to this class. The replies from all seventy districts showed that there were only fourteen cases which the principals believed should

be investigated with a view to segregation. It is true that our diversified opportunities in prevocational work have helped materially in solving the question of truancy and incorrigibility and the showing that Boston is making in regard to truancy is very favorable.

We should not be sanguine, however, that we can get on without some way of detaining the few children who are distinctly incorrigible or truant. Our present school offers no opportunity for detention — it is simply a day school. The influence of a detention department where children could be kept temporarily until formative and reformatory influences are well under way will have to be developed before we have a satisfactory arrangement. There will never be many of these children but there will always be some. The salutary influence of a small detention department which need not accommodate more than twenty, and to which children could be sent without the formality of court procedure, would put the teeth into compulsory education and give renewed courage to every attendance officer in this city. It is our intention and strong desire to enforce rigidly the school attendance laws. We believe they are enforced as never before. All children are kept track of until they are sixteen years of age and are required to be in school part time. All cases of truancy are investigated and followed up zealously, but when persuasion fails we lack the one factor of detention in order to secure the enforcement of the law.

THE WORK OF THE ASSISTANT SUPERINTENDENTS.

In developing so many school activities it is essential that there should be a division of duties on the part of the executives. In addition, therefore, to their duties as a board of superintendents with important functions, special duties have been assigned to the different assistant superintendents for their study and advice. The remarkable development recently in so many activities is due to the energy and intelligence which the assistant superintendents have exercised in their particular assignments. For example, the efficiency of the summer schools and the great progress that is being made in penmanship are due to Assistant Superintendent Rafter; the remarkable development of the intermediate plan and the gradual transition from elementary to high school, to Assistant Superintendent Burke; the progress of the work with defective children, to

Assistant Superintendent Parker; the development of all forms of industrial education, to Assistant Superintendent Thompson; the revision of the course of study in the primary grades and the improvement of reading in elementary schools, to Assistant Superintendent Ripley.

In the last annual report their individual reports were published. In the next annual report we hope to be able to publish their individual reports again, thus giving them sufficient time to show the material progress made in their respective departments by comparison with their first reports. An exception is made in the case of the intermediate plan. This plan has made so much progress in the past year and is of such immediate importance that Assistant Superintendent Burke has, at my request, given a full treatment of the subject which will be found in Appendix B, on page 119. From the point of view of the superintendent these specialized activities on the part of the assistant superintendents constitute the most important and progressive change in the local school administration.

Among the many things of value accomplished by the board of superintendents, the following should have special attention :

AN IMPORTANT STEP IN THE TRAINING OF SECONDARY TEACHERS.

Early in 1914 a movement was begun to bring about a fuller coöperation between institutions of higher education and the Boston school system for the training of teachers of secondary schools. The first formal step that was taken in this direction was that of the Head Masters' Association at its meeting on May 19, 1914, when a resolution was adopted requesting the board of superintendents to consider the granting of temporary certificates for service in high schools to graduates of colleges who might present satisfactory evidence of high scholarship or successful completion of an approved course in pedagogy. Accompanying this resolution was a tentative plan to carry it into effect. With slight modifications this plan was approved by the board of superintendents and adopted by the School Committee on April 5, 1915. The plan as finally adopted is as follows:

PLAN FOR TRAINING YOUNG COLLEGE GRADUATES FOR SERVICE IN BOSTON HIGH SCHOOLS.

Graduates of colleges and universities who have pursued, subsequent to graduation, a year's course in secondary education approved by the

board of superintendents, and holders of the Elementary School, Special Certificate (Certificate IX.) may be granted a temporary certificate qualifying them to serve for one year in the high schools of Boston; the salary for this year of service to be \$80±.

These temporary teachers shall be subject to inspection by the board of superintendents, the head masters and the heads of departments of the high schools to which they are assigned, and shall be under the supervision of the department of practice and training.

After a year of service, these temporary teachers may be granted, on the recommendation of the department of practice and training and subject to the approval of the board of superintendents, a supplementary certificate entitling them to an additional year of service in the high schools of the city; the compensation for this year of service to be \$900.

At the end of these two years of service, these temporary teachers, on the recommendation of the department of practice and training and subject to the approval of the board of superintendents, may become eligible for a regular high school certificate. The certificate examination of these candidates shall differ from that now required for a regular high school certificate, in that greater emphasis shall be placed on practical class room experience.

The board of superintendents also adopted the following as a basis for the selection of candidates:

BASIS FOR SELECTION OF CANDIDATES.

I. A candidate shall have a personal interview with members of the board of superintendents.

II. A candidate shall submit a transcript of his record in all the subjects pursued during his college course.

III. A candidate who has taught shall submit evidence of success in teaching; and all candidates shall submit a report from their instructors in the Boston Normal School, or in the approved graduate courses, embodying an estimate of their qualifications to teach in secondary schools.

IV. A candidate shall be examined in *one major subject* to be selected by him from the following list:

1. English and American literature.
2. Latin language and literature.
3. French language and literature.
4. German language and literature.
5. Spanish language and literature.
6. Trigonometry and analytics.
7. Physics.
8. Chemistry.
9. Biology.
10. Economics.

V. A candidate will also be examined in a *minor subject*, namely, composition and rhetoric.

In accordance with the plan adopted, the first examinations of candidates were given in June, 1915, and succeeding exam-

inations will be given in the month of June in order that those who pass may become eligible to begin service in the Boston high schools at the beginning of the term in September following the completion of their course in secondary education in college. There were twenty-six candidates who passed the first examination and twelve of these have been appointed to the rank of junior assistant in day Latin and high schools. Of the latter number three were holders of the Elementary School Certificate IX., Special, and were already teachers in our elementary schools.

In the perfection of the plan resulting in the granting of temporary certificates to college graduates for probationary service in Boston schools, the head masters, the board of superintendents and the superintendent were ably assisted by Professors Holmes and Inglis of Harvard University and by Professor Norton of Wellesley College. Both the city and college authorities are entirely in accord with the arrangement that has been made, and the brief experience with junior assistants in high schools, since the opening of the current term, gives promise of the successful operation of this newest coöperative endeavor to train our own regular high school teachers of the future from a selected group who have had adequate training in educational theory. Hitherto even the most promising graduates of courses of education in colleges and universities have been forced, under our rules, to obtain their probationary experience in schools of other towns and cities before they became eligible for the Boston examinations. The general examinations for high school certificates are to be continued in January of each year, but the extension of the opportunity to enter high school work, with the special view of encouraging the completion of a course in education as a more direct avenue to high school teaching, should ultimately result in a marked improvement in the quality of instruction given in the schools.

PART TWO.—AN ACCOUNT OF THE WORK IN THE DIFFERENT DEPARTMENTS IN OUR SCHOOL SYSTEM.

We have fifteen departments in charge of directors or supervisors, such as the department of practice and training; department of special classes; department of kindergartens; department of salesmanship; department of household arts, and so on. It is the purpose of this part of the annual report to give a brief account of the work of these departments and the lines of development in each department which are receiving special consideration.

DEPARTMENT OF SCHOOL HYGIENE.

The most radical change of the year in administrative organization has occurred in the supervision of instruction in health, physical training, military drill, playgrounds and athletics. From February 20, 1908, to September 20, 1915, the work in these four branches was carried on as one department under the supervision of Dr. Thomas F. Harrington, director of school hygiene. Prior to 1908 there had been a director of physical training and athletics but no central control of other health matters except by the superintendent.

When the position of director of school hygiene was established all of the health work conducted by the School Committee in the schools was correlated. The director was given general supervision and control of all matters affecting the physical welfare of pupils and teachers; all medical inspection, except that under the control of the Board of Health, his supervision having special reference to open-air classes and classes for defectives; all school nursing; all physical training, military drill, athletics, sports, games and play engaged in by the pupils or conducted in buildings, yards and grounds under the control of the School Committee, or in any other buildings, yards and grounds that it might have the right to use for such purposes. Under the able direction of Doctor Harrington the work grew to large proportions and continued under a central

head assisted by an assistant director of athletics, an assistant director of physical training, a supervising nurse, a medical inspector and their subordinates.

The change that was made in September, 1915, was the result of two events. First, the promotion of Doctor Harrington from his position in the city schools to the direction of that part of the health work of the state that is under the State Board of Labor and Industries. Second, the transfer of the responsibility for the appointment and control of the school physicians from the Board of Health to the School Committee.

The latter step brought all of the health work in the schools under the School Committee and made it seem wise to the committee to divide the work of the department of school hygiene. No successor to Doctor Harrington has been chosen, but instead the position of director of medical inspection has been created and Dr. William H. Devine has been appointed to that rank for service on part time.

The position of assistant director of physical training has been abolished and the work formerly carried on by the department of school hygiene has been reassigned along the following lines:

(1.) *Director of Medical Inspection.*— Supervision of the work of the school physicians, school nursing and the general supervision and control of all matters affecting the physical welfare of pupils and teachers.

(2.) *Assistant Director of Athletics.*— Athletics, physical training, playgrounds and military drill.

(3.) *Medical Inspector.*— Examination of children for admission and discharge from open-air classes and classes for defectives. Health matters pertaining to these classes are also under the general supervision of the director of medical inspection.

A civil service examination has been held and forty school physicians have been appointed from the certified list of successful candidates. The most important work that will devolve upon the new director of medical inspection during the current school year will consist in the organization, on an efficient basis, and the supervision of the work of the school physician. The division of the work of the department of school hygiene has not resulted in conspicuous changes in other respects. Some modifications of the courses in physical training are contemplated to bring them more into accord with the possibilities of the development of the subject in the schools, and the rules for

high school athletics have already undergone preliminary stages of modification.

The reorganization that has taken place has resulted in a reduction of overhead charges through the elimination of one salary and the establishment of the salary of the new director of medical inspection on a much lower basis than that which was paid to the director of school hygiene.

DEPARTMENT OF EDUCATIONAL INVESTIGATION AND MEASUREMENT.

No more significant change has come over school administration in recent years than in the method of attacking the problems of education. School administrators and teachers are developing a scientific attitude toward almost every phase of educational activity. Departments of educational investigation and measurement are now becoming common. Teachers instead of defending their methods and results as beyond criticism are learning to examine the results critically and dispassionately; to diagnose the causes as the physician does; to set up standards of reasonable attainment, and in general to attack the problems of education in the scientific spirit.

We are coming to recognize that many of the things we thought we knew we did not know at all. Two years ago the School Committee introduced a department of educational investigation and measurement and assigned for immediate study and report: (1) the testing of results in different branches and the establishment of standards of achievement on the part of children and teachers that would form definite ideals of accomplishment in different subjects and grades. Very considerable progress has been made in this work, especially in arithmetic, spelling, writing and geography; (2) the revision of the elementary course in the light of these scientific studies. This revision is well under way and by the close of the school year will extend through the first six grades. In Grades VII. and VIII. the problem is somewhat more difficult because in many schools (at present twenty) parallel courses are being offered in the seventh and eighth grades. These consist of a high school preparatory course including foreign language, mathematics, English and elementary science, and a course in the common branches which will probably be modified into a preparation for the commercial and business courses of high schools. In several districts a third course, pre-industrial or

prevocational in its character, is being developed. As the course must be introduced gradually and with mature consideration, it is not expedient to crystallize them into permanent form at this time, but numerous committees and councils of high and elementary teachers are at work upon them; (3) the development of a plan of promotion of teachers upon merit. To carry the plan of appointing teachers upon merit to its logical sequence it is necessary to have a system that will enable the superintendent to make promotions upon merit, such merit to be placed upon as nearly a fact basis as possible. There are so many ranks of teachers in the service and so many who are qualified, as far as certificate is concerned, for the higher positions, that to do this is a most difficult and delicate task. It requires much visitation of candidates and an accumulation of a great number of facts concerning the qualifications. The last twenty-eight promotions that have been made have been with the assistance of this department and it is the expectation to utilize its assistance hereafter.

In the report last year it was stated that the director would be called upon to give a comprehensive account of the work of the departments in the next annual report. He has done this and it will be found on page 84 of the Appendix. Special attention is called to this report as it is the first complete publication of the work of the department and contains many matters of importance.

Music.

In pursuance of a belief in the advisability of a readjustment of the course in music and the teaching of this subject in both the elementary and high schools, the School Committee on September 14, 1914, appointed an advisory committee on music composed of some of the best known music authorities outside the service. The persons appointed to this committee were Dr. Archibald T. Davison of the Music Department of Harvard College, who has served as chairman; Thomas W. Surette; Daniel Bloomfield of the Boston Music School Settlement; Mabel W. Daniels and Percy L. Atherton.

In October the membership of the committee was increased by the appointment of John P. Marshall, the organist of the Boston Symphony Orchestra and professor of music in Boston University. This committee was given the fullest opportunity to study the teaching of music as then conducted in the schools, and at the meeting of the School Committee, May 3,

1915, it submitted an extended written report on the conditions as it found them, accompanied by numerous recommendations of changes that were put into effect at once by order of the School Committee.

The changes effected through the initiative of the advisory committee and by order of the School Committee were as follows:

1. Beginning in September, 1915, the use of music books or readers in all grades was discontinued. This action was later modified so that songs included in the authorized text-books and printed in a temporary list, selected by the advisory committee, were allowed to be used. In presenting this temporary list for approval the advisory committee explained that its purpose was twofold. First, to insure the use of music which appears to be particularly adaptable to the needs of children, and second, to eliminate songs of musical inferiority. The advisory committee explained that neither the popularity nor the plausibility of material had been considered, musical worth alone being the criterion and the selection being made solely with the aim to improve the quality of music in the schools.

2. Beginning in September, 1915, singing exercises other than rote singing were discontinued in Grades I. and II. and it was recommended that only such technical instruction be given in Grade III. as might be prescribed in a special syllabus.

3. It was ordered that no further music books except such material as should thereafter be furnished by the School Committee be used in the first three grades, and the advisory committee was asked to prepare and submit what it deemed a sufficient number of songs for children in each of the first three grades with an accompanying syllabus of instruction to teachers. A collection of songs under the title of "Fifty Songs for Rote Singing" has been supplied. This book is to be revised and enlarged.

4. The advisory committee on music was requested to prepare by September, 1915, a course of instruction for the Normal School with a view to establishing a basis for the administration of the new plan for instruction in music. This course of instruction has been provided.

5. It was voted on recommendation of the advisory committee that when a grade teacher shall be found to be inefficient in his or her teaching of music, the principal shall, where

possible, assign the instruction in music to some other teacher provided that no additional or floating teacher shall be assigned for music.

6. It was voted that the superintendent be requested to assign the head of the department of music to give instruction in music to the graduating class of the Normal School.

7. The board of superintendents was requested to secure the coöperation of the advisory committee in the preparation and conduct of the examinations for certificates qualifying for service as assistant director and assistant in music. This coöperation will be given in connection with the examination of candidates in 1916. The advisory committee has already rendered valuable service in connection with the selection of a temporary teacher of music in the Latin and high schools to serve in place of Assistant Director John A. O'Shea, who has been the acting director of music since the beginning of school in September last.

8. It was ordered that choral practice be required in the high schools in the first year as then carried on, and that the assistant directors of music in the high schools be relieved as rapidly as possible by regular teachers in the high schools, to the end that as soon as practicable the entire instruction in the high schools in choral practice be conducted by the regular teachers. Progress along this line at present, however, is made difficult by the fact that there are few teachers in high schools who have specialized in music sufficiently to make it possible for them to take over all of the teaching of this branch of the work.

9. It was ordered that the advisory committee be requested to submit to the superintendent courses in musical appreciation for the high schools. These courses have not yet been presented but it is understood that they are in preparation.

10. It was ordered that the advisory committee be requested to continue to visit the schools and to give to the School Committee the benefit of its advice, and the superintendent was directed to arrange for a series of conferences between the advisory committee and the music department. These visits have been continued and through conferences and otherwise the advisory committee and the music department have been kept in constant touch with each other.

11. It was ordered that such assistance as might be deemed reasonably necessary to the advisory committee in the prepa-

ration of new material, including clerical work, be granted the committee at its request. The facilities of the superintendent's office have been put at the disposal of the committee for this purpose and clerical assistance has been furnished whenever requested.

12. It was ordered that choral training be offered to evening school pupils one evening a week at a suitable center. The advisory committee has recently presented its plan for carrying out this order.

13. It was ordered that the system of music to be instituted in the schools should without exception apply to all schools where music is taught.

In its extended report on the music as taught in the schools the advisory committee pointed out what it considered a lack of system that hampered instruction. The committee called attention to the fact that in different parts of the city different music courses were being taught and suggested the desirability of a uniform text-book. It stated that the competition represented by the music books of the different systems in use was to a considerable extent commercial or at best a pedagogical competition and that it did not represent a healthy striving to clear the way toward a simple, normal and true system of musical education.

The advisory committee contributed an interesting discussion of the quality of music most appropriate for school use which is somewhat too lengthy for inclusion in this report but may be found on page 63 of the minutes of the School Committee for May 3, 1915.

In regard to the method of teaching school music, the advisory committee reported that rhythm, the fundamental element in music, was being neglected in the Boston schools. This deficiency was explained as partly due to the lack of beat on the part of the teachers and pupils and partly to the pedagogical method of teaching rhythms as separate from measures — *i. e.*, using so-called rhythmic "types," "type I." for a quarter note, "type II." for two eighth notes, without placing the notes in measures and supplying them with the accents which result therefrom. The advisory committee found that in schools where the teaching of types had been discontinued an equally confusing and evasive system of "one-beat note," "two-beat note," etc., had been substituted. The committee explained that no note is a one-beat note since the number of beats it

contains depends on its relative value to the whole measure. The committee recommended that a whole note, a half-note, a quarter-note, etc., should be so called and that rhythm should always be taught in relation to measure values. It recommended that a firm beat and a firm accent be required and that the children themselves be taught to beat time. Other details connected with the method of teaching were reported upon at length by the advisory committee. The committee expressed its belief that its recommendations, if adopted, would lead to a professional standard in the teaching of singing to the same extent that it has long been applied to the teaching of children in pianoforte, violin playing and other instrumental music. By professional standard it implied the teaching of music as it really is, teaching it by the simplest and most effective methods.

It is not easy to do justice to the extended report of the advisory committee in the brief synopsis permitted in the annual report of the superintendent. It should be said, however, that the recommendations of the advisory committee are being put into practice as consistently and rapidly as possible. At the end of another year the measure of improvement resulting from the efforts of the advisory committee will have an important bearing on the further conduct of music in the schools.

In furtherance of the plans of the advisory committee on music the School Committee voted to allow credit not exceeding two diploma points in any one year to high school pupils who pursue the study of instrumental music outside of school.

DEPARTMENT OF PRACTICE AND TRAINING.

One of the elements of strength of the Boston school system is the work of the department of practice and training. The Normal School students in their senior year are assigned to their practice and are carefully followed up by this department. All substitutes, temporary teachers and special assistants who are at work in the schools are also assigned to their work and frequently visited by the staff in this department. Thus, most of the teachers who enter the service by appointment do so after several years of painstaking supervision by highly competent people.

The work of this department has been increased in the past year; first, by extending the practice work of Normal students from three months to five months; second, by giving the graduate students in the Normal School (the college graduates

who are taking a one-year course in the Normal School preparatory to teaching) an opportunity to practice in high schools and prepare for high school positions, thus extending the work of the department to supervision of practice in high school subjects; third, by establishing the rank of junior assistants, who are placed upon probation as high school teachers for two years prior to being listed for permanent appointment. The success of these probationers is to be estimated by this department and to be taken into consideration in determining their rank for appointment.

The development of the work in the department has been so remarkable that I have asked the director, Mary C. Mellyn, to epitomize it for this report.

“The training of teachers in the Boston schools is a continuous process from the first days of the practice work through the early years of temporary service until appointment is made from the Merit List. The oversight of young teachers is the work of one department, which forms in itself a unit in school administration.

“The activities of this department are various. First, the assignment, supervision, and certification for pay of all substitutes, special assistants and temporary teachers in the Boston schools; secondly, the assignment and supervision of all practice work of Normal School observers in elementary and high schools; and thirdly, the assignment and supervision of junior assistants in the high schools.

“In 1912 the department of substitute service took over the practice work of the Normal School, and the department of practice and training was organized. All graduates of the Boston Normal School entering permanent service in this city are, therefore, under the supervision of one group of directors from the beginning of their practice work, through the period of temporary service which every graduate must give until she becomes a regular teacher by appointment from the Merit List.

“The practice work which precedes graduation consists of three months' organized observation and practice in the classes of training teachers throughout the city. During this period the students in training spend four and one-half days each week in the classes of the training teachers and one-half day in the study of the application of Educational Theory to class-room practice with the director in the conference room at Mason street. In this year, a new departure has been undertaken by the lengthening of the practice period for two months — thus making five months in all, or one-half of the senior year.

“The added two months are to be spent in various ways according to individual elections. Students who are graduates of colleges electing high school practice will be sent into the high schools of the city to do specially assigned work with groups of backward pupils, library work or supervised study, in return for which definite and individual contribution, they will be given opportunities to observe and practice in the major subject in which they have been prepared at college, under the supervision of the heads of departments.

"The students who elect grammar school work will be assigned to elementary school principals. Their work will be definite, organized, group work with slow pupils, emergency substitute work for periods not over three days, and the teaching of certain assigned subjects in classes of teachers selected by the principals. The students electing primary work will be assigned to classes of first assistants in charge in primary schools. They will be asked to serve in overflow classes, in groups of backward pupils, in emergency substitute work in primary schools, and in charge of definite subjects in rooms of teachers, selected by the principal. The students in the grammar and primary schools will also take part in the yearly testing of arithmetic which is made in our schools.

"Observation of the work of the student in practice makes it possible for the director to assign her to temporary service for which she is suited, thus making for efficiency in substitute work by reducing to a minimum, chances of failure. The supervision of this work is entirely and immediately constructive. The student is helped by the office staff to interpret and solve her problem, and she is judged by her ability to solve that problem. Each young teacher is rated on her management of the problem before her, after she has been helped by organized constructive criticism from the directors by whom she has been visited.

"Temporary service as a substitute, special assistant or temporary teacher extends over a period of from one to five years. The length of service depends upon two factors, first, the scholarship mark which the Normal School graduate receives in her course, and secondly, the mark which her teaching receives for each year's service. The Normal School scholarship mark depreciates in value each year, and the experience mark rises in its value as an element in the rating of the year's work. The basis of rating is as follows:

	Normal School Scholarship.	Teaching.
First year after graduation	500	500
Second year after graduation	400	600
Third year after graduation	300	700
Fourth year after graduation	200	800
Fifth year after graduation	100	900

"Continued excellence in teaching is the sole basis for appointment, if the scholarship is low. In this way, teaching power existing apart from high scholarship is recognized, but mediocre teaching ability and mediocre scholarship cannot reach the position where appointment is possible — if scholarship is low, excellent teaching power must be shown.

"Another new type of work added this year is that of the junior assistants who are teaching in our high schools. These young teachers are graduates of colleges and also graduates of the Boston Normal School, or college graduates who have taken a specified course in graduate work in education. After examination, they are appointed from the merit list as teachers are needed in the high schools in the belief that this training will make them valuable additions to our high school staff, and this is already

proving a wise procedure. Their probationary service will extend over two years. At the end of this time a special examination will be given them and they will become eligible for appointment as permanent teachers in the high schools.

"The office of the director of practice and training makes about three thousand assignments of special assistants, temporary teachers and substitutes during each school year. Their terms vary from one day to the entire year. The following table shows the assignments for the year from September, 1914, to June, 1915, inclusive:

Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.
465	248	296	200	347	321	450	248	281	201

"The department makes about twenty-two hundred visits each year. More than fifteen hundred visits are made to substitutes and special assistants, and over six hundred are made to observers. Nearly every visit is followed by a conference with the young teacher, so that supervision and training are closely related.

"The department emphasizes the fact that supervision means right guidance of the teacher toward correct educational practice so that the children may always receive the best; that it means the improvement of the teacher through the development of every personal asset that is hers, and the elimination of all that would militate against her success; that it means the constructive criticism of the problem which the teacher is trying to solve; in short, that the aim of a department of supervision is the development of the individual teacher through ideals of life and service.

"This report would be incomplete without a tribute of gratitude to the training teachers and school principals who have coöperated in its work. The professional zeal of our volunteer group of training teachers and their cordial response to the demands made upon them prompt me to ask that their service receive an adequate remuneration. This is the one recommendation which this department wishes to make."

It will be seen from the above succinct statement of Miss Mellyn that in addition to her staff of four assistants there are several hundred teachers in the schools who coöperate as training teachers, doing so without extra compensation. These training teachers have much to do with giving the right attitude to the practice students and assisting them in mastering the innumerable details of a teacher's duties.

This apprenticeship period of the students is of great importance, as their future development into constructive, progressive, devoted and intelligent inspirers of youth, or into perfunctory, cynical wage-earners, will be largely determined in their early years of teaching by the influence of those with whom they are in closest contact.

We certainly appreciate the great responsibilities that rest upon the staff of this department and the whole group of train-

ing teachers and are most grateful to them for their earnest endeavor to set the faces of the young teachers in the right direction.

DEPARTMENT OF VOCATIONAL GUIDANCE.

Attention has been given to vocational guidance in the schools of this city for some years. Elementary districts have had individual counselors and the Trade School for Girls and High School of Practical Arts have had definitely assigned vocational assistants. Three years ago an attempt was made to organize the work and considerable was done in the way of helping the individual counselors. It has been with some difficulty that we have found a director who is able to continue in the position, which is very strenuous. We have in this past year been fortunate in securing the services of Miss Susan J. Ginn as acting director. She brings to the work many years of experience and as much educational preparation as we could hope to secure. She has been given two assistants, one man and one woman, who stimulate and unify the efforts of the counselors in the individual schools, keep in touch with employers, place children who must go to work (in connection with a private organization known as the Placement Bureau) and keep in close touch with high, evening and continuation schools. Heretofore the work has been approached from the theoretical and informational side. At present the work is being organized upon a practical basis. Local meetings of the counselors of elementary and high schools have been planned so that the problems of the particular sections of the city might be discussed. As the number at these meetings is small an opportunity is given each counselor to tell of his work and difficulties. The director and the assistant superintendent in charge, Mr. Thompson, contributed to the discussions and at the general meetings, Mr. Bloomfield, director of the vocation bureau, the father of this movement in the schools, and many others have participated. The problem of vocational guidance in the elementary schools is gradually resolving itself into the choice of the proper high school for the student to attend.

With the development of the "intermediate" plan, in our seventh and eighth grades, whereby children make their choice from courses which lead to academic high schools, commercial high schools and industrial careers, the elementary school

counselors will have work that must be done with great pains and foresight, although an opportunity will be provided for children to change their courses as mistakes are discovered. As the children approach the high school, the problem becomes much more complex since we have so many specialized schools from which to make a choice. It will be seen, therefore, that the elementary counselors must have definite knowledge of the purposes of the different schools and courses and the vocations to which they lead. They must also have insight into the more evident characteristics of children which indicate the lines along which they will develop with most advantage to themselves and to society.

In the high school the problem is one much more distinctly of guidance, placement and follow-up. Two assistants have been assigned to general high schools for this purpose. It will probably be found profitable to enlarge the number as the importance of the work develops. Placement is essential yet it is incidental to guidance and follow-up. The follow-up work is the vital connection between the boy and the home on one hand and the job on the other. Through visits to the home it will be found why the boy fails to make good. Through visits to the employer the aims of the boy will be ascertained and a better understanding between the boy and the one who employs him will be established. Frequently a word of encouragement at the right time has set many a boy upon his feet. The Placement Bureau has been of great aid in the development of the work and in fact has served as a pioneer.

The statistics at the close of the report give the scope and the amount of work accomplished during the six months the assistants have been at work. They do not show, however, the number of young people turned back into the schools although this is one of the leading functions of the counselor. Many who come to the office looking for work have been shown the advantages of further schooling. Others who were willing to leave school, should work present itself, were discouraged from so doing. A few have been taken from work and put back into school and some who persisted in leaving school have returned to ask assistance in getting back.

The work is not at all limited to boys. The girls graduating from the high schools may be divided roughly into two groups, those who are planning to fit themselves for life by further education and those whose school days are over and who hope to

enter some vocation for which their high school work may have fitted them. The vocational counselors are concerned with both groups but more directly with the latter. Those going on with further study have their plans made to a certain extent, and their chief concern lies in securing the means for carrying out these plans. The methods employed by some of these ambitious girls to secure means are very ingenious: caring for babies, assisting in homes where people want to escape house-keeping drudgery, making candy, getting magazine subscriptions and many other means are employed. The girls frequently come to the vocational assistant for ideas and suggestions as to opportunities for part-time work.

The difficulty with the second group of girls is that they are nearly all headed in the same direction — office work. Very good work has been done by the salesmanship classes in turning their attention toward another vocation, but there is still too much stampeding toward overcrowded callings. It is the business of the vocational assistant to present facts and figures about the present demands and in the light of the opportunity that is most promising to advise the girl concerning employment. Some of them who are plainly unfit for office work may succeed admirably in nursing, mechanical work, millinery, tea room work, doctor's or dentist's assistants, or in the greatest occupation of all, home making. Concerning these kinds of work the girl has very little idea nor does she know the best way to gain admission. Thus the assistant has very much to do in explaining the method of procedure and getting the girl started.

The vocational assistants have been warmly received in the high schools to which they are assigned and the head masters have not hesitated in expressing their gratitude for the help given in this direction. The teachers, already overburdened with their school duties, necessarily have not the time nor energy to devote to this specific kind of work. Children are dropping out of high school continually, the greatest number of withdrawals in the whole school system being at about the age of fifteen or sixteen in the lower high school grades. Eventually it will be necessary to have a vocational assistant in connection with each of our large high schools and one for two or three of the smaller schools.

As the vocational assistants come into close touch with the business world they are enabled to bring about a closer and

more pleasant relation with the schools. In the past a great deal of the criticism of employers upon the public schools has been due no doubt to the failure in adjusting the boy to the job. The changing attitude of the employers is now one of the hopeful signs of the new work. They are impressed with the interest and care that is taken to obtain for them the boys who meet their requirements. They say: "We are very glad that you have brought this matter to our attention, and feel that it fills a longfelt want." "We wish to thank you for your kind services in endeavoring to secure somebody who would answer our requirements." "We have had an interview with the candidate that you have sent and have made arrangements to take him. We are impressed with his record as you have given it and trust that he will be a success."

It is thus evident that the work that is to be done in the elementary schools is quite distinct from that which is most necessary in the high schools. For the counselors in the elementary schools a pamphlet is now in preparation which will show the many lines of industry that are open to young people, together with statistics showing which occupations are overcrowded. At present the schools are failing to regulate the supply to the demand of the business world. There are 10,000 different ways of earning a living in the United States. The vocational schools are preparing for but a few. Through the help of the Department of Vocational Guidance will come suggestions as to other courses that should be provided, many of which will probably be short unit courses that will not be of great expense. One of the most important duties confronting this department is to gather such facts about opportunities for employment as will enable us to give much more intelligent advice to students in their choice of courses than we are yet able to give.

VOCATIONAL GUIDANCE STATISTICS, MAY 1, 1915, TO OCTOBER 31, 1915,
INCLUSIVE.

Boys.

1. Number reporting to vocational assistant:	
By mail	49
In person at:	
Office	888
Schools	257
Evening centers	0
Public libraries	0
	— 1,194

2. Number parents visiting vocational assistant		18
3. Number visits by vocational assistant to		
Schools	49	
Parents	41	
Employers	12	
Miscellaneous	11	
	—	113
4. Number employers visiting office		5
5. Placements:		

	Part-time.	Temporary.	Permanent.	Total.
Boston Industrial.....		3	18	21
Brighton High.....		1	4	5
Charlestown High.....			6	6
Dorchester High.....		20	15	35
East Boston High.....		10	19	29
English High.....	2	13	25	40
Hyde Park High.....		2	8	10
High School of Commerce.....		3	25	28
Mechanic Arts High.....		1	11	12
Public Latin.....			2	2
South Boston High.....		18	10	28
West Roxbury High.....			3	3
Evening high schools.....			5	5
	2	71	151	224

Girls.

1. Number reporting to vocational assistant:		
By mail		95
In person at		
Office	539	
Schools	567	
Evening centers	0	
Public libraries	0	
	—	1,201
2. Number parents visiting vocational assistant		33
3. Number visits by vocational assistant to		
Schools	52	
Parents	5	
Employers	23	
Miscellaneous	2	
	—	82
4. Number employers visiting office		11

5. Placements:

	Part-time.	Temporary.	Permanent.	Total.
Brighton High.....			4	4
Charlestown High.....		3	6	9
Dorchester High.....	3	2	5	10
East Boston High.....	1	1	4	6
Girls' High.....	3	25	18	46
Hyde Park High.....				0
Roxbury High.....	4	5	14	23
South Boston High.....	1	3	4	8
West Roxbury High.....			1	1
Boston Clerical.....		4	1	5
Girls' Latin.....			1	1
High School of Practical Arts.....		1		1
Normal.....	2			2
Evening high schools.....		2	4	6
	14	46	62	122

DEPARTMENT OF THE EXTENDED USE OF THE PUBLIC SCHOOLS.

In the development of a school system to meet as far as possible the needs of life in a democracy there is no more important movement or activity that has come in recent years than the extension of the use of schools to meet the social and civic needs of community life beyond the period of schooling. In 1912 the Massachusetts Legislature passed an act setting aside two cents on each thousand dollars of the net valuation of the city to create a fund for financing this movement and giving the School Committee authority to expend the fund, which amounts to about \$30,000 a year. Prior to this act the Women's Municipal League of Boston conducted for one year a "center" in the East Boston High School, the School Committee meeting the expense of heat and light only. Immediately after the passage of the act four centers were established and were administered as a part of the department of evening and continuation schools. The next year the department of the extended use of public schools was established and operated in five centers.

In September, 1914, Mrs. Eva W. White, who came from a position under the Massachusetts State Board of Education, was made director of the department. She has undertaken a comprehensive scheme of activities so organized as to develop community interest and coöperation, to provide recreation for the young under wholesome conditions, to give an opportunity for all members of the community to develop avocations which would

interest them, and especially to foster influences according to the special conditions in different communities that will lead to a larger, richer and saner social and civic life.

Seven school centers have been operated during the past year, serving a total of about 100,000 persons through clubs and entertainments and about 60,000 people in lecture courses. There have been

122 home and school associations attended by 36,000 people.

21 alumni meetings attended by 3,962 people.

26 citizens' meetings attended by 4,744 people.

56 other meetings attended by 6,560 people.

In all, 210,530 persons have benefited by the fund in the past year on the basis of attendance. Much emphasis has been placed upon active instead of passive membership. The members have been encouraged to do real work, to participate personally in the activities and to form the habit of self-government and contributory self-support.

In planning new houses the needs of the school centers are to be considered. One of the difficulties in developing the work is that our older buildings do not lend themselves to the needs of the work of the centers. Auditoriums on top floors, primary desks nailed to the lower floors, and many other apparently small matters of construction, form serious obstacles to the development of social activities for adults.

It has been clearly proved that the groups served by the evening centers in nowise detract from the evening schools, as they are decidedly different. Although the centers vary somewhat in strength they are becoming part of local community life, bringing together thousands in good-fellowship, for the pleasure that is to be derived through group effort, and for mental growth through the discussion of social, civic, economic and educational problems.

As Mrs. White has now had something more than a year of experience in developing the work I have asked her to make a somewhat comprehensive report showing the principles upon which she is basing the work and the lines along which she hopes to develop it. Her report is so extended that it is necessary to place it in the Appendix. It is impossible to print it all, but only that which is of general interest. It should not be overlooked, as it contains the best expression of the ideals and principles that should guide the center movement which I have seen.

MANUAL ARTS DEPARTMENT.

The manual arts department includes drawing and kindred art subjects in elementary, high and Normal schools and the manual training and shop work in the elementary and general high schools and Normal School. It does not include the distinctly industrial work of the trade schools, Mechanic Arts High, the continuation schools and evening schools, in fact, none of the state-aided industrial work, though it probably should.

Drawing.

An advisory committee in drawing has been organized, consisting of the following: Prof. H. Langford Warren as chairman, Henry Hunt Clark, Lucy Conant, Denman W. Ross, Walter Sargent and Charles H. Woodbury. This committee has given very considerable attention to the subject in the past few months. It is making a survey at present of the art work in the elementary and Normal schools, and its report is sure to be of great value in improving the efficiency of the instruction in drawing and putting at our disposal the well considered opinion of recognized specialists. It is to be regretted that their report is not available for publication at this time.

The situation in the drawing department at present is as follows:

1. *In the Elementary Schools.*—The course is revised each year for the purpose of adapting it more closely to the ability of the average teacher and child, and also for the purpose of introducing new ideas evolved from the actual experiments in the class room and from all other sources, such as the suggestions derived from advisory committees and the work in other cities. In the course of study many options are offered according to the conditions.

In addition to the general course, special courses are provided in boys' schools and in girls' schools, aiming to relate the drawing closely to the interests of the students. For example, the study of color and design related to millinery, dress and home furnishings is emphasized in girls' schools, while art as related to industry and commerce is specialized in the boys' schools. Last year a special course for Chinese boys was introduced in the Quincy District. These boys were far in advance of their classmates, due possibly to heredity of art instincts. Results proved that when talented pupils have con-

tinuous expert instruction remarkable results may be accomplished. This year a similar class for talented pupils has been organized in the eighth grades of the Prince School. It is making rapid progress and accomplishing results impossible in the regular class room. Such opportunities should be afforded in other districts and would be except for the lack of trained art teachers to conduct the work.

In the prevocational centers special courses in drawing have been introduced to meet the conditions existing in each center and the work in these centers is closely supervised by the most experienced of our art teachers.

2. *In the High Schools.*—Drawing is on the elective basis in the general high schools with the exception of those students who intend to enter Normal School, who are required to take a definite course of two years of drawing. Among the special high schools the High School of Practical Arts and the Mechanic Arts High School require four-year courses and the High School of Commerce one year.

For the general high schools the director of manual arts, together with a committee of high school teachers, have formulated a four-year high school art course which has been approved by the council of high school drawing teachers and has proved beneficial in many ways. This course will be issued in printed form after it has had the criticism and suggestion of the advisory committee.

The high school art teachers meet with the director once in two months for the consideration of all matters connected with the art work of the high schools. The greatest difficulty in the progress of art in the high schools is the complication of programs which arises in an elective system, obliging a teacher to conduct mixed classes of students of different years at one time. This interferes with carrying out the approved course of study in which the work differs each year, and the requirements of academic courses with the complex arrangement of the school program frequently prevents pupils from electing drawing.

As the courses in domestic science are being introduced into high schools the need for closer connection between the art and household arts course is becoming obvious. At the present time there is an increasing demand in the sewing trade for people who have artistic taste and know how to apply it. The seamstress can only command eight and nine dollars a

week and the market is flooded. The artistic seamstress who can design gets from twelve to twenty-five dollars a week and the demand cannot be supplied. A course in plain sewing will never in itself produce artistic tradeswomen. The teaching of design should be related very closely to the technique of the trade. It is suggested, therefore, that a closer relationship between the art and domestic science department should be established in the high schools.

3. *Vocational Art Course at the Museum of Fine Arts.*— This course was organized nearly two years ago, and has now demonstrated its value. It was recognized at that time that children who have talent for art should have the same opportunity to fit themselves for their chosen vocation as those who desire to enter other vocations, but as we already have in this city in the art school of the Museum of Fine Arts an institution of nation-wide reputation, it seemed unnecessary to attempt to duplicate opportunities, providing its coöperation could be secured. The conditions in the Museum of Fine Arts are ideal for teaching art. The museum agreed to furnish its building and collections free and to make a nominal charge of \$25 a year per pupil to cover a part of the expense for its teachers. The school authorities agreed to allow for drawing a total of twenty-three points toward graduation — five each year for five afternoons a week at the museum and three for drawing taken the first year in the high school. Last year scholarships were issued to high school students, admitting them to the course in the afternoons. This year candidates have been selected from those who passed from the eighth grades to the high school. Out of the 6,000 students only those were chosen who showed exceptional talent in art work and forty scholarships have been awarded by a jury. These scholarships have been secured by the museum without the city's help.

Intense interest is shown by the students and great progress in learning to draw and design is made. Investigation shows that the students more than hold their own in their high school studies. In view of the fact that the museum authorities offer the use of its teaching staff at a nominal sum and the use of its remarkable collection of illustrative material free, it seems reasonable to ask that the city should provide funds for scholarships to be awarded to students who are unable to pay. An annual appropriation of \$2,000 would cover the expense of a four-year course. This would place the course upon a per-

manent basis and would make it one of the most valuable educational opportunities in this city. The student would be able to live in the art atmosphere which is so necessary in the education of the artist whether he be a portrait painter, sculptor, craftsman or designer. He would have opportunity for intensive study under expert teachers, would have access to the wonderful illustrative material in the museum collections, and would have contact with other children of talent from different parts of the city.

The work has been closely inspected by the advisory committee and has its high approval as the following letter indicates: "The committee was much impressed with the high value of the work of the classes at the Museum of Fine Arts. The committee voted that it highly approves the plan by which a selected group of high school pupils, who have shown marked artistic ability in the elementary grades, are given special instruction in drawing at the museum. The committee commends the results and earnestly hopes that the School Committee will find means to continue this work."

Other Coöperation of Museum of Fine Arts.

The usefulness of the Museum of Fine Arts as a factor in public school art education is increasing each year. The museum began by introducing half-tone reproductions of some of the famous paintings for eighth grade classes. This study of a few pictures influenced many children to visit the picture galleries of the museum. At the present time this idea has been extended to the sixth, seventh and eighth grades. Last year sheets of half-tone reproductions of Greek, Japanese and Chinese vases, together with Paul Revere's celebrated silver tea service and illuminated manuscripts, were furnished to each pupil in the eighth grade. The illustrations, together with descriptive text, were made into an art book. Study of this nature aims to create standards of beautiful form and decoration, upon which to base æsthetic judgment of manufactured objects. Last year the history-of-art classes in high schools were furnished with sheets of half-tone reproductions of museum sculpture, paintings and examples of craftsmanship with which to illustrate their notebooks. This experiment is favored by the high school drawing teachers and is to be continued this year. Another feature introduced last year was the talks given in the school halls and at the museum by the

director and his assistants to the assembled classes. These talks in the schools were illustrated with stereopticon slides, and in the museum with the originals. While the talks in the schools proved interesting to all, there is no doubt that greater inspiration is aroused in the presence of the masters' work.

The latest efforts at coöperation are, first, the preparation of a small reference book for the high school history teachers, pointing out the opportunities in the museum for illustrating their work in ancient, mediæval and modern history. This is a very valuable compend for teachers and enables them to make their history teaching objective and real. The classes, after clear and definite instructions as to what they are to examine in the museum, are sent there under direction and the students are thus helped to form a much more correct conception of the times which they have been studying; second, the museum has prepared with great care a traveling exhibit of Egyptian relics. These are genuine and of great value in showing the origins of our civilization. They are put up in cases and are carried by our school trucks to the various elementary schools, where they are used as illustrative materials in the classes which are studying the geography of Europe and the Mediterranean regions. There are wonderful possibilities in the expansion of the traveling museum. The exhibit which comes to a school and stays but a short time is more productive than the one which remains and becomes a matter of course. Further, such a traveling exhibit can be made of much greater utility than the miscellaneous exhibits not prepared by experts for the purpose. We should aim at a comprehensive scheme of traveling exhibits which would include the Children's Museum, the National History Society's collections, Historical Society's collection of the Old South, the Museum of Fine Arts, and probably other collections. By drawing upon these rich resources it would be easy to prepare an illustrative traveling exhibit which would richly reinforce and objectify the new course of study which is in preparation. The exhibit which has been prepared by the Museum of Fine Arts provides an excellent beginning.

Art in the Normal School.

In order that the students in the Normal School should be acquainted with the work in art of the elementary schools and with the methods in teaching drawing, the Normal art course

has been placed directly in charge of the manual arts department without a teacher permanently assigned to that school. Assistants in the drawing and in the manual training department teach the classes on a part-time plan which enables them to still continue their elementary school work. In this manner the Normal School students will be acquainted with the actual procedure in the elementary schools in which they are to teach. The course runs through two years and includes methods as well as art study. This complete change in the organization of the Normal art instruction is now beginning to be felt in the better preparation of the teachers who are entering the service.

Manual Training, Grades I. to V.

In the lower grades of the elementary school the manual training is closely associated with the art work and is outlined in the same manner. The development of the cardboard work in the fourth grade and the elementary bookbinding in the fifth grade has been along the line of increasing the individual thinking and planning and breaking away from purely geometric and abstract forms. The instruction given in the Normal School by the capable assistant, Miss Bean, of the manual training staff, has had most helpful influence in enabling teachers to conduct the work with as much confidence as they do their work in other school branches.

In the school districts where there are schools for boys only, modeling is taught by special teachers, not to relieve the academic teachers but to take advantage of what seems to be a most decided and native artistic ability in the children of these districts. The course aims to follow the drawing course, interpreting the various phases of drawing in terms of three dimensions.

Shopwork begins with the sixth grade. The subject was formerly called woodworking, but with the desire to broaden the activities in the school shops and introduce other than woodworking processes the course has been changed to shopwork. In certain schools where local conditions make it seem advisable, cobbling has been introduced; in other schools printing with power and hand presses. This is especially well done in the Dudley School and is used partially for manual training purposes. In a few of the schools work in concrete and in one school sheet metal work is provided. In most schools in the upper grades the work is taking on more and

more of a practical character, erecting wooden partitions and shelvings, laying of girders and floors, building stairways and doing a great variety of work connected with school repairs.

Originally it was thought that the compelling interest on the part of the pupil was possession of the object made. We are now finding it quite possible to enlist the interest of pupils in the construction of work for the school and community. It is estimated that about 25 per cent of the work is of this character.

There has been an attempt to provide a minimum requirement in the course of study of things which the children should be able to know in order to entitle them to certain marks. A list of processes, tools, materials and knowledge has been formulated and will appear in a new course of study. Also an authorized list of materials that may be had from the business agent has been formulated and is subject to requisition without explanation.

Beginning last spring an experiment was made in opening manual training rooms in certain districts at eight o'clock a. m. so that three classes could be adequately cared for each day instead of two. We now have thirty-four eight o'clock classes. With the utilization of every opportunity to form eight o'clock classes we will probably not need to construct new manual training rooms in the districts already provided until the demands on the rooms exceed 150 per cent of the original capacity. The present number of rooms is sixty-nine and the present number of teachers is sixty-five. We now have eight men manual training teachers who are called shopwork instructors. They are given additional work. The teaching of these instructors is five hours as against four in the case of assistant instructors, or a service of six hours a day instead of five. This enables us to carry out satisfactorily the eight o'clock plan of beginning work and the instruction costs no more per pupil or per hour than formerly. It would be of advantage if we could recruit our shopwork instructors from among the special assistants in the woodworking department of the Mechanic Arts High School, permitting them to acquire a third year of teaching experience, after which they would be eligible to take the examination for shopwork instructor. This would attract a higher grade of special assistants in the Mechanic Arts High School and would provide a source of supply for our

elementary school shops. Later on these instructors who have been tried out in the elementary schools might well have an opportunity for promotion to positions in the Mechanic Arts High School.

Art in Special Classes.

One of the able assistant instructors in manual training has been promoted to instructor to direct the advanced special class boys in shopwork in the George T. Angell School. These are the oldest boys collected from the special classes of the city and the industrial work that is provided in this school is considered of great importance, as a preparation for the boys to become self-supporting when they leave school. In addition to instructing in this school, the same teacher spends one-half day a week in visiting among the fifty special class teachers to give instruction in bench work, and another half-day in attending conferences of special class teachers and in giving instruction to those who go to her shop and work with her. She also takes charge of the distribution of all manual training materials that are designed for special class purposes. Thus it will be seen that manual instruction in our department of special classes is very well organized and supervised.

Prevocational Shopwork.

In 1913 there were six elementary schools provided with a single shop and with six shop teachers, five of whom were manual training teachers. Practically all of the pupils came from the districts in which the shops were organized. Since that time some of these shops have been developed as centers to receive boys from many districts. One of them, the Quincy, reports that it has now boys from sixteen different districts. As we provide new school buildings, the old ones are used for prevocational centers. There are at present eleven centers, three having but one shop each, four having two shops and four having three shops. There are at present twenty-two academic teachers and twenty-three shop instructors. Of the latter all but three are men who have had experience in the trades which form the basis of the shop instruction. It is now provided that the shop teachers in these centers shall hereafter qualify and hold the same certificates as demanded for positions in the industrial and continuation schools. The day has been lengthened from five hours to six hours in all but

two of the centers, which continue under the old plan as district classes in specialized manual training rather than centers for prevocational work.

Within the past year a working arrangement has been made with the Schoolhouse Commission and with the business agent whereby, as in the case of the industrial schools, the prevocational centers may do productive work on formal orders and with regular financial credits on the books of the School Committee. This arrangement applies to manual training rooms in elementary and high schools also, but there is not so much productive work in the latter.

Some of the difficulties in the development of the prevocational centers are: (1) the inclination of the district principals to discourage suitable boys from attending the prevocational centers outside of their own district; (2) the tendency to send incorrigible or mentally deficient boys, thus attaching to some extent a stigma upon the prevocational centers; (3) the difficulty of finding academic assistants in prevocational classes. These teachers are required to work through a six-hour day and are required to prepare daily lessons for three divisions in each class. For this service they are receiving but \$48 a year more than teachers assigned to boys' classes, though they spend 20 per cent more time and have a very special class of instruction to give, as it is necessary for them to relate their work day by day to the work done in the shop. It is recommended that a rank of prevocational assistant be established on a six-hour day basis that would reach a maximum of \$1,320. Through all of last year we had one special assistant in a prevocational class because we could not attract an academic teacher from any source. This year we are still lacking two teachers despite the fact that we have searched out every teacher suggested to us as a result of making inquiries in every direction.

As the "intermediate plan" is developed in the various schools for the seventh and eighth grades it will become easier to select students who are motor-minded for assignment to prevocational centers instead of high school preparatory classes. While boys selected for the prevocational centers are those who would naturally intend to go to work as soon as the law permits, it has been our experience that about three-fourths of the graduates actually go on to various high schools. Through the related work their interest in academic subjects has been

weakened. One aim of the work will continue to be the quickening of the intellectual life.

Coöperative Courses in High Schools.

Manual training in the general high schools is not upon the increase. In 1913 there were seven general high schools with eight shops and eight teachers; at present there are six high schools having eight shops, eleven teachers and three special assistants. The tendency is strongly toward coöperative industrial courses for boys who desire to enter industrial occupations. This is the third year of the existence of the Hyde Park coöperative course, in which the students after the first year spend half their time in commercial shops and the other half in the high school. The per capita cost during the calendar year 1914 was \$70 for this course, which compares favorably with high school costs in general, which are over \$80. There are at present seventy-five pupils in this course and it is now conducted by two instructors in coöperative branches and two special assistants.

The organization of a similar course has been authorized for the Dorchester High School, and the East Boston High School has at present twenty-three pupils signifying their desire to enter such a course. It is generally recognized that industrial education of the coöperative kind should be encouraged. It is the most economical type of industrial education, as manufacturing plants provide the equipment. It gives the boy his industrial training under actual shop conditions. It does not pour into the trades a surplus of craftsmen, but is selective. As the course proceeds, the boys will find their future place before their school days are over and there is no problem of placing the boys at the close of their course. It is highly desirable that our local coöperative courses should be standardized and brought under state aid. It is our experience that experts of the State Board of Education who are giving this matter of industrial education their entire time are most helpful in their suggestions, and their supervision is beneficent and constructive and not meddlesome.

DEPARTMENT OF HOUSEHOLD SCIENCE AND ARTS.

This department includes the sewing of the fourth, fifth and sixth elementary grades; the cookery of the seventh and

eighth grades; the prevocational work for older girls in the upper elementary grades, and domestic science and arts in the high schools.

Sewing.

Instruction in sewing for two hours a week is given each girl in the fourth, fifth, sixth, ungraded and special classes. Each principle of sewing is illustrated by application to some garment. The work is adapted to the different districts, those garments most necessary for the children of their district being selected, but the directions and patterns for making them are standardized. In many of the districts home mending lessons are frequent; all kinds of garments are brought from the home to be mended and a great variety of work is thus secured. In the higher classes the girls are given speed lessons; almost 1,000 of these lessons have been given in the past year and at present a monthly speed lesson is given each class and a report of it is kept. The purpose is to increase the efficiency of the girls by showing them that quantity as well as quality is an aim in all work. Nearly all material is furnished by the parents and the expenditure by the school system is thus reduced to a minimum. Perhaps this is carried too far and more sewing material should be provided for children whose parents cannot afford to purchase it.

Cookery.

A new course of study prepared by the director, Miss Morris, was introduced in 1913. This course arranges the lessons in logical order so that all classes have the same principles of cookery at the same time. Considerable attention is given to the habits which the girls shall form as well as to the principles and processes which they shall practise. The character of the lessons is adapted to the means of the different neighborhoods as closely as possible.

To bring the work more closely in touch with the homes many lessons are given on simple home meals. The girls are taught to plan, cook and serve these meals, first in the school kitchens, where more than 200 such lessons were given during the last year, and then in the home. The girls of the eighth grade have had special attention given to bread baking and are encouraged to make all the bread at home. This is no small task as the requirements of some families mean from eight to ten loaves of bread a week. Bread exhibits are held in each

school kitchen. The loaves are prepared and a judging committee, chosen from the mothers, inspects the bread and decides on an award. The prize winner receives no tangible reward other than the hearty praise of the mothers, but that is sufficient. At these meetings the girls have opportunity to exhibit their skill as hostesses in serving the luncheon which has been prepared by them in the school kitchen. In these meetings the mothers assist by discussing informally how the cooking lessons can be fitted to home conditions.

Other Home Tasks.

An effort is made to encourage the girls who perform various definite tasks at home. One girl may take charge of the bed rooms; another of the Saturday cleaning and cooking; another looks after the dish washing each day. A task book is kept by each girl showing the work which she is doing and the parents sign this book each month.

There are great possibilities in this close alliance of the home with the school and we are crediting all the girls in school for the duties performed in the home as a legitimate part of the work of this department.

Prior to 1913 there were but 46 school kitchens. The girls in the other districts were obliged to travel from their own schools to the nearest school kitchen. There were serious objections to this plan as it meant a waste of from 15 to 20 minutes and many of the girls were not dressed properly for travel, but with the removal of these objections parents are holding the instruction of these departments in higher esteem. There are now but three districts that are not provided with kitchens and this is because there is no available space for the equipment. It will be necessary to increase the allowance for food supplies for the cookery classes. The amount for each pupil per lesson that is allowed at present is less than two cents. With the present cost of food supplies it is impossible to give the girls advantage of individual portions for family receipts with any frequency and the department is obliged to stint in all directions.

Prevocational Classes for Girls.

Extension work for girls in sewing and cookery was started in fourteen classes during the year 1914. Before that date work was carried on in two districts. At present there are

nineteen districts in which this type of work is given. Special emphasis is placed on giving specific instruction to each individual girl. In ten districts the girls specialize in practical sewing. They are instructed about different materials and consider cost, quality and adaptability of material for specific garments. They make dresses, undergarments and different kinds of household articles in great variety. As much of the work in these classes is done on the machine, special effort has been given to the use and care of the sewing machine with all its appliances. Speed lessons are given frequently so that the girls may be able to perform a certain piece of work in a set time.

In six of the districts, furnished apartments are provided for all-round training in housekeeping. Attention is given to all kinds of cleaning, separate laundry work, planning, cooking and serving simple meals, buying and estimating costs of materials, and, in fact, the various forms of household duties that will enable the girls to become real helpers in the home or will equip them for future service in the shops.

These classes in both sewing and cookery are in a measure self-supporting because the teachers are permitted to have sales of the finished product of their classes.

High School Work.

The director has been given charge of the work in household arts in high schools, including the High School of Practical Arts and the Dorchester High School. During the last year it has been extended to five of the high schools, almost 1,000 pupils receiving instruction in domestic science and domestic arts. In the science work special attention is given to the planning and furnishing of the home, as well as in the chemistry of cleaning, home sanitation, food values, menus, purchasing of food materials and household account.

KINDERGARTENS.

The principles that underlie kindergarten instruction are more and more recognized as of fundamental value in the education of young children. In September of this school year the gain in enrollment in the kindergartens was 541 over last year. The entrance age to primary school has been raised to five and one-half years, unless a child has spent a full year in the kindergarten, when he may enter the first grade at five

years. This recognition of the value of a year's work in the kindergarten has resulted in added confidence in and appreciation of the kindergarten by teachers of other grades as well as of parents. At present there are 145 kindergartens in the city and about 225 teachers. It has been necessary to open thirteen afternoon kindergartens. These are not so satisfactory as are the morning kindergartens because the children are much more listless and the session is but two hours long instead of three. The experiment was tried of lengthening the afternoon session by beginning at one o'clock instead of at one-thirty when the other schools opened. The result was not at all satisfactory. It was impossible to assemble the children at that time as it interfered with the dinner hour and the older brothers and sisters who usually accompanied the younger children could not return to school until one-thirty. The principals found that the general discipline of the building was seriously interfered with, and were of the unanimous opinion that there was more loss than gain in attempting to open the kindergarten so early, on account of tardiness, absence and interference with the school routine.

The afternoon session, although it has necessarily limitations, is better than no kindergarten at all, and in many of the congested districts it is not possible to provide morning kindergartens for all.

Attention has been given for the last two years to Montessori methods and the contributions that may be derived from them in kindergarten instruction. For two years a fully equipped Montessori class with twenty-five children and two teachers has been conducted in the Quincy District. Miss Edith Johnson, one of our kindergartners, spent a year in Rome studying this system through courses personally supervised by Madam Montessori. She has been given an absolutely free hand to conduct the work according to Montessori ideals, and she has carried them out faithfully as she understood them. Very considerable attention has been given the experiment by the teachers and directors of the kindergarten. This year the class has been conducted under conditions more nearly like the average kindergarten. Kindergarten "days" have been alternated with Montessori "days"; the Montessori materials have been used during the "gift" period.

The principal of the Quincy School has carefully observed the work for the past two years and has compared it with the

work of the regular kindergartens in his district. He has had a good opportunity, because in the same building there has been a strictly Montessori class and a strictly kindergarten class. His report upon the work indicates that while there are certain contributions that the kindergartens may very well gain by the use of certain Montessori material and ideas, the Montessori plan *per se*, introducing reading and other school arts at a very early age, is so much at variance with American ideas of education that the adoption of the system without radical modification is not practicable at present; but a thorough understanding of the principles on the part of kindergarten teachers is well worth while. The essential parts of his report are as follows:

“As a result of our work with Montessori material, under as ideal conditions as we could present, and later under conditions presented by the average kindergarten, I suggest that all kindergartens might well benefit by using certain Montessori material and ideas. As I interpret Montessori's contribution to the education of little children, it is the emphasis laid upon the importance of sense training and independent individual effort, with a large element of choice by the individual himself. The latter is almost impossible in a full kindergarten, but all kindergartens might well and readily use the iron, geometrical forms, also the wooden insets, independent from the containing drawers. The drawers are the expensive part. In addition to these, the broad, narrow and fine-lined form cards are worth introducing.

“We all agree that the work of grading the colors is both helpful and possible. Here, as possibly with all the material which suggests value, it may be necessary to obtain the permission of the patentees, or to vary the original in such a way that no infringements will be made. I am sure the manual training department could suggest the best way to manufacture these things for our own city. I would suggest this particular thing: that small wooden strips, 1 inch by 3 inches, be painted and enameled, in place of the Montessori color material. These strips might be made at the prevocational centers. The only variation from the Montessori idea I should suggest, aside from the sort of colored material used, would be to eliminate some of the steps in the grading, so that material might be more easily and therefore accurately used by all. Any wide-awake kindergartner will discover various color games which may be played with these colored sticks.

“Concerning the value of using the letter and the number cards Miss Johnson and I differ; that is, I feel that as long as the first grade work does not begin until the child is six, there does not seem to be anything to be gained by introducing reading at the age of four and one-half, unless it is possible to permit the kindergarten teacher to do more extensive work than that which the program at present would allow, such as taking precocious pupils in the afternoon.

“For kindergartens which have such ideal conditions as two rooms which may be used by one kindergarten, Montessori methods might be

introduced by alternating kindergarten "days" with Montessori "days." We are doing this at present in Miss Johnson's class. This opportunity presents the question as to what may be eliminated in kindergarten time to make way for Montessori. We do it during the "gift period." Such kindergartens might buy nearly all the Montessori outfit, teachers having their own choice. Miss Johnson would be very glad to meet in her room, once a week, any kindergarten first assistants who would care to have her give first-hand reports of Madam Montessori's lectures as she received them in Rome, at the same time demonstrating with such teachers the use of the Montessori material. This method would have the advantage over any statement we might make as to what is best to introduce into the kindergarten; first, because teachers would be more likely to grasp Madam Montessori's idea, and each teacher would also have a larger field for choice, possibly discovering things which we have failed to find.

"As to whether I should recommend continuing a straight Montessori class, or a Montessori kindergarten with Montessori periods, so far as this district is concerned, we seem to be driven into the latter, although I should be very glad to maintain a straight Montessori, if you think it can be afforded."

The opinion of the kindergarten teachers is that in certain respects the principles that govern the Montessori plan are at variance with the principles of the kindergarten. The former places the emphasis on individual development, while the kindergarten places emphasis on the training in group activities; the former provides no place for story-telling, while the kindergarten believes the story is invaluable for developing imagination and training the ear to the sound of good English; the former lacks an opportunity for free self-expression, while the kindergarten is based fundamentally on the development of creative activity, and all kindergarten material gives ample opportunity for rearrangement according to the child's own plan. There are, however, many valuable suggestions in the Montessori materials and methods, especially in sense training. They supply a recognized need for that stage of development of the child which demands activity for activity's sake, and certain parts of the "didactic material" can be used with advantage, such as the color lessons, cylindrical and geometrical insets, dressing frames, etc. It will be advisable another year to convert the Montessori class into a Montessori kindergarten, and to utilize the special abilities of the teacher, Miss Johnson, in acquainting kindergarten teachers with the ideas and ideals of the Montessori system. The Montessori class, as distinct from the kindergarten, was discontinued October 29, 1915.

Renewed attention has been given the past year to out-of-

door work on the part of kindergarten teachers. Children have been taken not only for play periods but for work periods upon numerous walks and excursions to different places. This has been done especially in suburban districts and should be extended to all, not simply as a means of recreation but to enlarge children's ideas, train them to observe intelligently, and to get the right attitude towards the objects of the external world. The observations and materials gathered upon these happy excursions will make the lessons which follow in the kindergarten of far greater value to the children. With such first-hand observation and the follow-up work in the classroom the children will acquire basal ideas which will be of great importance in their later development.

An interesting account of the delightful excursions of one of our kindergartens is appended:

"Day after day we wandered forth into the fields and woods and heard the spring wind go rushing through the tree tops, loved the feel of the sun, the smell of warm, brown earth and bursting bud, saw innumerable green things pushing everywhere into the light. Together we hunted for pussy-willows and alder tassels; together we watched the maples grow redder, and learned to know each common wildflower as it appeared; learned, too, the early call of robin and bluebird, of redwing and song sparrow.

"The children were full of play and frolic upon these rambles; of all the glad, live things of the springtime, they seemed most alive and joyous. A bird darting across our path would send them flying in and out among the trees in merriest fashion; a grassy hill would set them running, tumbling, rolling and somersaulting to the bottom, only to come shouting back to the top to begin the fun all over again.

"But we did not always wander and play and gather flowers. As the first exuberance of spirit somewhat abated, we took our work out with us. We had in kindergarten a set of straw piazza mats, covered with denim, which made excellent out-of-door seats. The ready coöperation of the master supplied a pile of unused drawing boards, small and light enough to be carried easily with the mats. With these portable chairs and tables tucked under our arms, we could settle when and where we would. Next the mothers were called in to help, and each child was provided with a strong, washable bag, some 15 by 18 inches, that drew up with tapes. In each bag we kept scissors, pencil, waxed crayons and a box of paste, and into them we put also whatever else was needed for the day's work. Imagine the joy of sketching the hill against the sky, or the field with trees as they stretched before our very eyes; of drawing from life the robin redbreast, who sang to us from a tree nearby; the fields of waving grass, dotted first with dandelions, then with violets, buttercups, daisies and clover in their season.

"Think of each child being able to gather his own nature material day after day! There was no end of delightful things to do with, leaves, maple keys and flowers — the possibilities of drawing, coloring, pasting and cutting seemed inexhaustible."

Afternoon Work of Kindergartens.

The number of teachers in the department has become so large it has been necessary to arrange for two weekly conferences, one a conference for assistants, special assistants and substitutes. This is strictly a class in program making; the week's work is planned, the talks, stories, games, gift and occupation exercises are discussed and advice is given upon the work of the week, and the work done by different classes is placed upon exhibition. The second conference is for first assistants and those assistants who have taught more than four years. These conferences are made as inspiring as possible. One conference a month is devoted to the interests of mothers' meetings, and expert advice is secured from many outside agencies upon such topics as: "Kindergartner as a Social Worker," "The Ideal Home," "Hygiene in the Home," "The Child in Relation to the Neighborhood," "The Duties and Responsibilities of the Family," "Children's Ethics," and "Child Training." Subjects of a broad educational character are discussed at each meeting.

The home visiting and mothers' classes have been given renewed emphasis during the last three years. The purpose of this part of the work is to make the kindergarten a center for the diffusion of knowledge regarding the care and training of children, and also to provide enjoyable social opportunities for women who as a rule are closely confined to their homes. The kindergarten recognizes that its task is not simply the classroom education of the child, but the securing of the intelligent coöperation of the home and community, and therefore in some degree the raising of the standards of the home and the education of the home and community. As an evidence of the increased attention given to this part of the work the number of home visits made by the kindergartners in the school year ending in June, 1914, was 18,411. The number of visits made in the year ending in June, 1915, was 23,002. The number of mothers' meetings in the former year was 503, with an attendance of 14,057. The number of meetings last year was 634 and the attendance 17,616.

At the present time a committee of kindergartners is engaged in preparing a syllabus for mothers' clubs, containing suggestive topics and a discussion of kindergarten principles; also about twenty-five of our kindergartners have agreed to prepare a talk which they will give once a month to different groups of mothers throughout the city.

Traveling libraries of books for mothers and excursions are among other suggestions which a committee is considering.

Extension of Kindergarten Ideas to the Grades.

The great criticism upon the kindergarten is the limitation of its influence to the first year of the child's school life. A year is given to develop the freedom, creative power, play instincts, spontaneous expression, social or group relationship, handling and manipulating of a great variety of materials, development of imagination, getting ideas from sense impressions and ideals through direct relationship with people and things under wise counsel; and then all at once the child is plunged into a different world with a strait-jacket environment and an entirely different set of purposes and methods. In other words, the change from the kindergarten to the primary school is too abrupt, and at least the first year of the primary school should be used as a transition period. An attempt has been made to secure the coöperation of the kindergarten teachers in making the transition by getting them voluntarily to assist two afternoons a week with a section of the first grade. The primary teachers, as a rule, have welcomed these assistants and in many instances have expressed the wish that they themselves might have an opportunity to do some of the delightful developing work of the kindergarten. Following are extracts from some of their letters:

"I consider coördination in the primary and kindergarten a step in the right direction. It has helped me in the following ways:

"1. An opportunity is given me to help backward children.

"2. The work in language, dramatization and handwork in the kindergarten has enlarged the children's vocabulary.

"3. Visits to various manual pursuits (blacksmith, etc.) have quickened their powers of observation."

"The course of study allows no time for talks and other things that every teacher longs to do. When we do take time for them it is taken from some study. Games are a splendid means of developing children, yet in the first grade twelve minutes a day are given to play. I divide mine into two six-minute periods, but six minutes to play is such a short time for fifty children. If we primary teachers were given the time, we might accomplish some of the things that we believe ought to be done in Grade I."

"Owing to our numbers, we have never before found that we could take our children on excursions. Our district affords much opportunity for nature study and yet it has not been possible to take our classes out into the fields."

"Outside of the material value of this work with the kindergartner there has been added to the lives of the children a great joy and much pleasure, which have a very deep significance to those who have seen it expressed in their faces."

"First, it has given my children great pleasure; second, their walks in the nearby parks, where they have got their first ideas in nature study, have been a great help in their language work; third, it has made it possible for me to devote more time to individual children."

"Especially helpful along lines of science, drawing and number work."

"It seems to me that there ought to be some means of practical instruction whereby a primary teacher might get better ideas of kindergarten work as a whole and how to carry out these ideas, so that the work might be more continuous from the kindergarten to the first grade."

On the other hand, the reports from the kindergarten teachers who give the coöperation have not been reassuring on account of the extra tax it has placed upon their strength. They feel that when they are employed in this way both morning and afternoon they become so tired and nervous as to lose their chief assets — enthusiasm and play spirit — that are necessary for a good kindergartner. Without these factors the kindergarten becomes merely an asylum for children and not an educational institution. Thus we see that while the primary teachers would most heartily welcome such assistance it is not probable that we can look to the kindergartner for the necessary help. The happy outcome of the experiment has been that it removes any feeling that may have existed that our primary teachers look with disfavor upon the methods of the kindergarten, or are jealous of the encroachment of kindergarten ideas upon primary instruction. In fact, in arranging the new course of study for the first grade the committee has approved of a program that will provide for conversation periods, story-telling periods and a variety of seat work, excursions and games. Several of the teachers of the first grade have requested that movable furniture be provided in their rooms in order that they may carry on to some extent kindergarten activities. It must not be forgotten, however, that if the kindergartner with only twenty-five children for a half-day finds her strength taxed to its utmost, we can hardly expect a primary teacher with over forty children to carry out to any great extent kindergarten activities for a whole day.

The eventual solution of the problem of bridging the gap will probably be through the Normal School, through the new three-year course for the primary-kindergarten teachers. The

students who take this course will be prepared equally for instruction in kindergarten or primary grades. Further, with three years of training there will be much time for practice and it should be possible to work out a plan by which the practice students may give more of their afternoons to helping first grade teachers. If we had available people trained for kindergarten instruction it would be desirable to have their assistance in our first grades where the burden is greater than at any other point in the school system.

DEPARTMENT OF SPECIAL CLASSES.

The first provision for the education of mentally defective children in the public schools of Boston was made in January, 1889, when the first special class was formed. The second class was not started until ten years later and in 1911 there were only nine such classes. In that year the present supervisor of special classes was appointed and since that time the progress has been rapid so that at the end of 1915 there were fifty-five such classes, a gain of forty-six in four years. The total enrollment is 815, the number per class being usually fifteen pupils. Children are admitted to special classes on probation by the teacher thereof. They usually fall under one of the following three classes: (1) the children who are of such low grade mentality that they should not be kept in the public schools at all, but ought to be placed in an institution or else cared for privately; (2) mentally defective children who show marks of an abnormal mental condition and who have been found nearly or quite unimprovable under ordinary class room instruction; and (3) normal but very dull children who are, nevertheless, not beyond the reach of class room instruction skillfully administered.

The special classes are designed for children of the second description only, although they undoubtedly contain at the present time some of the first type. The reason for this is to be found in the very natural unwillingness of the authorities to exclude from school any child for whom suitable provision cannot be made elsewhere. Effort is constantly being made to have these unsuitable children of the first class withdrawn from the public schools and placed in the state schools at Waverley and Wrentham; but unfortunately, owing to the overcrowded condition of these schools, it is not possible to

secure admission promptly. It is also impossible, except by commitment through the courts, to place a child in the institutions without the consent of his parents.

The special class has usually occupied a room in an elementary school building and has cared for the mentally defective children of that immediate district. In distant and isolated schools single classes are necessary, but in crowded districts it is possible to collect the children of this type into centers and with a group of teachers. In 1912 a beginning was made in the Eliot District of the North End by combining two classes, to provide for differentiation and classification. This was the first attempt to carry out the "center" plan, which has been developed in other cities. There are obvious advantages in this "center" plan. In a crowded district the mentally deficient may be classified and those of a lower grade of development may be given the form of instruction best adapted to their needs, while the more improvable types may make more rapid advancement. The teachers may specialize in the subject they are best fitted to teach, one taking all the manual training, another the games and physical training. Thus through constant coöperation they may work out their problem for the good of all.

The present plan is to develop in local districts single special classes for young children, and after they have taken some years in the special class work, to promote them to higher schools, or centers where they may receive much industrial instruction. A center for the older girls has been developed at the Frances E. Willard School, a six-room building, and a center at the George T. Angell School for the older boys of the various special classes. Transportation is provided by the city. The separation of the sexes has been of advantage to pupils and teachers and has added much to the efficiency of the work. Little difficulty has been experienced in the transportation of the children. They have been graded according to mental capability and thus there has been great improvement in the academic as well as in the mental work. The girls have specially trained teachers for instruction in domestic science, millinery, sewing, embroidery, crocheting and knitting. The younger children are trained for the more advanced class work and the older pupils are given work that has an immediate practical value. In the boys' center, cane seating, cobbling,

simple woodworking and basket making are given as well as the academic studies. There are seventy-five in the girls' center and eighty-five in the boys' center.

The program is so arranged that each child has one hour and a half academic, one hour and a half physical and two hours' mental work each day. The subjects included are:

ACADEMIC.	PHYSICAL.	MANUAL.
Reading.	Games.	Drawing.
Writing.	Drills with rubber	Woodworking.
Arithmetic.	balls, wands, dumb-	Caning.
Language.	bells, etc.	Cooking.
Spelling.	Folk dancing.	Sewing.
History.	Gymnastics.	Millinery.
Geography.		Knitting.
		Crocheting.
		Basketry.
		Hammock making.
		Cobbling.

The younger classes have shown great improvement in muscular control and ability to coördinate, in balance and in appreciation of rhythm. They have also gained markedly in ability to listen and to follow directions. This has come largely through games and sense training. The older boys have gained in self-respect, they are acquiring manual ability in woodworking, basketry and chair caning, and are coming to admire good work and to try to produce it. The older girls have gained most in handwork, and now that cooking, sewing and millinery are possible for them, their interests are along domestic rather than academic lines. The children in all the classes at the centers are happy, industrious and show a growing spirit of loyalty to the school.

A training course for teachers in special class work was begun in January, 1915. A lecture course was given by Dr. Walter E. Fernald, and clinics were conducted by him at Waverley giving a clear idea of the problem of the special class child and the methods to be used for his development. The teachers in training have also been given a year of actual observation and teaching, combined with courses in manual training, conferences with those working with special children and visiting of the homes of special class children. The teachers who are already in the work have given hearty coöperation.

Conferences and discussions are given under the direction of

the supervisor on Friday afternoons to all the special class teachers. These conferences have been conducted with unusual success. Almost all topics related to the needs of special children have been discussed. The advice of recognized authorities has been sought and secured at these afternoon meetings. Some of the topics are as follows:

- Careers Open to Special Class Children.
- Academic Against Manual Work.
- The Delinquent Girl.
- Similar Work in London and Japan.
- Visiting in the Homes.
- After School Care.
- The Work as it is Carried on in St. Louis.
- Social Aspects of the Problem.
- Sense Training.
- Physical Training and Manual Training.

The last three consisted of many practical lessons in shop and gymnasium.

For teachers engaged in what would otherwise seem to be discouraging work such conferences are of great value, and, as a result, partly at least of their united effort, this group of teachers represents in interest, intelligence and devotion a very high order of professional spirit.

The syllabus for special class work which they have prepared has been in considerable demand. Each special class teacher has contributed material originated or tested in actual class room work. The minds of the children are approached through motor or sense training and the syllabus outlines clear and direct methods for such approach. It provides also for training the child in personal habits, deportment and efficiency and for the development of play activity through games and dances. The specific development of the school lunch is provided for and lessons in hygiene are given and practically applied. In like manner the number work, language and nature study are provided; the manual work is extensive and includes definite directions for drawing, modeling, folding, cutting, weaving, basketry, cobbling, sewing, knitting and several other forms of handicraft. It may be said with confidence, therefore, that the children of the special classes are given a very specialized form of instruction which would be entirely impossible in the ordinary class room. There is no better example in our system of the adaptation of instruction to the needs of the child.

Looking forward to the future development of this work there are two provisions that should be made: *First*, classes should be formed to care for institutional cases. It is the purpose of the special class proper to provide for improvable cases, but below this grade there are many in our schools who are a clog upon the regular classes which they attend and who are receiving nothing in the way of care adjusted to their needs. Owing to the overcrowded condition of state institutions it will be a long time before they can secure admission there. With the completion of the new school building in the West End we shall have available rooms in which we may collect from several school districts enough for at least two classes of children that are recognized as institutional cases. It is hoped that this may be provided before the close of the school year. *Second*, as the special class children reach the age for leaving school the need of after-care, or follow-up work, becomes urgent. In the centers for the older children they can be prepared for some appropriate employment, but cannot be given self-direction. The normal person can guide his life as he will, but the sub-normal, young or old, does not have that guiding power within. He may become self-supporting if he only has someone to do the planning. After he leaves school his passions and powers need outside control which should not be relaxed at least until he is twenty-one. It is quite necessary that there should be an advisor who will consult with employers, coöperate with institutions and continue the guidance begun by the teachers. Such follow-up work would eventually be one of the great means of preventing pauperism, crime and racial degeneracy. Such a person should be a strong, tactful, persistent woman who has been a teacher of mentally defective children and who has a broad experience in life. The after-care work should include obtaining of information about pupils, securing suitable positions, oversight of their work and of their leisure time.

As an evidence of this need, numerous instances may be given, of which the following three are examples: First, "A" (a special class girl) left school and went to work at the age of seventeen years and six months, in December, 1913. Her record has been followed up until June, 1915, one and one-half years. In that time she worked in eighteen different places. Second, "B" began work in September, 1914, and by September, 1915, she had worked in eight different places. Third, "C," same dates, had worked in ten different places. In addition to this they

have each been out of work a considerable portion of the time. There are now sixty-five special class children who are trying to work. It is highly desirable that we should have more knowledge of the positions that are open to such children in order that we may plan our work so we may train them for what they are able to do. This would be one of the purposes of the advisor who is assigned to their after-care. The reaction upon our school work would be highly profitable.

WORK WITH PHYSICAL DEFECTIVES.

There are five types of children with physical defects whom we are endeavoring to improve in the school system:

First.—The deaf, who have good instructional opportunities in the Horace Mann School, with a staff of fifteen teachers and 144 children below high school grade. Although the building is overcrowded the character of the work is exceptionally fine, and the teachers are among the most efficient and devoted of the entire city. The school lacks facilities for training the older children in industries that would make them self-supporting. This is a serious drawback which was until recently relieved in part through the generous assistance of Miss Laura Brooks, who no longer feels able to provide the trade education which she supported for several years. The teachers are doing what they can to fit the children for self-support, and the principal of the school, Miss Jordan, has been able to secure private assistance for some of the pupils to prepare them for clerical work. Our manual training department stands ready to provide industrial opportunities for these children, but the difficulty is that the group is so small as to make the expense per capita seem prohibitive for the equipment of an industrial school that would really meet their needs.

Second.—Under-nourished or anæmic children. These are in fifteen open-air rooms, which are, as a rule, equipped for the purpose with wraps, reclining chairs, and luncheon facilities. There seems to be no tendency to increase the number of these rooms. So much attention has been given to the ventilation of our school rooms by the open-window method that teachers feel most of their rooms are, to all intents, open-air rooms, and the principals who make comparisons between the children in the open-air rooms and those under ordinary conditions are coming to the conclusion after many years of trial that except for markedly defective children the so-called open-air room is

unnecessary. Our medical inspector is giving this matter serious consideration this year but has not as yet reached a conclusion as to the advisability of increasing or diminishing the number.

Third.—Hospital Classes. Children with tubercular tendency are followed up with great care by our nurses, and cases of infection are segregated in the hospital at Mattapan. These children are given the open-air treatment, and two teachers are assigned to this school, where they have about forty children. As the hospital school is far removed from our own schools there is considerable difficulty in finding teachers and in providing the equipment and supervision that the children deserve.

Fourth.—Children with defective vision, who are not suitable candidates for the Perkins Institute for the Blind. These are assembled in one center in Roxbury. There are twenty-two of these children, most of whom come from distant parts of the city, car fare being provided by the schools. They are distributed into seven classes, though most of the work has to be done individually. The pupils, with one exception, have better than one-tenth normal vision. An experienced oculist has oversight of the work, and two teachers, who have been trained at the Perkins Institute, give the instruction, which includes the ordinary curriculum of the course of study and especially adapted manual work. The few text-books used in the school are especially prepared in large type. Most of the matter, however, has been copied in large script by the teachers, and much of the work is taught orally. Most of the written work is done on a blackboard, although large pencils and specially ruled paper are used to some extent. The chief objection to the present plan of work is that the class is isolated from any regular grade rooms. An attempt has been made to find a suitable room in connection with some central school so that the pupils might go to the regular grade rooms for oral recitations, music, physical training and whatever work would not overtax their eyes. With this arrangement more pupils could be accommodated in the class and the difficulty of keeping them up to their various grades could be dealt with more effectively. A second center also is to be desired as sufficient children can be found for another class. As soon as suitable accommodations can be found to meet the two needs just mentioned, definite recommendations will be made.

Fifth.—The speech improvement classes. The work was organized in October, 1912, in two centers—93 pupils were

given treatment by two teachers. During the school term ending in July, 1914, 293 children were treated in four centers. During the last school year ending July, 1915, 333 children were treated, collected from 18 school districts, the instruction being given by five teachers to 19 different groups of children. These were classified as follows:

Stuttering, plus other defects	167
Backward speech, plus other defects	120
Infantile speech, plus other defects	46

Up to December 1 of this year there have been 375 admittances, and since the beginning 646 children have been treated. By the close of the year over 600 of our children will have been corrected of their speech troubles. The work is so planned as to avoid undue interference or interruption of the children in their regular grade progress. Since the organization of the work fewer than ten have failed of promotion, despite the fact that they have attended the speech improvement classes. Each group receives three hours of corrective work a week, except the very young children, who receive two. At the present time there are 28 different groups with an average attendance of 13 children to a group.

It will be of interest to many to see the program that is provided for these children. The following is the program for one period: 15 minutes, exercises for breath control and voice development; 15 minutes, exercises in applied phonetic work, word building, oral expression, etc.; 5-10 minutes, exercises for physical correction and speech exercises of a recreative kind; 15 minutes, exercises for free oral expression in language, arithmetic, geography, history, physiology and hygiene; 10 minutes, exercises for free conversation, story-telling, joke or puzzle periods, speech games; 30 minutes, exercises for free intensive practice by reading poetry or prose, reading and acting children's plays, and by debates. A second period of correction would vary in exercises but the underlying principles would be the same. The work that is done by the special teachers is so intensive and the skill that is required is so great that they should be given opportunity to improve themselves by some specially stimulating course, and I should approve of making provision to permit these teachers on Friday afternoons to take advantage of special opportunities offered by such institutions as the Emerson School of Oratory, the Forsyth Dental College and the psychopathic clinics.

It is also advisable that two additional speech centers be at once provided and two more special teachers be selected for this arduous and important work. It has been pretty well demonstrated that from 80 per cent to 90 per cent of children who have speech defects may be permanently cured, and all may be improved if they are taken early enough and given corrective treatment.

One of the centers might well be in connection with a downtown high school for older pupils from various high schools who have this very annoying and humiliating defect. There are now 158 selected cases on the waiting list that are in pressing need of treatment.

SALESMANSHIP.

The teaching of salesmanship in high and continuation schools has been extended until it now embraces classes in nine high schools, in six stores and in both La Grange and Boylston street buildings of the continuation school. Courses are offered in the Brighton, Charlestown, Dorchester, East Boston, Girls', Practical Arts, Roxbury, South Boston and West Roxbury high schools. Three groups of girls 14 to 16 years of age who are at work in small stores scattered over the city meet at 48 Boylston street for instruction twice a week. There are five stores employing a sufficient number of girls 14 to 16 years of age so that they may be taught in classes assembled in those stores. There are nine such classes and they assemble in their respective stores for instruction twice a week. There is one store in which two classes of girls 16 to 21 years of age who are members of the voluntary continuation school are given instruction four times a week. These store groups are all organized and taught as a part of the continuation school. In addition there is one group of salesmanship pupils from miscellaneous sources that meets in the continuation school quarters at 25 La Grange street.

Salesmanship in High Schools.

The teachers in salesmanship in high schools were secured from among the trained teachers in the salesmanship school conducted jointly by the Women's Educational and Industrial Union and Simmons College. Each teacher has classes in one or more high schools and has at least one store class. Coöperation between school and store is stimulated by the follow-up work of the teachers, who observe pupils while at work in the

stores and endeavor to become personally acquainted with them outside of the class room. Weekly teachers' meetings are held at which store problems are considered. Pupils are interviewed and advised concerning their choice of the course, either by the teacher of salesmanship or the head of the salesmanship department before they are placed in the classes. Health, punctuality, appearance and fitness for store work are considered by the teacher in the selection of her classes.

The high school course is elective and is limited to seniors, except in the Girls' and Roxbury high schools, where it is offered in both the junior and senior years. In general, seven points are credited toward a diploma for the satisfactory completion of a year's work; three for salesmanship and general store subjects, three for the study of textiles and one for color and design as applied to clothing, furnishings and other materials. No textbooks are used. Special reading and the study of merchandise papers together with home work on textile samples are required. Laboratory practice comprises actual work in more than twenty coöperating stores on Saturdays, Mondays and during vacation periods. Pupils who are able to maintain an "A" or "B" grade in school are allowed to go to the stores for practice work on Mondays during the school hours. The value of the store-practice is enhanced by the after-discussion of teachers with their classes of principles of salesmanship as learned through actual practice. A lesson in business honesty may be indelibly impressed upon a pupil's mind when at work better than any amount of study and recitation. Emphasis is placed upon the value of the knowledge received from "doing something" and from the application of their knowledge of arithmetic and English to business use. The feeling that the girls get from this experience that their studies in school have a definite end in view is of vital importance. The course pursued in high school is as follows:

I. Salesmanship (3 points).

a. General salesmanship subjects.

Department store organization and system.

Demonstration in selling in class with class criticism.

Class conference on important salesmanship subjects: Care of stock; service; waste in business, etc.

Practical experience in stores.

Store experience discussions; application of basal principles.

Individual conferences as a result of teacher's follow-up work.

- b. Arithmetic.
Sales slip practice and store system.
Drill in addition, multiplication, fractions, percentage.
Business forms.
- c. Economics.
Meaning of capital and wages.
Relation of expenditure to income.
The spending of money.
The saving of money.
- d. Business ethics.
Relation of conduct, hygiene, clothing, recreation and use of leisure time to a business position.
- II. Textiles (3 points).
Intensive study of fibers: Wool, silk, cotton, linen.
Manufacture — factory visits.
Fabrics.
Transportation and industrial conditions in relation to cost.
- III. Color and design (1 point).
As applied to clothing, furnishings and other merchandise exhibits; display.

Together, store and school have set about the task of accomplishing that which has proven to be mutually beneficial and industrially sound for the girl who would otherwise merely drift into the store and perhaps out again into other employment. The stores at first agreed to use as many high school pupils as possible in their junior positions on Saturdays and during busy holiday seasons. They are now looking to the high schools for their entire supply of so-called "junior specials."

During the year 1915 the stores afforded pupils in salesmanship classes a very extended opportunity for practice. The pupils were paid at rates varying from \$0.75 to \$1.50 a day according to the hours and the kind of work in which they were engaged. Personal records were kept of store work, and the following table for the year 1915 is an exhibit of the store practice of high school pupils for the year:

HIGH SCHOOL.	Teacher.	Number of Girls In Class.	Number of Days' Practice.	Amount of Money Earned.
Brighton.....	Miss Ivy.	14	109	\$141 75
Charlestown.....	Miss Parker.	12	90	127 25
Dorchester.....	Miss Sawyer.	35	447	519 00
East Boston.....	Miss Parker.	17	290	423 75
Girls' High (Seniors).....	Miss Goodwin.	52	873	1,050 00
Girls' High (Juniors).....	Miss Goodwin.	63	407	514 00
Practical Arts.....	Miss Ivy.	35	175	131 25
Roxbury.....	Miss Taff.	32	426	479 00
South Boston.....	Miss Taff.	17	210	276 50
West Roxbury.....	Miss Ivy.	17	282	350 50
Total, 9 high schools.....	5 teachers.	294	3,309	\$4,013 00

Girls are secured for Saturday employment by the employment managers in the stores through the office of the director of salesmanship. An intelligent effort is made to select the right girl for the work required, keeping in mind the training which each girl needs and her experience. Tact and discretion are required in the filling of places and an attempt is made to maintain a high standard of punctuality and reliability.

Girls become acquainted with the store systems in this manner. A group of thirty girls is selected from the nine high schools and asked to serve in a particular store from three to five o'clock, one day a week, for special instruction in the store system. After a few lessons they begin their regular Saturday work. In this manner four groups were instructed last fall in two of the largest stores where the girls have since worked as cashiers and in selling positions. A uniform wage of \$1 per day has been established for this service. The girls are at all times considered as school pupils and are under the direction and discipline of the schools. No attempt is made to place graduates in permanent positions, emphasis having been put throughout the course upon the necessity of their making the proper application for a permanent position. A large percentage of last year's graduates of the salesmanship course is now at work in the stores, however, and are earning from \$6 to \$10 weekly.

Salesmanship in Continuation School.

There are two divisions of the salesmanship work in the continuation school: pupils fourteen to sixteen years of age who are required by law to attend the school; and those over sixteen years of age who are attending it voluntarily. The law requires the children between fourteen and sixteen to attend the school four hours a week on their employer's time. The studies as specialized in the school are:

Arithmetic.—Combination drill to develop power, accuracy and alertness in addition; subtraction; multiplication; division of whole numbers and of fractions. Units of United States money; measures of length, inches, yards; measures of quantity, gross, dozen, quire, etc.; cash and personal accounts; fractions commonly used in business; English and French money; bills and accounting; bank checks; receipts; orders for goods; interest, commission, discounts.

Spelling.—Names of departments in store; names of articles of merchandise in store; names of positions in store; names of

streets in Boston; names of towns near Boston; names of other towns in New England; names of states with abbreviations; family names; words misspelled in notebooks; French words used in the store (spelling combined with notebook and other written work).

Hygiene.— Personal appearance; bathing; care of feet; foods and digestion; care of the teeth; dress; the Board of Health; ventilation; correct standing and walking; recreation and reading; formation of habits.

Textiles.— Fibres; spinning; weaving; raw material of cotton (2 lessons); manufacturing processes (3 lessons); finished product (3 lessons); linen (4 lessons); silk (6 lessons); wool (6 lessons).

English.— Friendly letter; business letter; ordering goods with replies; notebook work; comparison of adjectives; formation of plurals and possessives; adjectives for store work; masculine and feminine forms of nouns; comparison of adverbs; use of personal pronouns; irregular verbs; right work for right merchandise.

Civics.— Opportunities for Boston citizens (libraries, parks, buildings, lectures, concerts, educational, charitable, bathing, hospitals); city government; police department; fire department; trolley rides and chances for recreation; responsibility — of citizens; postal service (this is also connected with hygiene and English).

Commercial Geography.— Boston's harbor; Boston as a commercial center; New England as a manufacturing center; highways of commerce — rivers, lakes, oceans, canals, railroads, etc.; means of communication; transportation related to merchandise in store; Central Atlantic States (manufacturing); Mississippi valley (farming); Southern States (cotton); Rocky Mountains (minerals, wool); Pacific States (fruits, wool); system of Great Lakes; importations from foreign countries (related and connected both with the store and the textiles).

Store Topics.— Store organization; store system; sales slip practice; waste in business; store directory; business qualifications; truthfulness in business; courtesy; work (dignity and responsibility); relation to employer; relation to fellow workers; care of stock; approach to customer; use of talking points; suggestion; decision; demonstration sales.

Boston merchants have shown a willingness to assist in the establishment of the salesmanship classes for fourteen to six-

teen-year children. Wherever possible, because of the number of employees, groups of fifteen to twenty children are organized as a class in the store, usually in the employees' rest room, the lunchroom or the schoolroom of the educational department of the store. The stores also provide the furniture, the heat and the light without charge. The public schools provide supplies and teachers. The teachers of salesmanship in the high schools also devote a portion of their time to the continuation school classes located in stores. At this writing there are 300 pupils enrolled in the store groups. These groups appear to have passed an experimental stage. Through the awakened interest in school and the efforts of teachers to help each individual a number of pupils have gone back to regular full-time day schools to finish their high school course. Many promotions in the stores have been traced directly to the work in the store classes. There is a general functioning of the work and herein lies the secret of the unusual interest shown by the salesmanship pupils.

The salesmanship work in the high school was first undertaken in April, 1912. In the fall of 1913 a department of salesmanship was organized with Mrs. Lucinda W. Prince as director. Miss Isabel C. Bacon was later added as assistant director, and since the severance of Mrs. Prince's connection with the department last summer Miss Bacon has been acting director.

DEPARTMENT OF EVENING AND CONTINUATION SCHOOLS.

This large department of our service, consisting of more than 600 teachers and more than 25,000 students, includes the evening schools (high, elementary and industrial), and the continuation schools (compulsory and voluntary), and requires an expenditure of more than \$150,000.

Evening Schools.

The evening elementary schools have slowly increased from 5,470 in 1910 to 7,025 in 1915. In per cent of attendance, however, they have increased from 68 per cent to 84 per cent, and in the number of schools from 14 to 21 per cent. The per capita cost on the other hand has decreased from \$17.32 to \$14.41. Since the establishment of the compulsory continuation schools the evening elementary schools have become largely schools for immigrants. Last year, out of a total enrollment of 12,182, only 1,653 persons were born in the United States.

In the evening high schools, on the other hand, out of an enrollment of 5,989, 4,613 were born in the United States. On account of the cessation of immigration for the past year, the attendance this winter in the evening elementary schools has fallen off about 2,000, although the evening high schools have maintained their standard enrollment. It is probable that there will be still further shrinkage another year in the schools for immigrants, although the general civic agitation to rouse the public to the importance of the problem of immigrant education, in order to make one united and loyal nation out of our different peoples, may prevent the number of immigrant students from diminishing materially.

An attempt is being made to readjust the evening elementary schools to meet much more adequately the needs and requirements of immigrants. They have been classified according to race, education, and proficiency in English. A course of study adapted to their peculiar needs is in process of construction. The training of teachers especially for instructing foreigners was begun a year ago and another course is now in operation on Friday evenings for the seniors of the Normal School, who will become eligible next year; also for all properly qualified teachers. The course consists not only of special method and technique of teaching English to foreigners but also the observation of model teaching to give the proper equipment to those who contemplate teaching in evening elementary schools.

Special attendance officers are now assigned to the task of enforcing the compulsory attendance laws with regard to illiterate minors, and their attendance at evening school is fairly satisfactory. The average attendance last year was 84 per cent. It is highly desirable that the evening school term should be lengthened for immigrant classes. At present the term is twenty-two weeks, four nights a week. An addition of seven weeks for three nights a week in ten centers would be none too much. At the present time outside agencies continue the work where the evening schools leave off. The additional expense would be about \$8,000, but it is the duty of the city to provide for the special instruction of foreigners rather than the duty of a private agency.

Citizenship classes have been in operation for the first time this year. These classes are designed to interest foreigners in becoming citizens and to train them to meet requirements. They consist of beginner's classes in which the necessity of

naturalization is emphasized and community civics is taught in connection with the work in English, and advanced classes in charge of the first assistants of the schools, who give instruction in United States history and government and in the technical requirements necessary to obtain naturalization papers.

The United States Bureau of Naturalization is coöperating with the schools in this work by furnishing the schools with names and addresses of all applicants for first or second citizen papers. The leaders of the various nationalities must be interested in the work that is being undertaken, and the employers must be enlisted in a campaign of coöperation.

Continuation Schools.

(Voluntary.)

In 1910 the present director of evening and continuation schools was assigned to a study of this question and the first continuation school class was enrolled in that year. Since that time eleven different types of continuation school work have been planned and authorized on a voluntary basis. The work that is offered in these voluntary classes is similar to that done in the evening elementary schools. The reason for the daytime classes of the continuation school lies in the fact that the places of employment of the people who desire to attend are centralized, and employers can insist on their employees giving part of their time to courses that are closely adapted to their needs. It has been found that modern language classes (especially for women) can be conducted in the afternoon with well filled classes, while in the evening it is difficult to get sufficient numbers to justify the employment of a teacher. Non-English speaking mothers are unable to attend evening school on account of home duties, but it has been shown that these women are eager to learn English and American standards of citizenship if they may have an opportunity in afternoon classes. For example, a school which has been opened in the West End is attended by 150 adult foreign women. They are divided into two groups, meeting twice a week. They bring their children with them, and these are cared for in the nursery. Their progress is remarkable, and their interest such that they desire four afternoons instead of two.

The household arts classes were established to meet the needs of unskilled factory workers, most of whom marry at an

early age, the majority of the pupils coming from candy factories located in the North End. Employers have coöperated heartily with these classes, allowing groups of their workers to attend four hours per week without loss of pay. The instruction has consisted of general housekeeping and home-making in a suite of four rooms equipped for housekeeping. It is probable that household arts classes such as these and such as those that are conducted in the evening schools would meet with a ready response from home makers if offered in the daytime in other parts of the city. The needs of some are already met in the evening centers but a larger number would welcome such an opportunity.

(Compulsory.)

Compulsory continuation schools for young workers between fourteen and sixteen years of age were made possible by a law enacted in 1913. The director of evening and continuation schools was in a large degree responsible for the passage of the act, as he likewise was for the plan of organization which has been established in this city. It was necessary to form a new type of school to meet the needs of a specific group, all the members of which are strongly individualistic and unsuited to the opportunity and method of the regular school. The state authorities were consulted, all educational material bearing upon the subject was consulted, employers were visited and consulted and made ready for the change in conditions of employment, teachers were given a five months' course of training, and a large building on La Grange street was secured, remodeled and equipped especially for industrial and related academic work. The school started without a principal in October, 1914. Before the close of the year it was found necessary to place a competent principal in charge, which was done by the selection of Mr. Owen D. Evans, who has had long experience in the voluntary continuation school service.

In spite of the fact that this school took from employers, whether they wished or not, their young employees for four hours a week, it has made good from the beginning with employers and pupils, and the civic and economic value of the work is now generally recognized. The enrollment this year is 3,390, an increase of nearly 50 per cent over last year. Several classes have been placed in stores and factories, but since the small employers are far more numerous than the large ones, the

majority of pupils must be housed by the city. The present accommodations are now inadequate, and a larger range of prevocational opportunity should be provided in the system of education. This can be secured when the industrial school moves out of the Brimmer building.

The school has been carefully examined by the State Board of Education, by many visitors from other states, by a competent advisory committee, and by a committee appointed by the Boston Chamber of Commerce. It has also been critically scrutinized by the investigating committee appointed by the Finance Commission. One and all have pronounced the school worthy of confidence and support. The children are of legal school age and have the right of membership in the regular high school, costing more than \$80 per capita per year, while the continuation school is serving their needs, perhaps better than the high schools possibly can, at an extreme cost to the city not to exceed \$16 per capita.

To ascertain as nearly as possible the impressions of pupils as to the results accomplished by the continuation school and to learn their real attitude toward the school, a series of questions was answered by over a thousand pupils, each of whom had been in attendance for a considerable period. Pupils were requested to answer fearlessly, stating what they thought even though it might be unfavorable to the school.

Over 90 per cent replied that the continuation school had helped them in English, and over 85 per cent that the school had helped them in arithmetic. Replies indicated that nearly 80 per cent were spending their leisure time in a manner that could be approved. Over 30 per cent replied that the school had helped them in their present positions and a like number had received promotions in their present places of employment. Over 80 per cent had been with the same employer since entering the school. Over 85 per cent asserted that they liked the continuation school; over 95 per cent liked the continuation school better than the regular day school, and nearly 55 per cent preferred the continuation school to evening school. Of those employed on a weekly wage over 90 per cent reported no deductions because of continuation school attendance. More than 65 per cent declared that they had a more definite idea of what they would like to be in the future than they had before entering the school.

*School Attendance of Young Workers During Periods of
Unemployment.*

The director calls attention to the need of classes in the continuation school for continuous attendance of those who are temporarily out of employment.

Employment of children is usually of a temporary nature with frequent change of job and varying periods of unemployment. A strict compliance with existing law would force each child back into school immediately upon termination of his employment, where he would remain until a new position could be secured. It is educationally impracticable to force a child back into regular school class for a few days or a few weeks. Seldom can he be properly classified in courses where the unit is a year's work; he is a hindrance to the other pupils, and the idea of self-improvement through study becomes more revolting to him. When a child under sixteen leaves the regular school to enter employment, he becomes a charge of the continuation school. In case a child could be and were compelled to return to the regular school during periods of unemployment, he would again come back to the continuation school upon securing a new position. The child's work at the continuation school would be frequently interrupted by brief periods of attendance at the regular day school.

The continuation school is in a better position to serve the interests of children during temporary unemployment than is the regular school, both because of the manner in which instruction is organized and because of the facilities which the school possesses for securing re-employment. Of the twenty-nine children receiving employment certificates on the date of this writing, nineteen were placed in positions by the continuation school.

Children who are temporarily unemployed should be required to attend continuation school regularly for four hours per day or twenty hours per week, and such attendance should be interpreted as meeting the requirements of the law. This arrangement affords sufficient time in which the child may look for work; it affords opportunity for special instruction for specific employment and it centralizes responsibility for the child's welfare. No other arrangement promises to be as effective in serving the interests of these children and reducing the number and length of periods of unemployment in which habits of idleness and bad conduct are most easily formed.

CONCLUSION.

This report gives only a brief summary of the progress of the year and of the work that is under the supervision of special directors or heads of departments. In the following appendices the first three are an elaboration in detail of matters briefly mentioned elsewhere. The superintendent has avoided as far as possible extended treatment of the remarkable work that is being done in the common branches because the report of the director of promotion and educational measurement dwells at length upon improvements that are under way in the funda-

mental branches of the elementary course of study. In like manner the development of the intermediate or junior high school and also the development of the extended use of school buildings have been so thoroughly treated in the reports by Assistant Superintendent Burke and by the director of the extended use of the public schools that further discussion of these matters would be superfluous at this time.

At the suggestion of the Mayor of the city, the Finance Commission has appointed an investigating committee to report upon methods of school organization that would lead to greater economy, and upon the value of many of the newer forms of school activities. Their suggestions are not available at the time of preparation of this report but will no doubt call for special consideration in the next report, so far as they pertain to educational matters.

FRANKLIN B. DYER,
Superintendent of Public Schools.

APPENDIX A.

REPORT OF DEPARTMENT OF EDUCATIONAL
INVESTIGATION AND MEASUREMENT.

In accordance with your request I herewith submit my annual report on the department of which I am director. Because the department is of such recent origin, it seems desirable to present more details than might otherwise be necessary.

I. SUPERVISION OF REVISION OF THE ELEMEN-
TARY COURSE OF STUDY.

THE DIRECTOR'S ASSIGNMENT.

Supervision of the revision of the elementary course of study was assigned to two assistant superintendents and to the director of this department. Mr. Walter S. Parker has had charge of the conferences of teachers on first grade syllabus, and Mrs. Ellor Carlisle Ripley has had charge of the conferences of second and third grade teachers and of the preparation of the syllabus for each of these grades. The director was assigned the supervision of the conferences of teachers and the preparation of the syllabuses for Grades IV. to VIII., inclusive. Besides this assignment, the department has also participated in the work on the syllabuses for Grades I., II. and III., chiefly through its committees on standards in arithmetic and English.

The fact that the department has an interest in defining minimum essentials and in establishing objective standards of achievement in the various subjects in each grade, probably accounts for this supervisory assignment to the director.

COÖPERATIVE METHOD OF REVISION.

a. Teacher Participation in the Revision.

The present method of securing the coöperation of teachers in the revision of the course of study is not new in Boston. The

“Provisional Course,” adopted in 1909 and used since that time, bears witness to the fact that a considerable portion of that course was prepared by committees of teachers working with the supervisory officers.

Such utilization of the knowledge, ability, and experience of teachers has the advantage of building up a practical course of study based on class-room experience, of securing the sympathetic understanding by the teachers of the course when adopted and of affording helpful stimulus and proper encouragement to the teaching staff which must follow from such professional recognition.

The following tabulation will give some conception of the number of teachers who have participated in the course of study revision. It is altogether likely that other teachers may be added to the list of those already engaged in the revision of the course for the upper grades.

Teacher Committees.

SUBJECTS.	GRADES.								Total.	Group Totals.
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.		
Arithmetic.....		27	.....	14	6	11	9	12	79	104
Arithmetic and Seat Work in Number.....	6	.....	.....	.....	.....	.....	.....	.....	6	
Number.....	.....	.....	19	.....	.....	.....	.....	.....	19	
Drawing.....	.....	5	.....	.....	.....	.....	.....	.....	5	5
Geography.....	.....	.....	.....	9	5	7	5	6	32	32
History.....	.....	.....	.....	5	6	10	6	10	37	37
Language.....	.....	6	15	.....	.....	.....	.....	.....	21	133
Oral English and Sense Training.....	13	.....	.....	.....	.....	.....	.....	.....	13	
Reading.....	.....	19	6	.....	.....	.....	.....	.....	25	
Reading, Stories and Literature.....	.....	.....	.....	6	5	8	4	8	31	43
Written and Spoken English,.....	.....	.....	.....	7	8	8	8	12	43	
Reading, Spelling and Penmanship.....	8	8		8
Penmanship.....	.....	4	.....	.....	.....	.....	.....	.....	4	10
Writing.....	.....	.....	6	.....	.....	.....	.....	.....	6	
Use of Books in School Library.....	.....	.....	1	.....	.....	.....	.....	.....	1	1
Total.....	27	61	47	41	30	44	32	48	330	330

Committees on Standards.

Arithmetic	11
English	12
Reading, Stories and Literature	10
Written and Spoken English	9
Geography	11
Grade V.	5
History	9

b. Purposes of the Teacher Conferences.

When the teacher committees on course of study revision were organized, each member was furnished with the following statement of the purposes of such conferences:

1. To make such revisions in the courses of study in the various subjects as experience in their use indicates necessary or desirable.

2. To eliminate obsolete topics in each subject.

3. To extend the remaining outline of topics to be covered in each subject into a more comprehensive syllabus where that is desirable.

4. To indicate in those syllabuses the *Major* and *Minor* topics.

5. To separate as far as possible the matters of knowledge or content and the matters of ability or technique.

(For example, in arithmetic a pupil should acquire a knowledge of percentage, interest, taxes and insurance, and should also acquire the ability to perform accurately the fundamental processes in computation.)

6. To indicate as far as possible an irreducible minimum of accomplishment stated in terms of content or technique, or both, which should become the permanent acquisition of each pupil in each subject in each grade.

7. To indicate supplementary or additional work which teachers should cover in each subject by grades.

8. To suggest methods of teaching difficult topics in various subjects by giving lesson-plans on such topics.

c. Work of Committees on Standards.

After teachers had prepared their reports in accordance with the above instructions, they were typewritten and distributed to the various committees on standards ("arithmetic, English, geography, and history"), together with several elementary

masters. These committees have reviewed the courses of study in order to give coherence to the work outlined for the various grades. These committees have further assisted the department in defining the minimum requirements and in setting up reasonable standards of achievement for various subjects and grades.

d. Participation of Others.

After the committees on standards made their suggestions, the courses were passed on to others for further consideration. For example, the first grade syllabus was reviewed by the members of the staff in the department of practice and training, and many valuable suggestions were offered. Parts or all of the course for a grade have been referred to assistant superintendents concerned. The course of study in hygiene has been approved by the director of school hygiene. Finally, all syllabuses have been presented to the board of superintendents for their suggestions and approval.

FORM OF THE SYLLABUSES.

a. Parts I. and II. Explained.

Each grade syllabus is divided into two parts. Part I. consists of a statement of aims, minimum requirements, and objective standards in each subject. Part II. consists of suggestions on subject-matter, methods, and minimum requirements. Part I., therefore, should be considered as the course of study, and Part II. as offering suggestions which have been found helpful by teachers.

This form of syllabus has required an entire recasting of the subject-matter in the course of study for the various subjects. The obsolete matter in the old course of study has been eliminated and considerable new matter has been suggested. More important, however, is the fact that the course has been very materially reduced in amount. No one who has not participated in the work of revision will appreciate the amount of time and energy which teachers and others have put into the syllabuses in their new form.

b. New Features in Part I.

The following new features are being introduced into Part I. of the revised syllabuses:

1. A concise, definite statement of the aims to be accomplished in the teaching of each subject in each grade.

2. A statement of the irreducible minimum requirement in each subject in each grade.

3. A definition of the objective standards of achievement in various subjects as far as they have been worked out.

The purpose of the statement of aims to be accomplished in the teaching of each subject is to assist the teacher to economize her time and energy through the adoption of a definite purpose. While this was done to some extent in the "Provisional Course," yet in the new syllabus even more definite purposes have been defined. It is quite possible that some teachers may not agree with the statements of aim, but it seems clear that until teachers can agree on the clear statement of the purpose of teaching each subject in each grade, they will be teaching aimlessly or will be working at cross purposes. However crude the statements of aims may seem, they represent a serious attempt to make teaching more vital, more direct, and more purposeful.

The purpose of defining the irreducible minimum requirement in each subject in each class should be explained. In the "Provisional Course" so much was provided in most of the subjects that it was hopelessly impossible for any teacher to cover the course. The result was that each teacher was left largely to her own discretion in selecting from the course the topics which she should teach. In this revision of the course, those topics which are considered of fundamental importance and which, therefore, should be covered by every teacher, in every grade, and in every school, are indicated in the irreducible minimum requirement. In the earlier grades supplementary material, over and above the minimum requirements, is contained in Part II. of the syllabus. In the later grades the complete subject-matter will be presented in Part I., and the irreducible minimum will be clearly indicated. This arrangement should provide for much more uniform achievement among classes in different schools and grades, and should also assist the teacher to determine what subject-matter should be covered in the year's work.

The objective standards of achievement, which are being introduced into the new syllabuses, are of two kinds: first, those which are as yet purely theoretical, and second, those which are based on the results of testing work. It is the purpose of the department to put the theoretical standards on a fact basis as fast as tests can be prepared and given. Those standards which are established as a result of educational measurement are based on the median achievement of the

pupils tested. These standards, therefore, represent what a normal class of pupils may reasonably be expected to accomplish. They also set up a standard which represents what the schools are now accomplishing in the various subjects. As the results of school work improve, these standards can be raised. The standards, therefore, serve not only to indicate a reasonable achievement for normal classes, but they also make it possible to measure the improvement of children in the various subjects from time to time.

PRESENT STATUS AND FUTURE PLANS.

The syllabus for Grade I. is now in use in the schools. The syllabuses for Grades II. and III. are in the process of being printed, and should soon be ready for distribution.

The revisions of the teacher committee reports by the committees on standards are due in this office as follows: Grade IV. by March 1, Grade V. by April 1, and Grade VI. by June 1. It is the plan to edit these reports and prepare the manuscript for the printer during the summer months, so that the three syllabuses may be printed as one school document and distributed by the opening of the school year in September, 1916.

The revision of the syllabuses for Grades VII. and VIII. will not be ready until some time during the next school year. Owing to the present lack of a policy as to junior high school classes, or as to differentiated courses for pupils in the two upper grades of the elementary school, it has not been clear just how the courses of study for the seventh and eighth grades should be prepared. It seems probable now that the syllabuses for these two grades will be printed as one school document. The preparation of these two syllabuses will be slow because the courses of study in history and in geography are undergoing a thorough reorganization from the fourth through the eighth grade. As a result, considerable more time may be consumed in the revision than would otherwise be necessary.

II. A PLAN FOR THE PROMOTION OF TEACHERS ON MERIT.

INTRODUCTORY.

When the department of educational investigation and measurement was established by the School Committee, the person appointed head of that department was given the title

“Director of Promotion and Educational Measurement.” This was done in order to bring into prominence that part of the director’s work which has to do with the organization of a plan for the promotion of teachers on merit. By order of the superintendent, the director began work at once on a plan by which all appointments to higher positions in the public school system shall be placed on a city-wide merit basis.

This is not the proper time or place to make a detailed analysis of the factors which enter into the plan of promotion which is being worked out for Boston. This will be done in a bulletin which is being prepared by the department. It is appropriate, however, to indicate in general the situation which confronts the department in its work on this problem. The following pages contain a brief description of some elements in the situation.

SUPERINTENDENT MAKES APPOINTMENTS.

The rules of the School Committee of Boston provide that the superintendent “Shall, subject to the approval of the board, appoint, reappoint and remove all members of the supervising staff and teachers; provided that in the original appointment of subordinate teachers he shall consult the principal of the school or district, the assistant superintendent in charge thereof, or the director of a special department if the appointment is in that department.¹”

By this rule the superintendent is clearly and rightly charged with the responsibility of appointing and dismissing teachers. As a responsible executive and professional administrator, held largely responsible for the merits and defects of the school system, the rules give the superintendent correspondingly large authority in the appointment of the teaching staff, on whose work the success of the system and his success so largely depend. This rule also covers the cases of appointment to higher positions in the service, which are largely filled by promotions from a lower to a higher rank.

The original appointment of all teachers to service in the Boston public schools is from a merit list, prepared with much care by the board of superintendents, and strictly followed by the superintendent in making appointments. The fact that teachers are appointed according to merit when they come into the service strongly suggests that a similar plan might

¹ Rules, 1912, chapter VI., section 105.

properly be followed in the promotions which take place within the system from year to year.

The limitations of the problem of promotion as it is now being considered should be clearly defined. The plan which is being worked out does not concern itself with the established annual increases in salary or with the so-called promotional examinations which teachers are required to pass at the end of their second and their sixth year of service before they may advance to the next higher salary in the schedule. The plan which this department is working out covers all cases of appointment to higher positions, which in practice means the promotion of a person from one rank to a position of higher rank.

NEED OF A PLAN OF PROMOTION ON MERIT.

The need of some plan for the promotion of teachers to positions of higher rank on the basis of merit will be clearly indicated by a brief survey of some phases of or conditions in the Boston school system.

1. The size of the public school system makes such a plan necessary. In 1914 there were 1964 elementary school teachers and 593 high school teachers in the city. In this large staff of teachers vacancies are constantly occurring in the higher positions, which must be filled by the superintendent. These vacancies should be filled by the appointment of the most efficient persons available. Many of these 2,500 teachers can be known to the superintendent only indirectly through the assistant superintendents, directors of departments and masters of schools. Inasmuch as the superintendent needs positive information rather than general opinions about candidates for promotion, it follows that there must be some systematic plan for gathering and recording such information.

2. The variety of ranks both in the elementary and in the high schools makes such a plan necessary. Each rank has its salary schedule, and promotion from one rank to the next means more salary and carries with it added responsibility. Promotions from one rank to another should be made not solely as a reward for the faithful service of some person, but should be made also with the view of providing the city with the highest possible professional service.

As supporting evidence for some of the above assertions, the following tabulation is offered, showing for the elementary

and the high school the various ranks, and the minimum salary, the annual increase and the maximum salary for each:

Elementary School.

RANK.	Sex.	Minimum Salary.	Annual Increase.	Maximum Salary.
Assistant.....	Men or women..	\$600	\$48	¹ \$1,176
First Assistant, Grammar.....	Women...	1,212	48	² 1,404
First Assistant in Charge.....	Women...	1,212	48	1,500
Master's Assistant.....	Women...	1,212	48	1,500
Sub-master.....	Men.....	1,500	120	2,340
Master.....	Men or women..	2,580	120	3,420

High School.

RANK.	Sex.	Minimum Salary.	Annual Increase.	Maximum Salary.
Assistant.....	Men or women..	\$972	\$72	\$1,764
First Assistant, Head of Department,	Women...	1,332	72	1,980
Junior Master.....	Men.....	1,476	144	2,628
Master.....				³ 3,060
Master, Head of Department.....	Men.....	2,340	144	3,204
Head Master.....		3,204	144	4,068

3. The large number of teachers who hold certificates making them eligible for promotion makes necessary some plan for determining their relative professional qualifications. Many teachers who now hold eligibility certificates received them when the requirements were lower than they now are. A few of these teachers are not only not now qualified for promotion, but according to the assistant superintendent in charge, are not at the present time doing satisfactory work in their present positions. A considerable number of those teachers who hold eligibility certificates have received them from the board of superintendents. They have been given such certificates on the basis of having attained a minimum

¹ In boys' classes the maximum salary is \$1,224.

² Position found now only in girls' schools.

³ Junior Masters appointed since June 1, 1906, are no longer advanced to the rank of Master unless at the same time they are made head of department.

standard of achievement defined in terms of educational experience and professional study and measured by an examination. Naturally some teachers barely meet the minimum requirement, while others could easily reach a much higher standard. One of the logical results of a generous policy of issuing eligibility certificates according to a minimum standard is to grant a large number of certificates and thereby qualify for appointment many more persons than can ever hope to be appointed. In view of these circumstances, it becomes one of the functions of a plan of promotion on merit in Boston to determine the relative professional worth of candidates who have received eligibility certificates from the board of superintendents.

The following tabulation shows the number of positions of different rank and the number of persons within the service who hold certificates making them eligible for appointment to those positions:

Elementary School.

RANK.	Sex.	Number of Positions.	Number of Eligible Candidates.
First Assistant, Grammar.....	Women...	34	934
First Assistant in Charge.....	Women....	99	910
Master's Assistant.....	Women....	71	915
Sub-masters.....	Men.....	83	-
<i>a.</i> In the service.....			15
<i>b.</i> Not in Boston service, but on eligible list,.....			15
Masters.....	Men and Women...	70	148

High School.

RANK.	Sex.	Number of Positions.	Number of Eligible Candidates.
First Assistant, Head of Department.....	Women...	34	221
Master.....		22	*
Master, Head of Department.....	Men.....	52	163
Head Master.....	Men.....	15	52
	Women....		1

* There are no candidates for the rank of Master, inasmuch as all Masters hereafter appointed are at the same time made heads of departments.

4. The need of a systematic plan for the promotion of teachers on merit can also be judged by the number of appointments to higher positions which must be made from time to time by the superintendent. Since April, 1914, when the department began work, all appointments to higher positions have been made according to merit. The following higher positions were filled between April 14, 1914, and June 1, 1915:

In Elementary Schools:

First Assistant, Grammar	Women, 1
First Assistant in Charge	Women, 7
Master's Assistant	Women, 5
Sub-master	Men, 5
Master	{ Men, 5 Women, 1

In High Schools:

Master, Head of Department	Men, 1
First Assistant, Head of Department	Women, 0
Head Master	Men, 4
Total	<u>29</u>

The work of the department in connection with the above promotions varied considerably in amount. In some cases it was largely a matter of collecting and preparing information for the superintendent, while in other cases much visiting of candidates was done and many conferences held.

NUMBER OF CANDIDATES VISITED BY DIRECTOR.

The scope of the work of the department is merely suggested by the above list of promotions. In most cases the department has done as much work in connection with several other candidates as it did in the case of the one appointed. It seldom happens that there are not several candidates for every position, each one of whom must be given equal consideration.

The actual work involved on the department in assisting to make the above appointments on merit will be more clearly shown by the tabulation on page 95, which shows the number of candidates whose teaching ability has been rated or concerning whom information has been furnished the superintendent.

	Between April 14, 1914, and June 1, 1915.	Between September 8, 1915, and December 31, 1915.
In Elementary Schools:		
For First Assistant, Grammar.....	3	—
For First Assistant in Charge.....	16	5
For Master's Assistant.....	15	8
For Sub-master.....	24	—
For Master.....	63	9
In High Schools:		
Instructor in Physical Training.....	—	2
For Master, Head of Department.....	6	15
For First Assistant, Head of Department.....	—	3
For Head Master.....	13	—
Totals.....	140	42

This tabulation shows that in order to make twenty-nine promotions on merit, 140 candidates have been considered. Between the opening of school on September 8, 1915, and December 31, 1915, the department visited and rated forty-two additional candidates. Owing to the fact that the Finance Commission's investigators are studying the duties of some of the higher positions with a view to their reorganization, the superintendent and the School Committee agreed to make no appointments to such positions until after the report of the Finance Commission was available for consideration.

BASIS FOR RATING THE EFFICIENCY OF TEACHERS.

Any plan which seeks to classify candidates for promotion according to merit must determine at the outset what constitutes merit. The department has undertaken to indicate the factors which make for success in teaching, in the four official forms which have been prepared.

Form 264 aims to secure information from each teacher

appointed to the Boston public school service, covering, first, educational preparation for teaching before appointment to Boston service, and second, teaching and executive experience before such appointment. A new system of records has been prepared by the superintendent's office on which this information will be placed. This information can be recorded in this permanent form because it is not subject to any further change.

Form 265 aims to furnish a basis for judging the character of the supervisory, administrative and executive service rendered by sub-masters and masters' assistants in their respective districts. This information is especially important in the case of men and women who have had no executive experience before coming into the Boston service. Such candidates inevitably compete for promotion with those men and women who were appointed to service in Boston after having had a varied, successful and sometimes extensive experience as teachers and principals of schools. It is important, therefore, that candidates who have not had such experience outside of the city should be given an opportunity on this official form to show the extent of their executive experience within the service.

Form 266 aims to furnish a basis for judging the teacher's professional interest and growth since appointment in Boston. This information is not called for at any stated time, but is to be furnished from time to time as the candidate desires. This form gives each candidate an opportunity to record what he has done to improve himself professionally. It covers educational courses taken either in summer school or during the school year. It also provides an opportunity for the candidate to indicate what educational literature he is reading and how he has participated in various educational associations to which he may belong.

Form 267 aims to furnish a basis for judging and for recording the judgment of the personal characteristics and teaching ability of candidates for promotion. Inasmuch as the plan of rating teachers involves securing ratings from three different sources, it is necessary that there should be a common basis on which those ratings may be given. Form 267 furnishes such a basis.

Undoubtedly the teaching ability of the candidate is his or her largest asset in any plan of promotion on merit. It is the one factor which is common to all candidates, inasmuch as

practically all candidates for promotion are teachers. Ability to teach well and to be able to supervise teaching are important qualifications of every person who holds a higher position. Teaching is likewise the one qualification in which all teachers have an equal opportunity to show proficiency. Hence, in the plan of promotion which is being worked out for Boston, ability to teach is of fundamental importance.

DEPARTMENT DESIRES TO ASSIST CANDIDATES TO QUALIFY FOR PROMOTION.

Although the department is chiefly concerned in working out a plan for the promotion of teachers on merit, nevertheless it is the desire of the department to assist teachers in every professional way to qualify for promotion. The department will inform each candidate for promotion of the rating given by the department. The department stands ready at all times to discuss with each candidate the quality of work being done as well as the professional assets which are considered valuable. In order to indicate to teachers some of the factors which have a direct relation to success in teaching, a series of questions on teaching were printed and distributed to each teacher of the city. These questions were not asked in order to secure written answers from teachers. They were asked to help teachers make a self-examination in order to find ways of improving. The foreword by the superintendent and the questions follow.

QUESTIONS ON TEACHING TO HELP TEACHERS MAKE A SELF-EXAMINATION TO FIND WAYS OF IMPROVING.

PREPARED BY THE DEPARTMENT OF EDUCATIONAL INVESTIGATION AND MEASUREMENT IN CONNECTION WITH THE WORK ON A PLAN FOR PROMOTING TEACHERS ON THE BASIS OF MERIT, APRIL, 1915.

FOREWORD.

There is no effective way of improving the teaching of our schools except as the teachers themselves feel the need of self-improvement. Fortunately, there are few teachers who do not desire to improve in school room efficiency and in the knowledge of the theory and art of teaching. The first step towards improvement is a rigid self-examination through which each one may see himself as he is, in the light of what he should be. After such an examination, every conscientious teacher will put forth a strenuous effort to strengthen the weak places in his character and professional work. After considerable correspondence with many who have given much thought to the art of teaching, the following study has been prepared with

the hope that it will prove of value to teachers for the purpose of self-examination and self-improvement. If each one of us will subject himself to a rigid self-criticism in the light of this inquiry, it is probable that it will be of greater benefit to the children of this city than any material thing that could be done for the schools. It is hoped that no one, from the temporary teacher to the superintendent, will feel that this is not meant for him. "If each one mends one, all will be amended."

FRANKLIN B. DYER,

Superintendent of Public Schools.

I. PERSONAL CHARACTERISTICS.

1. Is my personal appearance as good as I can make it?
2. Am I careful to keep myself in as good physical health as possible?
3. Is my mien natural and sincere rather than affected or assumed?
4. What mannerisms have I that can be overcome?
5. Is my voice well modulated?
6. Is my speech so well enunciated that I am easily understood by the pupils?
7. How do I know that my use of English is worthy of the mother tongue?
8. What traits are there in my disposition which I should hold in check?

II. ABILITY AS A TEACHER.

1. *Management of the Room.*

1. Is the ventilation in my room as good as I can make it?
2. Is the temperature satisfactory?
3. Are the seats properly adjusted to the pupils?
4. Is the lighting of the room as good as I can make it?
5. What methods do I employ to have readily available for teaching purposes the appropriate educational material such as charts, maps, pictures, globes and practice work?
6. Have I done all that can be done to make my room an attractive place to work?

2. *Management of the Class — Discipline.*

1. How do I know that my ideal of good order is a worthy one?
2. Do I secure good order by the best methods?
3. What evidences are there that my pupils are acquiring habits of good physical bearing?
4. Do I find more difficulty in handling the class at dismissals than during recitation periods?
5. Do I lead or command the pupils in maintaining proper order?
6. What shows that my pupils are learning self-control?
7. In what ways is a responsive and coöperative spirit among the pupils shown?

3. *Teaching the Lesson.*

1. Do I distinguish the following types of lesson and employ each at the proper time,— a drill lesson, a thinking lesson, a lesson for appreciation (of literature or art), and a lesson to teach children how to study?

2. What method of teaching do I use most often:
 - a. The conversational, in which the pupils both answer and ask questions?
 - b. The quiz, in which the pupils only answer the questions which I ask them?
 - c. The lecture, in which the pupils merely receive what is given them?
3. Do I choose my method of teaching in view of the character of the lesson to be taught?
4. What part of the recitation time do I take up:
 - a. By asking thought-provoking questions and trying to get the pupils to talk freely about the subject which they are learning to handle?
 - b. By merely "quizzing"?
 - c. By giving information?
 - d. By working at the blackboard?
 - e. By using illustrative material?
5. What part of the recitation time do the pupils take up:
 - a. By working out new information through free conversation about the subject which they are trying to learn?
 - b. By repeating information memorized from a book?
 - c. By drill or practice work to apply the principles taught?
 - d. By giving thoughtful answers?
 - e. By working at their seats or at the blackboard?
6. To what extent in each lesson do I help the pupils to prepare the next lesson:
 - a. By a good ending of recitation?
 - b. By a judicious assignment?
 - c. By stating the aim?
 - d. By anticipating their difficulties?
 - e. By suggestions or directions?
7. How do I find out that the pupils have clearly in mind the aim or purpose of each lesson?
8. Do I take appropriate means to ascertain how much the pupils know about the subject of the lesson before I attempt to teach them the new lesson?
9. To what extent do I secure the proper attention of pupils to their work through interests that are natural to them?
10. What means do I take to present the material in the form of problems which stimulate the curiosity of the pupils?
11. Are my questions simple, direct and logical, or are they rambling, ambiguous and suggestive of the answer?
12. Are most of my questions for the purpose of developing new ideas or to find out how much of the assigned lesson the pupils have learned?
13. What means do I adopt to insure a judicious distribution of my questions among the pupils?
14. How many different pupils of my class do I give a chance to recite in each recitation? In a week?
15. What pains do I take to make my questions such that the pupils must answer them with a complete statement rather than with one word?

16. What methods do I employ to have each pupil, as he recites, address himself to the class rather than to me?
17. How do I make it necessary for the pupil to make the proper use of his past experiences and his present knowledge?
18. Do I make desirable use of pictures, objects, charts, maps, blackboards and other objective material?
19. Am I distributing my attention judiciously among the better and poorer pupils so that each pupil is getting the largest possible value from my instruction?
20. Am I training my pupils to discriminate between what is essentially important in the lesson and what is only relatively so?
21. Am I teaching my pupils to organize their own ideas in proper relation and sequence?
22. How do I see to it that the pupils feel that the object of the lesson has been accomplished?
23. By what methods do I clinch the main idea of each lesson before closing the recitation?
24. What evidence is there that my pupils are increasing in power of self-control and initiative? Are they learning to solve their own difficulties?
25. Are my pupils increasing their feeling of responsibility for their own improvement?
26. Do my pupils attack hard work gladly or do they want help in every little difficulty?
27. Are my pupils being trained in conscious methods of study and work?
28. To what extent do drills and practice work of pupils carry over into their other work?
29. Is my teaching such that there is inculcated in my pupils the desire to learn, to render some valuable service and to be somebody worth while?
30. In general, what am I as a teacher doing, what am I doing it for, and why am I doing it in this particular way?

III. MEASUREMENT OF EDUCATIONAL RESULTS.

INTRODUCTORY.

One writer¹ in discussing the difference between economy and efficiency points out that economy means primarily a reduction in expense, while efficiency means an increase in the value of results. Economy in education means, therefore, reducing the elements which are utilized to produce the present result, such as the amount of time or the amount of money expended, without decreasing the quality of the result. Efficiency in education means getting the largest possible educational results from the time and money expended under present administrative arrangements. This department has been largely concerned with efficiency in education and not with

¹ Durell. *Fundamental Sources of Efficiency.*

economy. If the department can be the means of improving the quality and character and increasing the amount of the educational results, it will be rendering to the children of the city a greater service than it could render by showing how less money need be expended.

AIM OF EDUCATIONAL MEASUREMENT IS IMPROVEMENT OF INSTRUCTION.

The department of educational investigation and measurement in Boston is undertaking its measurement work on the theory that "the ultimate purpose of all educational measurement is to increase the effectiveness of the instruction which the child receives." In this age of new undertakings and of new definitions of old ones, we cannot be reminded too often that every administrative agency, every special teacher or supervisor, all educational equipment, in fact, everything pertaining to the public school system is fundamentally for the purpose of making effective the instruction of the children. The information obtained from educational measurement, which goes to the superintendent's office, to assistant superintendents, to principals, or to teachers, is for the purpose of improving the present instruction, wherever that instruction is ineffective.

THREE STEPS IN THE PROCESS OF IMPROVEMENT.

In the process of improving educational results through educational measurement, three quite distinct steps are involved:

1. The quality of the educational results now being obtained must be measured by the best available standard tests as a basis for determining just what the present educational achievement is. This involves also analyzing that achievement and judging it in the light of what, for a better term, may be called a standard achievement.
2. After the present educational achievement has been thus analyzed, suggestions must be made for improvement where results are unsatisfactory. These suggestions may be given in informal conferences with individual teachers or with groups, or they may be presented to teachers in the form of printed reports.
3. When a reasonable time has elapsed after the suggestions were made similar standard tests must be repeated to determine what effect, if any, the suggestions have had on the instruction.

These second tests should not be given until the teachers have had ample time in which to put the suggestions into operation. The suggestions cannot be made to-day and test given to-morrow or even next week.

PRESENT STATUS OF EDUCATIONAL MEASUREMENT IN BOSTON.

In Boston, as elsewhere, the measurement of educational results is in its initial stages. In Boston the first step in the above program has been taken in several subjects; the second step has been taken in a few cases; but as yet the third step has not been taken in any subject except in the four fundamental operations in arithmetic. The work which has already been undertaken in Boston to determine the present educational achievements will be briefly described.

a. Accurate Copying.

One of the eight requirements in English for graduation from an elementary school, defined by the committee on standards in English and approved and put into effect by the board of superintendents, reads:

"A graduate of an elementary school should be able to copy at least twelve lines of simple prose or poetry and a bill of at least seven items. (Copying is not an end in itself, but a means to an end. The pupils should be made to see that accuracy in arithmetic, language, and other subjects may depend largely on accuracy in copying.)"

A standard test was prepared by the department and given to 4,944 first-year high school pupils in November, after they had been in the high school only about two months. For our purpose they were considered only elementary school graduates. In this test the department was not concerned with the value of accurate copying as an accomplishment. The department was concerned with finding out to what extent elementary school graduates are able to meet this theoretical standard.

The standard for accurate copying, based on the median achievement of those 4,944 pupils, reads as follows:

"A boy graduating from the elementary school should be able to copy fifteen and a half lines (four and a half inches long, or 30 ems of 10-point type) of ordinary prose, in fifteen minutes, making not more than five errors of any kind. (Spelling, punctuation, capitalization, words added, words omitted, wrong words used, misplaced words, uncrossed t's and undotted i's.)"

"A girl graduating from the elementary school should be able to copy sixteen lines of ordinary prose in fifteen minutes, making not more than three errors of any kind." (Length of line and kinds of errors same as above.)

"A mixed class of boys and girls should be able to copy sixteen lines of ordinary prose in fifteen minutes, making not more than four errors of any kind." (Length of line and kinds of errors same as above.)

In due time, after teachers have had opportunity to study the successes and failures of pupils in this test, and also have had opportunity to improve their instruction, another test of the same kind will be given to measure the improvement.

(For details, see Bulletin No. VI. of the Department, School Document No. 2, 1916.)

b. Spelling.

The department is proceeding on the assumption that one of the reasons for the lack of ability on the part of some pupils to spell lies in the fact that teachers are spreading their instruction over too many words, many of which are practically useless to the pupil. As a means of economizing the time of teacher and pupil, and improving the pupil's ability to spell, the department is preparing lists of words for each grade, which shall consist primarily of words used voluntarily by normal pupils in their written work.

In making up the lists for each grade, teachers were asked to furnish lists of alleged difficult words. The teachers' lists have revealed two things: first, that mere opinion or *a priori* reasoning is not an adequate basis for determining the degree of difficulty of spelling words, because many of the alleged difficult words were spelled correctly by 990 out of 1,000 pupils in the test given last May; second, that many of the words which teachers have reported as being difficult to spell are words which elementary school pupils should not be expected to spell. Teachers have been trying to teach such words as "convalescence, coupé, crochet, diaphragm, dilatory, equilibrium, fictitious, hypotenuse, impenetrability, knuckles, licorice, malleable, mayonnaise, naphtha, phlegm, quadrilateral, reminiscence, sovereignty, and zephyr," when the children are misspelling such common words as "business, divide, either, enough, fourth, library, ninety, similar, straight, their, there, through, and which." To limit instruction to a reasonable list

of words, and thereby to economize the time and energy of both teacher and pupil, is the first step which Boston has taken toward improvement in spelling.

Boston has also taken another step to promote better spelling. As a result of the tests given last May the degree of difficulty of each word in the spelling lists for the various grades has been determined according to the ability of 1,000 pupils to spell it. Each word has thus been standardized so that each teacher knows what words are most difficult for the children of her grade. She likewise knows with what degree of accuracy the children of her class ought to spell the assigned words.

One further step has been taken in Boston. A committee of Boston teachers has been organized to study the various methods of teaching spelling. This committee has reviewed all the periodical and other literature published during the last several years touching on this subject. The recommendations of each educational writer on methods in spelling were discussed by the committee, and during the next ten weeks each teacher is to carry on in her school an experiment involving some phase of method of teaching spelling. At the close of this year's work a printed report for teachers will set forth the results of these experiments.

(For details, see Bulletin No. I. of the Department, School Document No. 8, 1914, also Bulletin No. IV. of the Department. School Document No. 10. 1915.)

c. Geography.

The first and second steps in the above program have also been taken in the subject of geography. A test was recently given covering certain phases of the geography of the United States and Europe. Exactly the same test was given to 594 eighth-grade pupils, to 166 third-year high school pupils, and to 83 first-year pupils in the Boston Normal School. The most surprising result shown by this test is that so little of what has been taught in the sixth grade remains in the minds of eighth grade, high school, or Normal School pupils. This test has indicated the urgent need of defining the minimum essentials in the course of study, if pupils graduating from the elementary school are to carry with them a knowledge of those common facts of geography which should be the intellectual possession of every person.

(For details see Bulletin No. V. of the Department, School Document No. 14, 1915.)

d. Penmanship.

The quality of the handwriting of elementary school graduates has also been studied. A random selection of 600 papers was made from the 4,944 papers written in the test in accurate copying. These papers were studied by a committee of six Boston teachers who are especially proficient in the teaching of penmanship. The papers were rated according to the Ayres Scale for Adult Handwriting, disregarding the even numbered specimens in that scale.

The committee has also analyzed the merits and defects of these specimens of handwriting, and a report is being prepared for distribution among the teachers of the city. The department believes that merely calling the attention of teachers to the merits and defects of the handwriting of the children is to promote systematic improvement.

e. Addition of Fractions.

In December a test in the addition of fractions, prepared by the department, was given in the sixth, seventh, and eighth grades of the elementary schools. The usual procedure of analyzing the results and printing a report for the use of teachers will be followed.

f. Four Fundamental Operations in Arithmetic.

Addition, subtraction, multiplication and division are the only phases of any subject in which educational measurement has been carried on for a sufficient length of time to make it reasonable to expect any tangible results therefrom.

The Curtis Standard Tests were introduced into Boston in October, 1912, when Mr. Curtis was employed by the School Committee to make a study of the results of arithmetic instruction. Since that time the Curtis Standard Tests have been given five times in Boston.

The introduction of the tests into the city has been gradual. They were first given in twenty-one of the seventy elementary schools of the city. Gradually, from ten to fifteen more schools have been added in the five successive testing periods, until in May, 1915, all of the seventy elementary schools were tested, involving 214 buildings and 55,277 pupils.

Courtis Standard Tests, Series A, were given during the first year the Courtis tests were used in Boston, three years ago; and Series B have been used since then. Unfortunately for our purpose, this makes it impossible to compare the achievement of pupils in 1912, when the tests were first given, and the achievement in 1915, after a period of three years.

A most significant comparison has been made, however, between the results achieved in May, 1915, in the schools where the tests had been given over a period of three years and results obtained in schools where the tests were given in May, 1915, for the first time. This comparison shows the cumulative effect of giving the tests in a group of schools over a three-year period. To make this comparison, the seventy elementary schools of Boston were divided into three groups and the results tabulated accordingly.

Group A schools in the following discussion are those in which the tests have been given since 1912. In Group A there are twenty-nine schools and 18,391 pupils represented.

Group B schools are those which were added during the second year or the first half of the third year of testing. They are schools which have been tested from one to two years, and are schools in which the effects of the testing may legitimately vary. In Group B there are seventeen schools and 15,241 pupils represented.

Group C schools are those in which the tests were given for the first time in May, 1915. They are schools which have not been affected by the Courtis testing work in the city, except in so far as general discussion of the work has affected individual teachers or principals. It should be said, however, that principals of these schools have had opportunity to introduce the practice material, and several of them did so. If these schools had not been at all affected by the system of educational measurement in the city, the superiority of the schools tested would have been even greater than it is. In Group C there are seventeen districts and 11,836 pupils represented.

In the amount of work done by eighth grade pupils in the four fundamental operations Group A schools show superiority over Group C schools of from 12 to 17.7 per cent. This gain in amount of work done has also been accompanied by an actual increase in the accuracy with which that work was done. It is worth noting that in all testing work undertaken by the department those pupils who do most work also do it

most accurately. The fact that the 18,391 pupils represented in Group A schools are graduating from the elementary school or are going into the next grade with varying degrees of superiority up to 17.7 per cent over the 11,839 pupils who have not been tested is altogether due directly or indirectly to the system of educational measurement in the city. These results are largely due to the desire of principals and teachers to make the best possible use of the time of pupils and teachers in securing a reasonably satisfactory educational result. These results seem to prove two important propositions: (1) That the scientific measurement of educational results, at least in arithmetic, is possible and practicable even in a large city school system, and (2) that educational measurement may be a means of improving those educational results.

METHODS EMPLOYED TO IMPROVE INSTRUCTION.

The use which has been made from time to time of the results from testing work in arithmetic will illustrate not only how the improvement in the four fundamental operations in arithmetic has been brought about, but it will also show the methods by which the department undertakes the improvement of instruction in any subject.

a. Standards Have Been Established.

Objective standards of achievement in the four fundamental operations in arithmetic have been established for grades IV. to VIII., inclusive, in the elementary schools. These standards have been established on the basis of the median achievement of all the pupils in all the schools tested. These standards not only represent the present educational achievement of the elementary schools in the four fundamental operations, but they indicate a reasonable achievement for any class of normal pupils.

As in other cities, Boston finds great variation in the achievement of pupils and classes,—a condition which appears to a considerable extent as unnecessary as it is educationally disadvantageous. The lower 29 per cent of the eighth grade pupils have no more ability than the upper 29 per cent of the fourth grade pupils. Ultimately this variation should be reduced through a better educational classification of pupils. If these objective standards become the end to be attained by pupil and teacher, and if they become an incentive for both

to put forth their best efforts or to economize time, as the case may be, the results cannot be other than a more homogeneous group of pupils in each class and grade.

b. Formal Reports Have Been Made.

1. To Teachers.

The report made to each teacher places her in a position to know how her class stands in comparison with the established standard for that grade. What is still more important, these reports tell her what pupils made low scores and probably need special attention and what pupils made high scores and, hence, should not be subjected to any further unnecessary drill.

2. To Principals.

A report has been made to each principal after each test, showing the relative standing of his school in the city and of each class in his school. Every principal may find in these reports what classes stand relatively low and should have special attention in his supervision. These reports have been made as professional and more or less confidential reports from the director of the department to the principal of the school. Detailed comparison of the work of one teacher with that of another has been studiously avoided. The form of the report has been such as to protect every individual teacher and no publicity has attended it. What official use is made of the report has been left entirely to the discretion of each principal.

3. To the Superintendent.

The superintendent has been furnished with copies of all statistical tabulations and reports for his information and for such individual use as he cares to make of them.

From the above description it is clear that the results thus far achieved from educational measurement have been brought about without administrative pressure of any kind. Whatever has been accomplished has been brought about through the professional attitude of principals and teachers toward this problem of economizing time and effort in obtaining a satisfactory result. The credit for the achievement belongs, therefore, to the principals and teachers as much as it does to the department.

c. Printed Bulletins Have Been Distributed.

In addition to the reports just described, six bulletins in all have been prepared by the department analyzing the statistical results, explaining their significance, and suggesting methods of improving unsatisfactory results. These bulletins have been published as School Committee documents and a copy has been given to each teacher.

d. Systematic Practice Material Has Been Introduced.

Undoubtedly the most important means of improving arithmetic instruction in the four fundamental operations has been the introduction of systematic practice material or exercises which take the place of the former general class drill in which every child practised on the same exercise. The Curtis tests have demonstrated conclusively that the mass or class drill exercises in addition, subtraction, multiplication and division are ineffective and uneconomical. Mass drills provide unnecessary practice for the more capable third of the class and hence are uneconomical; they do not provide enough practice for the less capable third of the class and hence are ineffective. An economic distribution of drill requires that it provide a means of reaching the individual needs of the forty pupils of the class.

The department has not insisted on the use of any particular kind of practice material. Reports from the principals show that over 80 per cent are using one or more of five different kinds. The department has felt that each principal should be left to use that educational material which he and his teachers believe to be most effective.

This brief sketch will give a general notion of the methods by which the department believes the educational results in various subjects can be improved. Undoubtedly the objective standards of achievement, the various reports made to teachers, to principals and to the superintendent, the printing of bulletins for general distribution, the introduction of scientific practice material, have all contributed something toward the improvement of results in arithmetic. Of more pronounced effect probably than any of these factors, however, has been the stimulation among teachers of an inquiring attitude toward the whole problem of arithmetic instruction. The results from the tests have shown the need of improvement;

they have shown that the problem of arithmetic teaching is not yet solved, and they have prompted many teachers to study their own work as the first step toward improving methods of instruction.

IV. HOW THE DEPARTMENT CARRIES ON ITS WORK.

THE STAFF OF THE DEPARTMENT.

In view of the variety and amount of work undertaken, one might expect that a large staff would be necessary to carry on the work of the department. This is not the case, however. From the beginning the department has not intended to build up a large permanent staff. As a result, up to January 1, 1916, the staff of the department has consisted of one director, one permanent clerk assigned from the superintendent's office and one man with the rank of sub-master, temporarily assigned to the department. Since January 1, 1916, one woman with the rank of assistant has been temporarily assigned, and one permanent clerk has been added. The department has been desirous of carrying on its work through temporarily assigned teachers who are especially interested and well qualified to work in the department. It will always be necessary to have a few members of the staff who may be considered relatively permanent. Those teachers who render temporary service in the department gain a valuable insight into the character and significance of educational measurement. They will go back to their respective schools with a new interest and a new point of view toward the teaching problem and will be a source of strength among the teachers of the school, as well as a means of assisting the department in carrying on educational measurement in their respective districts.

COÖPERATION OF BOARD OF SUPERINTENDENTS AND MASTERS IN RATING OF TEACHERS.

As a part of this same general policy, the department is utilizing as far as possible, agencies already established in the public school system. In working out the plan for the promotion of teachers on merit, the department has worked in close coöperation with the members of the board of superintendents who have, since 1906, been rating teachers biennially.

In considering this matter with the assistant superintendents it was found to be the practice of some to confer with the master of the school concerning the character of the work of each teacher. The system of rating teachers, which is being worked out, involves securing the independent ratings from the master of the school and from the assistant superintendent in charge. To these two is added the rating of the director of promotion and educational measurement.

NORMAL SCHOOL SENIORS AS EXAMINERS.

In view of the character of some of the tests which are given in the schools, specially trained examiners are necessary. Arrangements have been made with the Boston Normal School and with the department of practice and training, whereby the complete time of the Normal School seniors, for a fixed period, is placed at the disposal of the department. This arrangement is made, not so much because the department has work to be done, but because this affords the seniors opportunity to gain some direct knowledge of educational measurement. These seniors are taught to give the desired tests, and in addition are instructed in the significance and methods of educational measurement. These seniors go into the various schools of the city and give tests according to the instructions received. In a few cases they also assist in the tabulation of some of the results, although this has not as a rule been found necessary.

CLERICAL SCHOOL GIRLS AS TABULATORS.

The statistical tabulations and the preliminary work leading to the tabulations are done in large part by girls from the Boston Clerical School. The common practice is to secure a group of from six to ten girls, for a period of from three to five days. During that time they are expected to devote the time of the regular school day to the work of the department. A report of their attendance is sent to the head master of the school. The work involves the sorting of papers, assembling of figures, and the making of final tabulations. It is the kind of work which these girls may be called on to do in whatever line of clerical work they may engage after completing their course in the Clerical School. The head master and teachers of the school look upon this as valuable experience for the girls before they complete their course.

SUPERVISORS OF TESTING.

The master of each district has designated some one of his or her teaching force as supervisor of testing in that district. Usually the master's assistant or the sub-master acts in this capacity; in some cases the master himself acts, or has assigned such supervision to one of his assistants. These supervisors were designated in order to relieve the master of some of the details connected with educational measurement. It is their duty to see that printed instructions sent out by the department reach the teachers. They also collect the reports from teachers after each testing period, and forward them to the office of the department. Further, they act as bureaus of information for the teachers of their respective schools.

COMMITTEES ON STANDARDS.

In addition to the teacher committees which are discussed in another part of this report, there are committees on standards organized for the purpose of giving systematic attention, over a period of years, to the problem of establishing objective standards in their respective subjects. The committees and the members on each are as follows:

Committee on Standards in Arithmetic.

Clarence H. Jones, <i>Chairman.</i>	Sub-master, Martin School.
Gertrude E. Bigelow	Master, Hancock District.
Alton C. Churbuck	Sub-master, Quincy District.
John J. Cummings	Sub-master, Oliver Wendell Holmes District.
Arthur L. Gould	Master, Dearborn District.
Ellen M. Greany	Grade VII., Hugh O'Brien District.
Annie R. Mohan	Master's Assistant, Emerson District.
William L. Vosburgh	Normal School.

Committee on Standards in English.

Charles L. Hanson, <i>Chairman.</i>	Mechanic Arts High School.
James A. Crowley	Sub-master, Emerson District.
E. Gertrude Dudley	Master's Assistant, Oliver Wendell Holmes District.
Carolyn M. Gerrish	Girls' Latin School.
Arthur W. Kallom	Department of Educational Measurement.
Bertha L. Mulloney	Grade VI., Everett District.
Lincoln Owen	Master, Rice District.
Henry Pennypacker	Head Master, Public Latin School.
Augustine L. Rafter	Assistant Superintendent.
Helen M. Richardson	Grade VII., George Putnam District.
Ellen L. Roche	Grade VI., Mary Hemenway District.
Charles G. Wetherbee	Sub-master, Prince District.

Committee on Standards in Geography.

Leonard O. Packard,	Normal School.
<i>Chairman.</i>	
Agnes F. Barry . . .	Master's Assistant, Elihu Greenwood District
John Carroll . . .	Sub-master, Longfellow District.
Annie H. Chadwick . . .	Grade VII., Mather District.
Everett L. Getchell . . .	Sub-master, George Putnam District.
Sarah A. Lyons . . .	Normal School.
Walter S. Parker . . .	Assistant Superintendent.
Ethel G. Ross . . .	Grade IV., Bowdoin District.

Committee on Standards in History.

Leonard M. Patton,	Master, Edward Everett District.
<i>Chairman.</i>	
Lillie B. Atherton . . .	Master's Assistant, Dearborn District.
Charles I. Gates . . .	Sub-master, Edward Everett District.
Walter S. Parker . . .	Assistant Superintendent.

Committee on Standards in Penmanship.

Honora T. O'Dowd,	Master's Assistant, Hancock District.
<i>Chairman.</i>	
Thomas J. Barry . . .	Sub-master, Thomas N. Hart District.
Matilda F. Bibbey . . .	Grade VII., Hancock District.
Emma J. Irving . . .	First Assistant in Charge, Emerson District.
Edward J. Muldoon . . .	Sub-master, Francis Parkman District.
Edgar L. Raub . . .	Sub-master, John A. Andrew District.

Committee on Standards in Spelling.

James A. Crowley,	Sub-master, Emerson District.
<i>Chairman.</i>	
Miriam J. Bronski . . .	Grade VI., Lewis District.
Marcella E. Donegan . . .	Grade I., Eliot District.
Ellen C. Hayes . . .	Grade IV., Warren District.
Arthur W. Kallom . . .	Department of Educational Measurement.
Sabina F. Kelly . . .	Grade II., Lawrence District.
Nellie G. Kelley . . .	First Assistant in Charge, Martin District.
Henry E. Loring . . .	Sub-master, Roger Woleott District.
Madeline B. Murphy . . .	Grade V., Elihu Greenwood District.
Archer M. Nickerson . . .	Sub-master, Washington Allston District.
Anna J. O'Brien . . .	Grade III., Dwight District.
Verna G. Pitt . . .	Grade VII., Bowditch District.

ADVISORY COMMITTEE OF THE DEPARTMENT.

There is also an advisory committee for the department, made up of the chairman of the above-mentioned committees on standards, together with the following-named persons:

Rose A. Carrigan . . .	Department of Practice and Training.
Oscar C. Gallagher . . .	Head Master, West Roxbury High School.
Arthur W. Kallom . . .	Department of Educational Measurement.
Maurice J. Lacey . . .	High School of Commerce.

This advisory committee meets from time to time to consider the work of the department, chiefly that which has to do with the extension of educational measurement. The committee has rendered valuable assistance in the preparation of standard tests, in deciding on the most appropriate time when they should be given, and in placing at the disposal of the department their knowledge of the local conditions which might affect the results from tests.

V. IMPROVEMENTS IN METHODS OF CARRYING ON WORK.

On the occasion of the first test after the department was organized the amount of computation expected of teachers was reduced by approximately one-half. This naturally resulted in transferring a large amount of statistical work to the department. However, it was felt that teachers should not be expected to make computations unless the work involved is of profit to them.

To carry on in an economic manner any kind of educational measurement work on a city-wide basis in a school system as large as Boston's necessitates reducing to a minimum the amount of clerical work involved. One way of doing this is to organize the testing so that there shall be only enough children tested in any given case to make the results obtained fairly representative of the whole city. If, for example, the results obtained from testing 1,000 children are approximately identical with the results secured from testing 5,000 or more children, then it is obvious that, as far as the results alone are concerned, it is sheer waste of time to tabulate the results of more than the 1,000 cases.

By a carefully planned study * made last year this department showed that the scores achieved by a group of 1,000 representative pupils in the Courtis Standard Tests in Arithmetic were practically identical with those achieved by the whole group of from 3,000 to 5,000 pupils. In fact, nearly the same results were secured in the scores from 500 children as from the group of 1,000 pupils. The essential requirement appears to be that the 1,000 pupils shall be representative of all the children of the city.

As a basis for selecting the 1,000 representative pupils for each set of spelling words, with the aid of the elementary school

* Reported in *Educational Administration and Supervision*, Vol. I., No. 7, pages 469-472.

masters the seventy elementary districts were divided into ten groups of approximately the same number of pupils. In each group were placed those schools whose predominating type of pupil was most nearly alike. The schools as classified into groups are as follows:

GROUP I.

Dwight.
Everett.
Franklin.
Hyde.
Prince.
Rice.
Sherwin.

GROUP II.

Blackinton.
Eliot.
Hancock.
Samuel Adams.
Theodore Lyman.
Ulysses S. Grant.
Washington.

GROUP III.

Frederic W. Lincoln.
Gaston.
John A. Andrew.
Oliver Hazard Perry.
Shurtleff.
Thomas N. Hart.

GROUP IV.

Chapman.
Comins.
Emerson.
Jefferson.
John Cheverus.
Lawrence.
Lowell.
Minot.
Norcross.

GROUP V.

Dearborn.
Dillaway.
Dudley.
Hugh O'Brien.
John Winthrop.
Lewis.
Martin.

GROUP VI.

Bigelow.
Bunker Hill.
Frothingham.
Harvard.
Prescott.
Warren.

GROUP VII.

Abraham Lincoln.
Bowdoin.
Quincy.
Wells.
Wendell Phillips.

GROUP VIII.

Bennett.
Edward Everett.
Gilbert Stuart.
Mary Hemenway.
Mather.
Washington Allston.
William E. Russell.

GROUP IX.

Agassiz.
 Charles Sumner.
 Edmund P. Tileston.
 Elihu Greenwood.
 Francis Parkman.
 Henry Grew.
 Longfellow.
 Robert G. Shaw.
 Thomas Gardner.

GROUP X.

Bowditch.
 Christopher Gibson.
 George Putnam.
 Henry L. Pierce.
 Oliver Wendell Holmes.
 Phillips Brooks.
 Roger Wolcott.

At best such a classification of schools is imperfect. The basis of selection, *i. e.*, the number and the predominating type of pupils, made necessary some compromises. However, where as many as 1,000 pupils are considered, it is not probable that the utilization of such a classification will ever lead to results that are seriously erroneous.

The Curtis Standard Tests were not given in October, 1915. Instead each teacher was asked to report on the proper blank the educational status of her class. Each teacher could do this from the Record of Arithmetic Cards (Form 223) which accompany pupils from grade to grade or from school to school. This card contains the pupil's record in each of the tests which he has taken in arithmetic. From the record of last May's test each teacher prepared her report. This report furnishes the department with the information necessary for determining the growth made by the class during the school year. This plan of substituting this report for the test which has been given previously results in a saving to the city of the expense of giving the tests, minimizes the interruption of school work caused by the tests, and relieves the department from the training of examiners and the conducting of the tests. The plan is thus far experimental, but there is every prospect that it can be successfully operated.

VI. EDUCATIONAL PROBLEMS WHICH SHOULD BE STUDIED FROM DATA IN THIS OFFICE.

As a result of educational measurement the office of the department is in possession of a wealth of material for the study of various educational problems. It is hoped that from time to time those who are required to prepare a thesis on

some educational subject for a higher certificate will take advantage of the opportunity to make use of this material. The department would be glad to place such material at the disposal of those qualified to study it. Among the problems which might be studied at the present time are the following:

1. The relative ability of boys and girls to spell.

Do boys or girls spell better? If they differ in ability, in what grades does the difference appear? Should boys', girls' and mixed classes be expected to attain approximately the same standard of excellence?

2. The relation between age of pupil and ability to spell.

Are the younger pupils the best spellers? Are the over-age pupils responsible for an undue proportion of the errors in spelling?

3. The frequency of errors in the various columns of addition and subtraction examples in the Curtis Standard Tests in Arithmetic.

Are the columns of equal difficulty? Does fatigue enter as shown by the errors in the last columns of each problem? This would really be a study of the Curtis Standard Tests as measures of ability.

4. The kind of error in the multiplication and division examples in the Curtis Standard Tests.

Are the errors largely in the processes of multiplication and division or are they errors in addition and subtraction?

5. The persistency through the grades of a weakness in one of the four fundamental operations in arithmetic.

To what extent has a weakness in addition, for example, shown in one grade been eradicated by the time of the next test? Is it reasonable to expect the overcoming of such a weakness? Is a weakness in one of the four fundamental operations a constitutional weakness on the part of the child, which we should not expect to eradicate?

6. The comparison of spelling ability of Boston children with that of other cities.

This would involve comparing the ability of Boston children to spell with children in Oakland, Cal., Butte, Mont., and in other cities where standard tests have been given.

The teacher committees on course of study and the committees on standards have placed the teaching profession in Boston under obligation to them by their devotion to the

problem of revising and improving the course of study and to the establishment of reasonable objective standards of achievement. These committees have rendered a service which will redound, not only to their own credit, but to the credit of the teaching profession in Boston wherever Boston's educational achievements are the subject of consideration.

Respectfully submitted,

FRANK W. BALLOU,
Director.

APPENDIX B.

REPORT ON THE INTERMEDIATE OR JUNIOR HIGH SCHOOL, BY ASSISTANT SUPERINTENDENT JEREMIAH E. BURKE.

There is much waste in education. Enrichment has been carried so far that absorption is well-nigh impossible. Our courses of study in the elementary grades are altogether too elaborate. There is a demand for elimination of non-essentials and simplification of subject-matter. In many instances the instruction is too bookish. There is an attempt to teach too many things and quality is sacrificed to quantity. No subject in the curriculum should be isolated or fragmentary, and all the work should be within the experience or the comprehension of the pupils. There should be concrete application of every abstract principle. All instruction should be motivated and vitally related to industrial, social and moral self-efficiency. There is a very general opinion that such reconstruction is impracticable so long as eight years are assigned for instruction exclusively in the so-called fundamentals. It is imperative that differentiation of the work of the pupils begin at the end of the sixth year and that the work in the grades following be radically modified.

Our present school divisions are artificial. In our accidental, illogical and indefensible plan we have two distinct systems of schools — one elementary, another high — differing in teachers, methods, subjects and ideals, and having little or no points of articulation between them. Pupils leaving the elementary school and entering the high arrive at what is almost a new world. Heretofore the government has been matriarchial or patriarchial; now the pupil must become self-sustaining. On the one side is dependence; on the other side independence. In the elementary grades there is too much teaching; in the high school too little. The criticism is reiterated that the first year pupils of the high school are unprepared for independent study, and the testimony of many thoughtful teachers is that from one-half to three-fourths of the study periods of the average first year pupil is wasted.

The transition from the elementary to the high school is too sudden and abrupt and the pupils suffer from the shock of maladjustment. The mortality among first year high school pupils is appalling. The cause of this wreckage largely is the failure of the pupils to adjust themselves to their new environment, or else their inability to see wherein the new studies are of practical benefit to them. In a survey made by Dr. Van Denberg in New York, it was shown that of a thousand pupils who entered the high school and who replied to the question, "Do you believe that the high school course will benefit you in your life's career?" 330, or 33 per cent, answered "No"; 200, or 20 per cent, were uncertain. In other words, 53 per cent of these pupils entered the high school either prejudiced against the work they were to undertake or indifferent as to its value.

In this discussion we make no criticism of the high school administration. The masters and teachers in high schools are struggling zealously and intelligently to solve their very serious problems. High school attendance has increased by leaps and bounds. It has imposed upon high school head masters perplexing difficulties, such as the necessity of arranging for excessively large classes, the colonization of pupils, etc. In many instances, moreover, high school teachers are lacking in pedagogical training, a condition which we are seeking to overcome in Boston by scientifically training teachers for service in the high schools. The cause, therefore, of mortality and wreckage among first year high school pupils is not attributable to the schoolmaster, but to an antiquated administrative machinery which sustains an impassable void between the elementary grades and the high school. It is in this chasm that the most startling instances of waste are to be found. It is imperative that we bridge over the gulf between the elementary and the high school grades, and that the arbitrary distinctions between these two divisions of schools be removed. This may be achieved by introducing into the grades some of the subjects of the high school course, and by reserving for the high school some of the more difficult work now required in the elementary courses; likewise, by closely correlating the work in all subjects throughout the entire twelve years. There should be a unified and progressive sequence in the pupils' work all the way from kindergarten to college.

It is universally conceded that the time for a child to begin the study of a modern foreign language is at an early age, preferably when he is lisping at his mother's knee. At all events, the study of a modern foreign language should not be deferred later than the age of twelve, when the memory of the child is retentive, when pronunciation and idioms may be acquired naturally, when the eye, the ear, the tongue, the whole being absorb and reproduce sounds and inflections and expressions until the new language becomes a part of the life of the child. Beginning with the seventh grade, pupils who are going to the high school should be given the privilege of electing a modern foreign language, the methods of instruction to be oral, conversational or direct. Criticism is justly aimed at the methods and the results of teaching a modern foreign language. We have been teaching a foreign language heretofore for two purposes, one ornamental, that the pupil may flippantly toss off a few trite commonplace expressions; the second, that the pupil may make a preparation for college. We have failed to make our teaching in this subject practical. There is nothing in the world more vital, more full of life and spirit than a spoken language. There is nothing that can be related more definitely and concretely with all the child's experience than a foreign language which is mastered not for the purpose of reading it, but with the intention of speaking it.

It was considerations such as these that prompted the School Committee in the autumn of 1913 to authorize modifications of the courses of study in four of the elementary schools of the city. In the seventh and eighth grades of two of these schools, the Henry L. Pierce and the Mary Hemenway, the study of oral French was introduced, and in the corresponding grades of the remaining two schools, the Chapman and the Edward Everett, the study of German was begun.

The following year the study of German was introduced into the Dearborn school and the study of French into the Abraham Lincoln, the Edmund P. Tileston, the Lewis, the Roger Wolcott, and the Ulysses S. Grant Schools. In the fall of 1915 the work was further extended by the study of French in the George Putnam School; German in the Emerson and Lowell Schools; Spanish in the Dillaway, John Winthrop, Norcross, Oliver Hazard Perry and Thomas N. Hart Schools, and Italian in the Blackinton and Eliot Schools.

In order that the work undertaken in these grades might be closely articulated with that of the high schools, conferences were held by a Council comprising the teachers of the high and the elementary schools who were interested in the problem; all the outlines of the work for the new departure and the methods employed were approved by the heads of the modern language departments in the high schools, and everything was so arranged that no detail might be fragmentary, but all the work might become part of an organized and harmonious whole. These classes in the elementary grades were inspected by the high school members of the Council, not in an inquisitorial but in a friendly and sympathetic manner. As a result of this inspection, the Council submitted a report to the effect that the pupils in the elementary grades who had studied modern foreign languages for two years had done the equivalent of the first year's work in the high school. The Council furthermore recommended that pupils completing two years' work in modern foreign languages in the elementary schools approved by this Council should receive a full year's credit (five points) on their entrance to the high school. This recommendation was adopted by the School Committee and is now in force. Observation of these pupils after their admission to the high school by members of the Council reaffirms the suggestions and recommendations of their report. One of the results of the deliberations of this Council has been the preparation of courses for the study of French and German in these intermediate grades. The Council has in preparation at the present time similar courses for the study of Spanish and Italian.

These classes were not arbitrarily created. They were voluntarily established by the masters of the elementary schools who had in their corps of teachers those who were competent to teach a modern foreign language. No classes were organized unless this condition was fulfilled, for manifestly the teacher is a *conditio sine qua non*. It might be said in passing that many of these teachers are unsurpassed in skill or in equipment. For the extension of the work, however, it is necessary to prepare our younger teachers. We admit to our Normal School for a year's course graduates of college; many of these young men and women have majored in modern foreign languages. Many of the girls pursuing the regular Normal course likewise are quite proficient in some one of these languages. In order to equip these groups of students for

future work in these languages, classes have been established in the Normal School for the study, orally and aurally, of French, German and Spanish. These classes are under the direction of some of our most competent high school teachers. By the development of this plan we shall be able to meet the future's demand for professionally trained teachers of modern foreign languages.

The whole subject of mathematics needs to be re-studied. Arithmetic should be pursued for six years in the elementary grades, where stress should be placed upon the fundamental processes and the simpler elements, where drill should be emphasized rather than abstract reasoning, and where all mathematical severities should be avoided. Beginning with the seventh grade, mathematics should be taught as a unit—not as arithmetic, nor as algebra, nor as geometry, but as a combination of them all—where the practical problems of arithmetic, the simpler measurements of geometry, and the elementary forms of algebra may be closely correlated. In all this work the more difficult topics should be reserved for the high school. Algebra is studied the first year in the high school. Why it precedes geometry nobody is able to explain, except that tradition has placed it there, and the number of pupils who fail in algebra is a sad commentary upon its prominence in the curriculum. Now, algebra is a highly differentiated science. In its simplest form, with the equation as a core, it may be taught easily in the elementary grades. Its more abstract principles may well be reserved for the more advanced high school pupils. By the introduction of algebra earlier, not as a distinct subject, but as a part of mathematics, the pupil is led to a comprehension of the subject step by step and is not confronted abruptly with its abstractions in the first days of the high school course.

Last year a committee composed of heads of departments of mathematics in the high schools was appointed to make a study of this problem. This committee made a report to the Head Masters' Association, embodying the suggestions herein presented, namely, the teaching of mathematics as a unit. On the receipt of this report a council was appointed, comprising heads of departments in the high schools and a group of teachers from the intermediate schools. This council is formulating a program for work in mathematics that shall be sequential throughout the seventh, eighth, and ninth grades.

Similarly, a Council on English has been appointed, comprising teachers of the high school and of the intermediate grades for the purpose of unifying all the work in English, so that it may be sequential, uninterrupted, and free from repetition throughout the seventh, eighth, and ninth grades.

A council likewise has been appointed for the development of a plan of work in science for the seventh, eighth, and ninth grades.

Heretofore the work has been restricted to the seventh and eighth grades. It is now proposed that the ninth grade be included as a part of this experiment and that an intermediate or junior high school be established to provide for pupils of the seventh, eighth, and ninth grades, thus relieving the high school of its present first year work.

There are physiological and psychical reasons for segregating pupils of these grades as a unit distinct from those that are younger and from those that are older, and for differentiating the character of their work, but the chief advantage educationally would be the atmosphere created by such a school.

The intermediate or junior high school should be neither elementary nor high; rather, it should be both. The teachers should be neither elementary nor high, but both. The organization of the school beginning as elementary should gradually approach the regimen of the high school, with departmental instruction, promotion by subjects, more independence and self-control by pupils, and possibly in its last days a school of one session. Pupils would enter the school as elementary but they would emerge full-fledged high school pupils. The chasm now existing between high and elementary schools would be bridged, a consummation devoutly to be wished.

Another advantage would accrue from retaining the pupils of the ninth grade in this intermediate group. Children entering the high school at the present time are very young and to a considerable extent the pupils themselves select the courses and the subjects that they are to pursue. In the intermediate or junior high school they would have an additional year in which to find themselves and the teachers would have greater opportunity to judge of the pupils' capabilities and inclinations, and thus vocational guidance would become more intelligent and more effective.

Another interesting situation has arisen in reference to pupils who graduate from the elementary school at an early age.

By recent legislative action, children employed between the ages of fourteen and sixteen are required to attend continuation school, while all children between these ages who are unemployed must attend the regular day schools. As a result of such legislation the number of first year high school pupils has greatly increased. Many of these pupils never intended to enter the high school and some even dislike to go there. Yet for the most part, being under sixteen years of age, they are compelled by law to go to school. If they enter the high school they are restless, indifferent, sometimes insolent. Under these conditions they learn little that is valuable and acquire much by habit that is injurious. It would be decidedly to the advantage of these boys and girls if they were to remain for another year in an intermediate school rather than to be forced into the environment of a high school for which they have no inclination.

The intermediate or junior high school should offer various options in subjects and courses. It should provide for

(a.) Pupils who desire to pursue cultural subjects in the high schools;

(b.) Pupils contemplating taking commercial courses in the high schools;

(c.) Pupils preparing for further pursuit of industrial or mechanical subjects, and

(d.) That heretofore sadly neglected group of boys and girls who must enter the commercial or artisan world upon or even before the completion of the elementary school grades.

“Blind alleys” are as intolerable in a system of public schools as they are in occupational pursuits. The courses offered, therefore, should be flexible, in order that pupils may pass readily from one to the other in the difficult processes of discovering and adjusting themselves. Into the intermediate or junior high schools should come all the pupils of the seventh, eighth and ninth grades of a district. There should be no attempt to segregate pupils taking one course from those taking another. We must preserve a social solidarity among our pupils and absolutely avoid anything that approaches social stratification. Moreover, there should be an outlet from the end of each course to the beginning of a more advanced one to enable pupils to climb from a lower to a higher plane everywhere throughout our systems of education.

It is confidently expected that the introduction of these courses in the intermediate or junior high school will effect an economy of time and effort on the part of the pupil by making the work offered more harmonious and more directly related to the needs of the pupil. It is unsafe to predict, but it seems altogether reasonable, that the reconstruction of courses in accordance with this proposed program will lessen by a full year the school life of many pupils. At all events, the work accomplished in the intermediate school shall be recognized as the equivalent of the first year's work in any high school, so that pupils may pass directly into the second year of the high school course scarcely conscious of any change, and in most instances a premium will be placed upon their previous attainments. Moreover, it is believed that pupils saved from the dangers that now confront them in their first year's work and having successfully passed on to the second year will be impelled to pursue their studies still further, and thus the wreckage of high school pupils will be mercifully reduced.

This plan of reconstruction of the work of grades VII., VIII. and IX. is based upon pedagogical principles and is urged for its effects educationally. There is every assurance that, by simplifying, unifying and making progressive the work of the seventh, eighth and ninth grades great economy will result in time and effort on the part of the pupil, the impassable chasm now existing between the high and elementary grades will be bridged and the awful wreckage of first year high school pupils will be averted. Yet while we emphasize the value of intermediate or junior high schools educationally, we believe that it is timely and opportune to consider the financial economy that would result from their establishment. Our high school population is becoming enormous. We should rejoice in this fact, because our paramount object is to promote education. But the cost of maintenance of our high schools is almost overwhelming, and unless some relief is afforded our whole school system may soon experience a financial shock. Therefore, any sane suggestion seeking to reduce high school expenditure should be welcomed, and it seems evident that the organization of junior high schools will contribute materially to such a reduction. Manifestly, the cost of instruction for the ninth grade will be much less under the proposed plan of organization than it is at present.

Finally, one of the practical results of the establishment of district intermediate or junior high schools will be the relief afforded the congested condition of several high school buildings; and if this newer type of schools is constructed in place of the traditional, a financial saving will be effected, since the junior high schools need not be so ornate or so richly equipped as the buildings that they supersede.

APPENDIX C.

REPORT ON SCHOOL CENTERS.

There is no movement before the American people at the present time from which more is hoped than the social center, recreation center, community center, or school center movement, whichever it may be called. From its underlying motive, that of catching up the resources that lie in the expenditure of leisure time and spontaneously focusing those resources on contemporary social progress, many a thinker goes so far as to assert that the movement will play a very decided part in the future social, political, industrial and moral development of this country. No less a person than Justice Hughes, when governor of New York, said in addressing a center meeting, "I am more interested in what you are doing and in what it (a center) stands for than anything in the world; you are buttressing the foundations of democracy."

Why is this so? What is a community center? More and more it is being borne in upon us all that the deciding factor in a man's life is his action under the stimulus of free choice. Vital as are the effects of the conditions of the working world, still more vital are the effects of the choice of recreation and association which directly influence personal character and power. In the development of the boy or girl, man or woman, the plus traits that make a contributing citizen are very largely conditioned by the friendships formed, the advantages of contact with many persons of varying experiences, the opportunities for thought stimulation through reading, lectures, membership in clubs, and the broadening influence of art and music.

Now the great contribution which America has made to the world is its public school system. This country has recognized its responsibility as has no other country for providing its people with an educational equipment in the gaining of which, the opportunities have been equally shared by all. The American public school system stands as the exponent of an abso-

lutely democratic institution. It typifies the American ideal. The confidence of people in our school system is demonstrated by the multiple duties that are being imposed more and more on boards of education and by the increasingly great demands that are made upon them. The public school must give the country the efficient worker, the wise statesman, the true homemaker, the disinterested voter, and must incorporate into its field of work whatever is necessary in order to bring this about.

There was a time when the sphere of action of the public school was clearly defined; subjects taught were few; evening schools were not operated; no attempt was made to reach all ages or to meet special need. All this has changed. The public school system now stands back of the citizens ready to assist whenever possible. Static administration has given way to that which is most flexible and far-reaching. So now that another very great need is beginning to dawn on the consciousness of the people — a need which strikes at the very foundation of our civic organization and social responsibilities — it is only natural that the public school should again be turned to and an added function be imposed upon it. Throughout the country, on every side, from labor leaders, the clergy, students of civic affairs, public-spirited men and women, in the city and in the country, comes the call for the awakening of the community sense; the opportunity for free discussion; the development of neighborhood association; a return to the rub-shoulder *camaraderie* of the village of a generation ago when the husking bee so interwove the monotonous task of husking with the jollity of the occasion that the neighbors almost forgot the assistance they were rendering but, as the result of the task so merrily performed, were bound together by all that there is in group coöperation.

The community center is a recognized need of our time. The rallying point for a community is naturally the school building in that community, first for reasons of principle; it belongs to the people themselves. The schoolhouse represents the agency maintained through the coöperative action of the citizens for the dissemination of knowledge and the building up of potential civic power. The second reason for the use of the school building is one of utility. School buildings exist in all neighborhoods and, since they are not used continuously for regular school purposes, can be used for meetings, concerts and lectures with-

out entailing the additional expense of constructing other buildings to be used for community center purposes. As was stated above, the movement to arouse communities to recognize their selfhood by throwing open the school buildings in order that the buildings may serve as meeting places for the residents, where activities that grow out of the needs and desires of the people may be organized, is most popular. The movement has not progressed far from the experimental stage, however, and is yet in many of its phases abstract. Nevertheless, when it is remembered that it was only ten years ago that the demand for the use of school buildings for community center purposes began to crystallize, and, according to the Russell Sage Foundation, 101 cities are now adopting it as a part of their recognized public responsibility, it will be clearly seen that the wider use of the school plant is steadily gaining in momentum. A movement which carries with it such a vision of possibility, which opens up such far-reaching opportunities and is, in itself, so many-sided, must of necessity develop slowly. Because of its very magnitude it must work out its own definitions only after carefully gauged experience based on aim and accomplishment.

The community center movement carries with it — in spite of its similarity in many of its phases to other movements — its own standards and must be approached absolutely openly-mindedly. The community center is itself, not something else. It does not serve to provide recreation for the youth alone; nor for the adult alone. It does not serve as a "get-together" place for the adult to talk over public questions only. It does not have as its main object the bringing of cultural opportunities through concerts and lectures to large groups of persons. No one of these lines can be emphasized to the exclusion of any other. A community center cannot be analyzed from the point of view of the recreational enthusiast as such, nor from the angles of civic reform primarily, nor as to its accomplishments in the vast field of informal education, the demands of which are steadily increasing. The community center stands as the most inclusive instrument to meet the allround needs of its constituency that has yet been brought forward and it should remain inclusive. Moreover, it is a citizenship movement above all else. It is not for one group of persons and not for another. The great primary aim is to project into adult life the same democratic influence and to open up opportunities

comparable to those the day school offers to our young people. Instead of being superimposed on the school system it offers the next great step in public school administration. This can be clearly shown. One of the most important issues that faces the public school is its correlation with the life of the town or section of the city of which it is a part. The public cannot afford to have the effectiveness of its schools discounted by the conditions of living and of labor. Educational authorities have increasingly been drawn into movements outside their specific field in order that the seeds that they were sowing might have a fair chance of growth. It has been pointed out again and again that parental duty goes farther than inertly giving over the entire control of a child's education to the school. Another point that is being continually brought forward is that when our young people are graduated all contact with them is broken. Again, the boy or girl may have had the best the school system has to give by way of mental or manual training yet fail to make good. Why? Because the stimulus which comes from the good time thoroughly enjoyed under the right conditions was lacking. Either there was no light and shade in the life, or the natural instinct for pleasure was turned from that which upbuilds to that which breaks down. Another point: Many a student makes an excellent record as far as scholarship is concerned yet does not get on. Why? Because manner and outlook on life play as important a part as mental or manual training. The fault here often rests with the attitude of those with whom the young people come in contact outside school walls. Further, one of the greatest tragedies is the growing apart of parent and child because the former has not had equal advantages. Now the greatest opportunity before the school center is to meet each of these needs and its place will be won among great democratic institutions when it shall so relate the interests of young and old that each shall work for the other. The adults rallied by the needs of their children shall pull together to clear the way for them in the working world; shall work for them in showing by personal example a high patriotism and by standing for all that there is in wholesome pleasure and the stimulus of applied personal and social ideals. The young people on their side shall spring forward to catch up the standards held out to them and, sympathetically and actually, old and young shall work and play together.

In the light of this understanding of the school center movement the activities in the Boston centers were organized during 1914-15. Certain definite principles of organizations were laid down and adhered to as far as possible. The dominant aims have been as follows: *First*, to place in charge of the centers the persons who had the necessary qualities of leadership and the local knowledge with which to enlist the interest and support of the people in the sections served. *Second*, to select club leaders who through the subjects taught had the power of developing the social outlook and coöperative neighborhood spirit. *Third*, to organize local advisory committees made up of persons representative of the various interests in the community, who should take an active interest in the affairs of the center and who should interpret the center to the neighborhood. *Fourth*, to offer such activities as the communities should desire and to stimulate a sense of responsibility for the success of such lines of work as were chosen. *Fifth*, to develop the principle of self-government through individual club organization based on carefully thought-out constitutions, put in action by the chosen officers; and through the center councils, which have been composed of representatives elected by the various groups in the centers, to assist in mapping out and putting into action the center policies. *Sixth*, to develop the sense of personal participation and partnership through contributory self-support and through the giving of personal service. *Seventh*, to lay a foundation for the acceptance of each center as the correlating center of local interests and activities through drawing to the centers local organizations such as improvement societies and men's and women's clubs. A center thus becomes a means whereby community efforts may be pooled and welded together. *Eighth*, to work out a lecture course in English which should touch a high point of public interest, present a content of actual value, and have continuity. *Ninth*, to increase the range of the non-English lecture course and present material as far as possible which had not been used for a period of at least three years.

To say that this organization has been completed would not be so. That a beginning has been made, however, and certain elements of strength brought out will be shown, it is to be hoped, by the following analysis of our general situation.

ORGANIZATION OF THE DEPARTMENT OF THE EXTENDED USE OF THE PUBLIC SCHOOLS.

The department is in charge of the director, assisted by seven managers, one for each school center district, four assistant managers, who divide their time between the seven districts served, and a secretary who serves the central office. Everything this first year has proved that the decentralization of executive officers has been effective from the administrative standpoint. Each manager has been held strictly responsible for the organization of the work in a given district and, as time goes on, the managers should become thoroughly imbued with the needs of their neighborhoods and through their personal contacts should be able to rally the latent talent in the various sections of our city for the purpose of enriching our activities.

MANAGERS.

Leadership plays a very important part in the success of school centers. A person must be able to get coöperation by rallying people. A manager must have the knack of human contact. Neighborhood organization, moreover, presents definite executive problems. A manager must thoroughly understand the motive of the community center and he must be able to interpret this motive with all the reality of actual understanding. On the one hand he must sense the hopes and aspirations of a district and on the other be able to suggest lines of interest, continually working ahead of accomplishment at any given time. The managers are responsible for the organization of local advisory committees and for working out and putting into action programs which are a result of their counsel. The manager must develop this group into active supporters, not merely nominal sympathizers. Each group that joins a center should be organized with a constitution, self-adopted, and should elect responsible officers. A third step is the formation of a central council to which are elected representatives from every group in the center. This council is concerned with the internal working of the center and, with the advisory committee, assists in planning and putting into execution the allround center policy. Managers are held responsible for holding monthly meetings with the

advisory committee and center council. Managers are also responsible for guiding group leaders and are required to hold conference meetings with these leaders.

One very important point is that each manager, if he is to be successful, must do a considerable amount of work outside the four walls of a given building. A manager must get into the neighborhood game as it is played. A manager must go to local meetings; he must be taken into the neighborhood life and so know the people at work and at leisure; he must make a recognized place for himself. Therefore a manager's time must be so arranged that this is possible.

In so far as possible, residents of our school center districts who presented the necessary requirements as to education and experience have been appointed. The work of the managers has been supplemented by the work of the assistant managers.

ASSISTANT MANAGERS.

The assistant managers, all women, have been responsible, under the guidance of the managers, for organizing the activities for women and girls and for doing much of the follow-up detail work of local calling, committee consultation, newspaper notices and clerical work which has been found necessary.

TERMS OF APPOINTMENT OF MANAGERS AND ASSISTANT MANAGERS.

From the first the department faced a very acute problem in regard to leadership. To those who do not understand the scope and possibilities of the school center, a man of good character and personality with certain disciplinary qualities might seem a fitting candidate. Very much more, however, must be sought. It would be fatal to select a person whose powers of natural leadership have never made themselves felt in an associated group. Many a person successful in other ways would absolutely fail when it came to group organization or neighborhood organization, which is group organization enlarged. A special set of qualifications are required. Further, with the funds available it was impossible to command the services of men on full time, therefore six of the managers were engaged for ninety-five days of service and one for seventy-five days. The rate paid has been \$8 per day, eight hours of serv-

ice constituting a day's work. A careful tabulation of this service has been kept and is registered with the director at the central office.

Assistant managers have served the department on full time, eight hours per day, forty hours per week, daily rate from \$4.11 to \$5.28 per day.

GROUP LEADERS.

In the main, leaders who had served the department previous to the appointment of the present director were reappointed. In the selection of leaders it is not sufficient to present the ability to teach a given subject like sewing, dramatic work or singing. One must have the power to bring about through any given line of activity not only standardized accomplishment in that line but to develop the social, coöperative group spirit. If a group of women gather together to make dresses for themselves and at the end of the season show that they have learned how to construct an attractive gown but are unwilling to join with other groups in the center in getting up a center social, in protesting against a neighborhood nuisance, in taking of their time to assist the young people in their ventures, one of two things is certain, the leader is at fault in not drawing the group into the social whole or the persons in the group do not truly belong to a center because their individualism is so utterly selfish that their spirit is to get and never to give. Such persons should receive instruction under conditions where to make a dress, if that be their aim, is all that is required. In the center we interpret dressmaking as a means to a social end; women who take the instruction do so because they believe good gowning is a social obligation, not entirely an obligation to self and, because they believe this, they want to assist in helping to interest the young girl of eighteen. So with the person who joins a musical club. "Music pleases me but I am a social being. Others must come to enjoy what I enjoy."

The success of group work, then, is judged on the basis of center spirit, group unity, excellence of accomplishment — all three. When in Charlestown last winter an afternoon group of women who met in a dancing class organized and financed an evening class for their own daughters and other young girls, nearly all of whom worked during the day, the center spirit was exemplified. Again, when all the adult groups in the centers

joined to provide the Christmas entertainment for neighborhood children, the same spirit was shown.

Managers and assistant managers are required to meet with the director on the second Monday of each month.

ADVISORY COMMITTEES.

The advisory committees had to be slowly and carefully organized. Very few people, comparatively speaking, understand the school center movement. A realization of the opportunities it offers and the responsibilities involved in living up to those opportunities are matters of slow education. It is necessary to know communities well before forming these committees, because active workers are needed with suggestive, constructive minds. Proved local leaders should be chosen and the committees should be absolutely non-factional. We have but made a beginning in the formation of these committees. Those formed have been of decided help, notably in Charlestown, Roxbury and the West End.

ACTIVITIES.

The following activities, under main subjects, have been carried on: Art work (sketching, designing, painting); bands; basketry; basket ball; boys' clubs; choral work; civics; concerts; crocheting; debating; dramatics; embroidery; folk dancing; folk singing; forums; game clubs; girls' clubs; home cooking, dressmaking and millinery clubs; home nursing; junior city councils; lectures in English and five other languages; mandolin clubs; modern dancing; mothers' and homemakers' clubs; men's clubs; novelty sewing; orchestras; parliamentary law; social clubs.

The art and musical work have been carried on from the standpoint of appreciation to get that pleasure which comes from taking part in a chorus or from forming one in an orchestra. We have not tried the ultra ambitious, and much from the standpoint of art technique has been crude, but when hard-working young men and young women attend with a regularity that has been striking, it is evident that the desire to satisfy the creative impulse as in some of the art work and to meet the craving for just what music gives have been met. Art standard has its humanly applied side as well as its culturally technical side. Gradually, as the resources of the department develop

through public coöperation, it is to be hoped that the best our city has to offer will be available for a place on our programs.

The civics, debating clubs and junior city councils have proved among the most valuable of our undertakings in presenting fact, helping toward clear thinking and logical statement. Persons who have been members of these clubs, both adults and young people, cannot but have been stimulated to take a new grip on their citizenship duties. The public debates held in the centers were a credit to the department.

GYMNASIUM WORK.

The gymnasium work with us has to serve the purpose of relaxation rather than physical training as such. A certain amount of "setting-up work" and corrective work has been demanded each evening though the greater part of the time has been given over to games, basket ball and such activities as pole vaulting and dashes. Frankly, from the accepted standard of gymnasium work there is much yet to standardize. It must be remembered, however, that we serve a non-selected group. The attendance is absolutely voluntary. The fact that out of some of the gymnasium classes have come some of the most loyal workers for the centers and that rowdiness has given place to good manners and genuine club spirit proves the value of gymnasiums as part of our equipment and the supreme importance of strong gymnasium leaders. The inter-center track meet held at the Dorchester High School, May 20 last, showed an appreciation of clean sport.

FOLK DANCING.

The most successful affair of our year in many ways was the folk-dance festival on May 25, again at the Dorchester High School because of the suitability of the gymnasium in that school for this purpose. The Mothers' Club of the Dorchester Center showed their interest by presenting a white satin banner, to be competed for annually, as a souvenir of excellence. Large numbers from East Boston, Charlestown and elsewhere were on hand to support their representatives.

FOLK SINGING.

The experiment at the Wells School, where some 400 gathered each week to sing the songs which have been developed out of the history of their race, has more than justified itself and will

be undertaken elsewhere the coming season. Not only was there the large group who sang Yiddish folk songs but an Albanian chorus as well.

HOME COOKING, SEWING AND MILLINERY.

This work was undertaken after consultation with the director of evening schools to meet the need of those who do not live near an evening school where such work is offered or who did not care to enroll in strictly vocational classes. The work in no sense duplicates that in the evening schools either as to group served or content of courses.

MOTHERS' AND HOMEMAKERS' CLUBS.

Among the most successful clubs in the centers have been the afternoon meetings conducted by the women of our districts. Not only have these clubs strengthened markedly in independent action, but volunteers from their membership have assisted managers and assistant managers in serving as volunteer leaders of the young people's clubs in the evening, chaperoning our dances, in getting up center socials, in providing Christmas trees for the children, and the most encouraging sign of all as to the future of the clubs has been their coöperation in local efforts. Local charities have received contributions, local moving picture houses have been followed to see that objectionable performances were not patronized, and we coöperated by helping as we could the unemployment situation, several jobs having been found by members of our groups. Two thousand forty-two (2,042) articles were sent for the relief of the war sufferers from the Boston centers.

To show what these clubs may do on the purely social side, said one member, "I have lived for three years next door to Mrs. —; I never met her until I came here" (to the center).

DANCING.

Probably no one activity causes more discussion than social dancing. Either persons think of the school center as the instrument for meeting this demand of youth and uphold large dances which practically become, unless great care is taken, as promiseous as those run in public dance halls, or dancing is frowned upon utterly and, as a result, brings down caustic criticism upon the whole movement. The department has had to meet the representations of both groups of persons. In

regard to the large dances, we have endeavored to safeguard that situation by stopping all dances where persons could enter freely from the street. The dances at the Washington School were stopped this season in spite of the protests of locally interested persons. There is evidence enough in the hands of the department, however, to prove that it was necessary to go to the extreme for a time, so that, with the exception of an occasional club social for members only, three dances only for members and their friends were permitted, and those in May when our staff had become thoroughly familiar with the local situation and the standards to be maintained in the center.

In East Boston, only those were admitted to the Saturday evening socials who were members of clubs meeting at the center Wednesday or Friday evenings and whose attendance had been regular. The same system prevailed in Charlestown. In the South End a dancing club was organized in coöperation with the South End Improvement Society. This club met once a week and no one was admitted to the Girls' High School gymnasium who was not a regularly enrolled member. In South Boston, center clubs in turn were allowed to give dances in the gymnasium on Saturday evenings. The members were held strictly responsible for the guests whom they invited; the name of the guest as well as that of the club member appeared on the ticket. In Roxbury and Dorchester only occasional large dances were held. These were considered center socials and were participated in by all groups, young and old. It was a requirement of the department that all dances should be chaperoned by members of the Mothers' Clubs or by mothers and fathers of those in attendance. Great care was taken as to decorum. Certainly, under the proper safeguards the use of our gymnasiums for dancing meets a definite social need. In fact, it might justly be claimed we were not living up to our responsibilities to our young people did we not permit dancing. That all our dances were perfect could not be said; that the standard at the end of the year was better than at the first is a fact. Discipline in our centers would be a very easy thing if we debarred all those whose refinement of manner was not that which we hoped ultimately to reach. Coarseness and vulgarity must be instantly stopped. A certain roughness of manner, a kind of sixteen-to-eighteen-year-old hoydenishness must, however, be patiently and tactfully changed. It is in this regard that the adults in our com-

munities can help by sympathetically holding on to the good and softening down objectionable affectations of manner. Moreover, the adult needs to face just these problems which handicap many a life permanently and which result from the neighborhood itself. The fault cannot be laid to any given boy or girl but to those who have failed to guide and safeguard them. The home, the working world, the very people who cry down the follies of the sixteen-to-twenty-year-old boy or girl must bear the stigma. If the centers can weave together the recreational interests of old and young, we shall enter upon a new era of pleasure in America.

ENTERTAINMENTS.

The moving picture shows and programs made up entirely of outside talent were done away with and in the place of these every encouragement was given to our groups to develop their own talent, to put on their own plays and concerts, or to draw to their aid the talents of the neighborhood. Persons appreciate most that for which they work. Active participation in providing for the pleasure of others not only means a strengthening of personal creative power, a kind of inner growth, but is in every way quite a different thing from the inertia which results from having everything provided. Unless the centers can do something different from the commercial dance hall and moving picture show they have no right to exist. The director does not wish to be misunderstood in regard to the attitude toward moving pictures. They serve a real purpose and have their place most decidedly. In laying a foundation for the ultimate growth of neighborhood coöperation, however, the moving picture would have to be used with care. Moving pictures are popular. A free show will attract hundreds. Attendance based on this kind of activity could be won with little expenditure of effort. Hundreds of persons, let us say, frequent a school building once or twice a week. What has resulted by way of center support? Has the individualism which exists in any audience been broken down? Has the center been able to put on an entertainment so artistically superior or in content so much more valuable than the commercial house that the excellence of the performance justifies planning for a series of motion picture evenings? This latter is hardly possible with the present conditions of film rental in

competition with business agencies without the expenditure of sums of money which would make such a venture prohibitive. So that from both points of view, that of working for active membership and that of endeavoring to set artistic and creative standards, the moving picture show as such should not be considered at the present time a main activity. This attitude on the part of the department was protested again and again, but the success of local entertainments, such as performances given of "The Rivals," "Midsummer Night's Dream," and the glee club and orchestra concerts, have proved our best defence.

LECTURES (ENGLISH).

The lecture course in English had to be very hurriedly arranged and under difficulties, since only six weeks of time elapsed from the time the director took office to the first lecture, and lectures are frequently booked from six to ten months in advance. The attempt was to work away from mental vaudeville and meet the desires of those persons in every community who wish accurate and broadening information on current situations or on educational topics. The caption chosen for the course was "See America First." The content of the course dealt with the industrial, educational and political development of North and South America, and the common interests of the countries of the two continents. Whereas the course was considered heavy by many who sought to be amused and who wished us to give up the lectures for moving picture shows, the director received many letters in praise of the speakers and material in the lectures. The course planned for the coming year is on "American Art, Literature and Music." It will be somewhat more popular than the course of 1914-15.

The attendance at the English course was 44,134.

NON-ENGLISH LECTURE COURSE.

This course, given in five languages, with the coöperation of the North American Civic League for Immigrants in interpreting America to the recent arrivals to our shores, is most valuable. It does not, however, test itself and, in following the lectures which dealt with citizenship topics, it was evident that much that was said was not understood in its application. An arrangement has been made for the coming season whereby the lecturers will allow time for questions and answers. The

concert program will be omitted and the singing of national songs substituted as an experiment. The attendance at non-English lectures was 16,209.

MEMBERSHIP.

More emphasis has been placed on getting adults, that is, persons from twenty-five to forty into our centers, and men as well as women, than upon organizing the young people. This as a matter of expediency. Once let this movement be interpreted as a movement for the sixteen-to-twenty-year-old person and other members of the community will stand off from it. Were a new system to be started, organization should begin with local women's clubs, men's clubs, improvement societies and parents' and teachers' associations. The centers as they are now organized, if they serve only those who have no other connection with the day school except as in such special cases as the director may see fit to admit, are meant to serve those sixteen years old and over. This is proving a wise ruling. Older people may cooperate in work for the young, but that is not the same thing as sharing responsibilities on the basis of actual shared membership. There has been, with one exception, East Boston, a gain in adult membership. All the mothers' and homemakers' clubs have been strengthened. Forum meetings have attracted large numbers of men regularly in Dorchester and Roxbury. The industrial classes for women have grown and improvement societies have held some of their meetings with us.

We have arrived at actual membership, counting those persons members who have come regularly to group appointments. Persons who drift in for a night or two or who only attend occasionally have not been counted. Thus far we have had to get a system under way; therefore our program has been intensive. No advertising has been done by the department aside from winning the cooperation of the newspapers. It seemed wise to place our policy before our members, test it out and then begin through the loyalty of the members themselves to wage a membership campaign. The spirit in the centers has been one of the encouraging things about this season's work. If we can maintain our standards and continue to win the same amount of cooperation as this year, our growth and results will be cumulative. Total membership in the centers, 3,408.

ATTENDANCE.

The test of center effectiveness is not to be gauged by the members attracted by entertainments, receptions, dances and socials. This is difficult for most persons to understand. Moreover, the center movement suffers from a certain attitude of mind which plays a part with nearly every one when center activities are run in a school building. The familiar sight of row upon row of night school pupils in groups averaging forty and entirely filling practically every room is in the background of our consciousness. It must be remembered that there is a flux and always will be a flux in attendance upon any voluntary social organization and that by no means lessens the effectiveness of the social organization. In any club there will at times be an overflow of members present; at other times only a handful about a given building. When noted speakers are to appear the dining tables are filled. So with the school centers when there are lectures or dances, or our public officials are entertained, the numbers are impressive, but the work that makes the reality of the value of these larger affairs is the work of the small group activities where needs are met and good fellowship and civic spirit are made contagious from person to person. The success of a center rests on the number and diversity of small, well-knit groups. Moreover, the entirely voluntary side of our membership and the altruistic motive and standard of active participation must be remembered. It would seem better to have two hundred such members than a thousand of whom no social demands were made. Moreover, informality, to a certain point, in the school center marks efficiency. The school center is the one agency that should be flexible enough to carry on any worth-while activity for which there is a demand on the part of fifteen persons or more.

SELF-GOVERNMENT.

Since the chief aim of the school centers is the training for citizenship it follows that self-government is fundamental. Therefore each manager is asked to explain the principles of self-government to the leaders and members of the groups. As a result our clubs have adopted constitutions, have elected officers, and have not only undertaken the serious, disinterested consideration of their own internal affairs but have elected representatives to a center central council.

The central council brings together the delegates from all groups, old and young. The councils all have monthly meetings the minutes of which are filed with the director. Their function is to work out and to put into operation such policies as may be justified within the rulings of the School Committee. Self-government is not an immediate process; personal bias and local difficulties tend to enter into some of the decisions. The situation on the whole is, however, encouraging.

SELF-SUPPORT.

The department may seem to have sufficient funds available to meet its needs. For the present this is true. Future developments, however, need to be considered and it is sometimes forgotten that the department stands as the "Department of the Extended Use of the Public Schools" and that the organization and maintenance of school centers are only a part of the responsibility of the department. The following charges against the funds of the department must be allowed for before the budget can be apportioned to the centers: the cost of Home and School Association meetings, monthly and executive meetings; alumni meetings; expense of graduation parties; certain citizens' meetings of a non-political character; non-English lecture course; English lecture course. These charges are legitimate and it is to be hoped that as time goes on the Home and School Association will greatly strengthen the work of the department and that much can be done to bring the alumni group into closer affiliation with our community organization aims.

We must, however, face the question of steadily increasing demands. With the growth of Home and School Association meetings and alumni meetings more money will have to be set aside for those meetings. Last year twelve districts were served by our English lecture course; this year as many more are asking us to meet their needs. Brighton, Mattapan, Hyde Park and the North End are organizing to secure local school centers. Several petitions have been sent in from national societies — Greek, Italian, and Hebrew — asking that school buildings be opened on Sundays. The department cannot at present spread its scope further. That which has already been undertaken, if it is to be of permanent value, has projected a program five years into the future. Sound, intensive, local work must be done in the communities already touched.

Even in these communities the work can grow only in two ways: by giving of volunteer service to the centers so that more groups can be admitted and have leaders, or by the working out of contributory self-support. For example, if in a given center an orchestra is to be formed and the budget of that center has been entirely planned, the only way to have the orchestra is to get a volunteer leader or to have the members contribute a certain sum a week to pay for the services of a director. This in the centers already operated. As to opening additional centers, the department faces squarely the issue of continuing as now or of adopting the policy of gradually withdrawing the payment of leaders in the centers now running and using that money to meet the cost of janitor service, light and heat so that buildings could be opened in districts not now served. This would mean ruling that the department would meet the expense of opening a school building and of providing the executive officer, the manager, but that the local committees in coöperation with the local citizens would be responsible for the leadership of clubs, for the payment of pianists at dances, and all other charges. This could be done providing the citizens accept the issue and prefer to contribute directly rather than indirectly through taxation without entailing any great financial burden on any of the patrons of centers. Twenty-five women paying ten cents a night can support a dressmaking teacher; a chorus of seventy-five paying five cents a night can support a choral club.

The method of direct assessment for clubs is one means of financing a center. Another method — the one used in New York — is to place in the hands of a local committee of citizens the financial responsibility. This committee manages a series of moving picture shows and dances and out of the profits so gained pays for such industrial work, musical work, or whatever else is not so readily contributed toward. This brings us to facing squarely the arguments for and against self-support that have been presented during the past months and of pointing out the position of this department in regard to the policy of self-support. The department has stood for contributory self-support. The problem involved in our financial situation has been told our members frankly. In the case of many, the tendency to push for legislation for increased funds has come to the front. The department has not encouraged this, consistently pointing out the increased tax burden involved and

upholding the principle of coöperation in spreading the advantages of the present fund created by the many, through contributions on the part of those who desire to have certain activities organized for their special benefit. The value of backing up self-government by direct financial responsibility has also been explained, and the fact that it has been proven again and again that where advantages have been offered free they are not as well supported as where small fees have been asked. This matter of self-support cannot be pushed beyond its acceptance by those whom we serve. It is a matter of slow growth and unfortunately the American public is far from considering any public fund in the way of a personal fund to be safeguarded as one's own. Self-support has, nevertheless, in spite of arguments pro and con made considerable headway, and the spirit, with few exceptions, has been one of enthusiastic coöperation. The following statistics prove this:

Number of self-supporting clubs.....	15
Number of partially self-supporting clubs.....	2
Number of volunteer leaders.....	47

The receptions tendered to his Honor the Mayor at South Boston and at the High School of Practical Arts, the reception to the Lieutenant-Governor and Mr. Corcoran at the Abraham Lincoln School, receptions to Mr. Corcoran at the Dorchester High School, to Mr. Coleman at the Wells School, Postmaster Murray at Charlestown and Samuel McCall at East Boston were all financed by center funds created by contributions from the individual treasuries of the center clubs or from funds raised by an entertainment and dance. The expenses of the intercenter meet, folk-dancing festival, intercenter debate (aside from the shield presented by a friend), massed girls' club social, general mothers' club meeting, where in both cases all centers were represented, were financed by the dividing up of the expenses between the centers. The expense of Christmas entertainments and local neighborhood rallies and socials have been met by local contributions. All dances have been self-supporting. Overtime charges for janitors have not been paid by the department.

In May the question arose as to the legality of having any kind of fee in connection with the centers. This question was

vital as the whole matter of contributory self-support was brought to the front. The Corporation Counsel was consulted and gave the following ruling:

MRS. EVA W. WHITE, *School Committee, Mason Street, Boston:*

DEAR MRS. WHITE,— In reply to your question I interpret chapter 195 of the Acts of 1912 as meaning that neither the School Committee nor any association or individual which is allowed to use the school halls shall permit admission fees to be charged for the use of such halls.

Section 2 provides that the School Committee may appropriate money to cover the expenses of the extended use of school buildings. This indicates that the Legislature intended the School Committee should not make any profit out of the letting of its halls for any of the purposes named in the act. On the other hand, it was not intended that the School Committee should assume or pay any expenses other than those connected with the furnishing, heating, and lighting of the halls and possibly other incidental expenses. If, therefore, music and refreshments are served at any entertainments authorized by chapter 195, it is the duty of the individual or association under whose auspices such entertainment is given to pay these extra expenses. The expenses may be lawfully met by subscription of the persons who are to attend and tickets may be issued in order to identify the subscribers. No admission fee should be charged at the door nor should tickets be sold at the door, and the tickets themselves should show that they are subscription and not admission tickets.

Yours truly,

JOHN A. SULLIVAN,

Corporation Counsel.

The work will, therefore, be organized strictly in accordance with this opinion.

USE OF THE SCHOOL CENTERS AS NEIGHBORHOOD RALLYING POINTS.

No friend of the center movement should make the mistake of saying or implying "if the center movement succeeds, this and this kind of organization will go out of existence." Over-enthusiasm of this sort is one of our greatest handicaps and causes a perfectly natural defensive position to be taken by groups that the centers wish to bring together on the basis of neighborhood unity. Not only this, but such a type of reasoning makes an even graver error. The underlying ethics of the center movement are by such a viewpoint utterly misunderstood. Root, personal loyalties to given groups or organizations are to be upheld because these loyalties mean strength. The center movement is to do a larger thing than to build up

its strength by clearing the field of or supplanting naturally formed groups. Its task is to take its place among the strongest organizations that American genius has been able to develop and not only to rally to its support the individual but to tie together every kind of organization in a community; to enlarge the aims of a given association by causing to be included in it as the result of definite action the support of the school center movement. No center in our system is doing all that it can do and no manager is showing the power of leadership necessary who is not gradually winning the support of local organizations. When it has been reported that the local Welfare League is to stand back of certain activities for young men, the right note has been struck. When a church society or a district women's club takes charge of a program, coöperation is gained. When an improvement society backs the lectures and provides volunteer service, the center is doing its work.

The center year was blocked out as follows:

October to January.— Organization and development of local coöperation. Intensified club work. Christmas parties.

January to May.— Increased number of massed activities, that is, neighborhood socials, entertainments, given locally by the various clubs, such as dramatic performances and concerts ending with the receptions to our public officials.

May.— No leaders were paid after May first. The centers were open, however, until June first and the month was devoted to intercenter meetings in the various sections. For example:

Trial debates ending with the final debate at Roxbury.

Massed mothers' meeting at South Boston.

Massed girls' club meeting, South End.

Folk dance festival, Dorchester.

Track meet, Dorchester.

Intercenter concert given by the affiliated center orchestras, attended by 1,500 people, at the English High School.

Intercenter reception and dance, English High School.

During May, also, each club was asked to work out a program for next year so that the clubs would start with attack in October.

When the time for closing came more than one expression of regret was sent to the central office, and the director found herself asked to a series of spontaneously arranged meetings besides the Saturday walks planned for the young people, the

weekly outings for mothers at our parks, and the baseball games scheduled. Two mothers' clubs gave closing banquets in June, at hotels, the expenses of which were met out of their treasuries. Several tea parties were held in local homes. Every mothers' club planned at least one meeting "to keep together" during July, August and September, and one picnic a month was arranged by the managers for the entire membership of the centers. The young people of East Boston visited Plymouth in August. These outings have done much to cement the center spirit.

APPENDIX D.

EDUCATIONAL ORGANIZATIONS, 1915-16.

I. OFFICIALLY CONNECTED WITH THE PUBLIC SCHOOLS.

1. BOSTON HEAD MASTERS' ASSOCIATION.— *Chairman*, the Superintendent of Schools, *ex-officio*; *chairman*, Charles W. Parmenter; *secretary*, Wallace C. Boyden.

2. BOSTON MASTERS' ASSOCIATION.— *President*, Franklin B. Dyer; *secretary*, Lincoln Owen; *executive committee*, Oscar C. Gallagher, *chairman*; George A. Smith, Mrs. Emma S. Gulliver, Joseph B. Egan, Joseph F. Gould.

3. HIGH SCHOOL COUNCILS:

Ancient Languages Council.— *Chairman*, Herbert T. Rich, Public Latin School; *secretary*, Frank A. Kennedy, Girls' High School.

Commercial Council.— *Chairman*, Ernest V. Page, Brighton High School; *secretary*, Chester M. Grover, Roxbury High School.

English Council.— *Chairman*, Malcolm D. Barrows, English High School; *secretary*, Mary I. Adams, West Roxbury High School.

History Council.— *Chairman*, Alva T. Southworth, English High School; *secretary*, Charles T. Wentworth, Dorchester High School.

Manual Arts Council.— *Chairman*, Adalena Farmer, Dorchester High School; *secretary*, Ruby G. Allen, Hyde Park High School.

Mathematics Council.— *Chairman*, John W. Regan, Charlestown High School; *secretary*, Gracia E. Read, East Boston High School.

Modern Languages Council.— *Chairman*, Frances B. Wilson, West Roxbury High School; *secretary*, Mary T. Loughlin, Roxbury High School.

Science Council.— *Chairman*, Adelbert H. Morrison, Mechanic Arts High School; *secretary*, George D. Bussey, East Boston High School.

4. BOARD OF TRUSTEES OF THE BOSTON PUBLIC SCHOOL TEACHERS' RETIREMENT FUND.— *President*, Michael H. Corcoran; *secretary*, Alfred Bunker; *custodian*, Charles H. Slattery, City Treasurer; *trustees elected from the School Committee*, Joseph Lee, Frances G. Curtis; *trustees elected by the association*, Frederic A. Tupper, Abbie G. Abbott, Loea P. Howard, Annie C. Bunker; *trustee ex-officio*, the Superintendent of Schools.

5. ADVISORY COUNCIL ON ELEMENTARY SCHOOL BOOKS AND EDUCATIONAL SUPPLIES.— *Chairman*, John F. McGrath, Eliot District; *secretary*, Frederick W. Swan, Quincy District.

II. COMPOSED WHOLLY OR MAINLY OF BOSTON TEACHERS.

6. ASSOCIATION OF TEACHERS OF PHYSICAL EDUCATION.— *President*, Edith T. Sears; *vice-president*, Bessie W. Howard; *secretary and treasurer*, Mabel S. Morse; *executive committee*, Florence R. Skinner, Florence M. Young.

7. BIOLOGICAL CLUB OF THE BOSTON NORMAL SCHOOL.—*President*, Eliza D. Graham; *vice-president*, Laura S. Plummer; *treasurer*, M. E. Towne; *secretary*, Jessie K. Hampton; *executive committee*, Emma Plummer, Mary Driscoll, Ava Dawson, Edith Snow, Elsie Karlson.

8. BOSTON ASSOCIATION OF SCHOOL PRINCIPALS.—*President*, George W. Evans; *vice-president*, Frederic H. Ripley; *secretary*, Charles F. Merriek; *treasurer*, Frederic L. Owen.

9. BOSTON COOKERY TEACHERS' ASSOCIATION.—*President*, Mary C. Mitchell; *secretary*, C. Jane O'Brien; *treasurer*, Emeline E. Torrey.

10. BOSTON EDUCATIONAL SOCIETY.—*President*, Frederick C. Adams; *vice-president*, Thomas G. Rees; *secretary*, Francis A. Smith; *treasurer*, Eugene M. Dow.

11. BOSTON ELEMENTARY TEACHERS' CLUB.—*President*, Florence A. Goodfellow; *vice-presidents*, Julia E. Sullivan, A. Harriet Haley; *recording secretary*, Abbie G. Abbott; *corresponding secretary*, Mary F. MacGoldrick; *treasurer*, Ellen G. Hayden; *directors*, Martha E. Hall, Annie A. F. Mellish, Mary E. Donovan, Susan S. Foster, Mary I. Hamilton, Imogene Owen, Evelyn L. Alley, Annie E. Haley, Elizabeth R. Bradbury, Margaret L. Toole, Minnie F. Sutherland.

12. BOSTON HIGH SCHOOL MASTERS' CLUB.—*President*, John Haynes; *vice-president*, Patrick T. Campbell; *secretary-treasurer*, Arthur F. O'Malley; *executive committee*, Carlton Preston, Philip Goodrich, Ambrose B. Warren.

13. BOSTON MANUAL ARTS CLUB.—*President*, Fannie Prince; *vice-president*, Katharine Robinson; *secretary*, Sallie Johnson; *treasurer*, Martha Hall.

14. BOSTON NORMAL SCHOOL KINDERGARTEN CLUB.—*President*, Alice E. Leavens; *vice-president*, Katherine A. Daly; *secretary and treasurer*, Mary I. F. Montgomery.

15. BOSTON PUBLIC SCHOOL NURSES' ASSOCIATION.—*President*, Mary Callaghan; *vice-president*, Mary Donovan; *treasurer*, Minerva Peckham; *secretary*, Josephine Ellis.

16. BOSTON SCHOOL MEN'S CLUB.—*President*, Michael J. Downey; *secretary*, Malcolm D. Barrows; *executive committee*, Frank V. Thompson, Maurice J. O'Brien, Arthur L. Gould, Leonard B. Moulton, Mark B. Mulvey, Adelbert H. Morrison, Herbert S. Weaver, Malcolm D. Barrows, Michael J. Downey.

17. BOSTON SEWING TEACHERS' ASSOCIATION.—*President*, Bertha M. Pattee; *vice-president*, Margaret C. Crane; *corresponding secretary*, Mary A. Mulrey; *recording secretary*, Lillian McCormick; *treasurer*, E. Marie Lappan; *auditor*, Evelyn F. Lally; *board of directors*, Ellen E. MacHugh, Nida F. Vesper, Helen E. Hapgood, Katherine E. Leary.

18. BOSTON TEACHERS' CLUB.—*President*, Dora Williams; *vice-presidents*, M. Elizabeth Mailman, Bertha V. Cudworth, Julia E. Dickson; *recording secretary*, Annie R. Mohan; *corresponding secretary*, Margaret A. Nichols; *financial secretary*, A. Isabelle Macarthy; *executive secretary*, Marietta S. Murch; *membership secretary*, Esther F. Sullivan; *treasurer*, Elsie M. Blake; *assistant treasurer*, E. Leora Pratt; *directors*, Lillian S. Allen, Carrie E. Hoit, Fannie B. Prince, Edith A. Scanlon, Clara S. Gay, Dora L. Lourie, Rachel Rosnosky, Grace G. Starbird.

19. BOSTON TEACHERS' MUTUAL BENEFIT ASSOCIATION.— *President*, Augustus H. Kelley; *vice-president*, Katherine K. Marlow; *financial secretary*, Henry C. Parker; *recording secretary*, Jennie F. McKissick; *treasurer*, Herbert L. Morse; *trustees*, Mary B. Adams, Florence Cahill, Lucy W. Eaton, Julia G. Leary, Ella L. Macomber, Marietta S. Murch, Esther F. Porter, Edward W. Schuereh, Charlotte E. Seavey, William B. Snow.

20. CLUB OF FIRST ASSISTANTS IN CHARGE.— *President*, Catherine Foley; *vice-president*, Katherine Daily; *recording secretary*, Mary E. Williams; *corresponding secretary*, Caroline F. Cutler; *treasurer*, Laura L. Newhall; *executive committee*, Mrs. Alice M. McDonald, Alice Greene, Carrie A. Waugh, Georgia D. Barstow, Annie M. Niland.

21. HIGH SCHOOL ASSISTANTS' ASSOCIATION.— *President*, Matilda A. Fraser; *vice-presidents*, Abby C. Howes, Marian A. Hawes; *treasurer*, Sybil B. Aldrich; *secretary*, Prudence E. Thomas.

22. HYDE PARK TEACHERS' ASSOCIATION.— *President*, Arthur W. Armstrong; *vice-president*, Abby C. Howes, Elsie M. Burgess; *secretary*, Mary Shute; *treasurer*, Bertha F. Munster; *executive committee*, Della S. Scott, Mary F. Thornton, Helen M. Gidney, Evelyn L. Alley, Mary J. Mulcahy, Mrs. Frances E. Brigham.

23. LADY TEACHERS' ASSOCIATION.— *President*, Elizabeth Palmer; *vice-president*, Mrs. Helen A. Emery; *secretary*, Isabella Bissett; *financial secretary*, Alice Ryan; *treasurer*, Katherine Haskell; *executive committee*, *chairman*, Alice Ryan.

24. MASTERS' ASSISTANTS' CLUB.— *President*, E. Gertrude Dudley; *vice-president*, Lucy W. Eaton; *recording secretary*, Katherine E. Lahey; *corresponding secretary*, M. Elizabeth Mailman; *treasurer*, Lillian W. Prescott; *executive committee*, Jessie W. Kelly, Emma M. Jenkins, Jennie M. McKissick.

25. SUB-MASTERS' CLUB OF BOSTON.— *President*, James A. Crowley; *vice-president*, Elmer E. Sherman; *secretary-treasurer*, John F. Suckling.

APPENDIX E.

LOCAL SCHOOL AUTHORS, 1914-15.

SCHOOL COMMITTEE.

JOSEPH LEE:

"Play in Education."—Macmillan Company. New York. 1915.
vii., 494 pages.

BOARD OF SUPERINTENDENTS.

FRANK V. THOMPSON:

"Commercial Education in Public Secondary Schools."—World
Book Company. Yonkers, N. Y. 1915. 196 pages.

"Vocational Guidance in Boston."—*School Review*. January, 1915.
9 pages.

"Industrial Society and Industrial Education."—*School and Society*.
February, 1915. 4 pages.

"Equalizing Educational Opportunities."—*Educational Administration
and Supervision*. June, 1915.

GIRLS' LATIN SCHOOL.

MATILDA ALEXANDRA FRASER:

"Cape Cod Pageant in the Making."—*Boston Evening Transcript*.
August 13, 1914. Two columns, editorial page.

CAROLYN M. GERRISH:

"Secondary School Composition."—*Educational Review*, Columbia
University Press. New York. Vol. 49. February, 1915. Pages
126-135.

"Moving Pictures and English Composition."—*The English Journal*.
Chicago. Vol. IV. April, 1915. Pages 226-230.

ERNEST G. HAPGOOD:

"Efficiency in the Public Secondary School."—*Education*. Boston.
Vol. XXXV, No. 10. June, 1915. Pages 633-651.

BRIGHTON HIGH SCHOOL.

FREDERIC ALLISON TUPPER:

"The Shrill Chirp of a Critic."—*Harvard Alumni Bulletin*. Vol.
XVI, No. 22. 1914.

"The Boston Teachers' Retirement Fund."—*The Boston Teachers'*
News Letter. Vol. III, No. 4. January, 1915.

"Honor to Whom Honor is Due."—*Boston Transcript*. December,
1914.

"In Memoriam, Eugene Dexter Russell."—Massachusetts School-
masters' Club.

"The Treeless Yard."—*Harvard Alumni Bulletin*. Vol. XVII, No. 33.

DORCHESTER HIGH SCHOOL.

WILLIAM LINCOLN ANDERSON:

"The Stimulative and Correlative Value of a Well-balanced Course in Commerce and Industry."—*School Review*. September and October, 1914. 16 pages.

ALBERT S. PERKINS:

"Latin a Foundation for English in Commercial Classes."—*The Boston Teachers' News Letter*. June, 1914. *Journal of Education*. July 9, 1914. 4 pages.

"The Classics as a Source of English."—*The Outlook*. June 6, 1914. 2 pages.

"Latin as a Vocational Study in the Commercial Course."—*The Classical Journal*. October, 1914. *Journal of Education*. December 10, 1914. 8 pages.

"Latin as a Vocational Study."—*The Journal of Home Economics*. October, 1914. 4 pages.

"Vocational Values of Knowing Latin" (with editorial comment).—*The Christian Science Monitor*. December 21, 1914. Two and one-half columns.

HIGH SCHOOL OF COMMERCE.

EDWARD BERGE-SOLER:

Regular editorial work for the Spanish Edition of "The Boot and Shoe Recorder." From June, 1914, to June, 1915.

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MICHAEL S. DONLAN:

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FREDERIC W. LINCOLN DISTRICT.

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GEORGE PUTNAM DISTRICT.

KATHERINE W. HUSTON:

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APPENDIX F.

ASSOCIATIONS OF PARENTS CONNECTED WITH THE
BOSTON PUBLIC SCHOOLS, 1915-16.

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No Parents' Association.

PUBLIC LATIN SCHOOL.

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DORCHESTER HIGH SCHOOL.

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EAST BOSTON HIGH SCHOOL.

No Parents' Association.

ENGLISH HIGH SCHOOL.

No Parents' Association.

GIRLS' HIGH SCHOOL.

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HIGH SCHOOL OF COMMERCE.

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HYDE PARK HIGH SCHOOL.

HYDE PARK HIGH PARENT-TEACHERS' ASSOCIATION.— *President*, George W. Earle.

MECHANIC ARTS HIGH SCHOOL.

No Parents' Association.

ROXBURY HIGH SCHOOL.

THE ROXBURY HIGH HOME AND SCHOOL ASSOCIATION.— *President*, Melville C. Freeman; *secretary*, Bessie W. Howard, High School of Practical Arts.

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No Parents' Association.

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BOSTON CLERICAL SCHOOL.

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BOSTON INDUSTRIAL SCHOOL FOR BOYS.

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INDEX.

A.		Page
Arithmetic		105
Art		17
In Normal School		48
In Special Classes		51
Assistant Superintendents, The Work of		22
Associations of Parents		158
Authors of Local School Publications		153
B.		
Boston Industrial School for Boys		13
C.		
Clerical School		8
College Graduates, Plan for Training for Service in Boston High Schools		23
Committees on Standards, Work of	86,	112
Conclusion		82
Continuation Schools		15
Compulsory		80
Voluntary		79
Cookery		18, 54
Coöperative Courses in High Schools		53
Coöperative Industrial Course in:		
Dorchester High School	8, 13	
Hyde Park High School	8, 13	
Course of Study, Elementary:		
Coöperative Method of Revision		84
Improvement of		6
Supervision of Revision		81
Teacher Committees		85
Courtis Tests		105
D.		
Dancing		137, 138
Disciplinary Day School		21
Dorchester High School:		
Coöperative Industrial Course		8, 13
Drawing		44
E.		
Educational Investigation and Measurement		28
Advisory Committee		113
Bulletins of		109
Department Staff		110
Report of		84

	Page
Educational Measurement, Aim of	101
Present Status of	102
Educational Organizations	150
Educational Results, Measurement of	100
Process of Improving	101
English, Accurate Copying	102
Evening and Continuation Schools	15, 19, 77
Evening Industrial Work	13
Extended Use of Public Schools	20, 42
G.	
Geography	104
H.	
Household Science and Arts	53
Home Tasks	55
In High Schools	56
Hyde Park High School, Coöperative Industrial Course	8, 13
I.	
Industrial Education	8, 13
Instruction, Methods Employed to Improve	107
Intermediate Schools	10, 119
Introduction	5
J.	
Junior High Schools	119
K.	
Kindergarten, The	12, 56
Afternoon Work	61
Extension of Ideas to Grades	62
L.	
Lectures in School Centers	141
M.	
Manual Arts	17, 44
Mechanic Arts High School, Reorganization of	8, 14
Medical Inspection	18, 26
Montessori Class, Report on	58
Mothers' and Homemakers' Clubs	138
Moving Picture Entertainments	140
Museum of Fine Arts, Coöperation of	47
Music	16, 29
N.	
Normal School, Reorganized	7
O.	
Organizations of Parents	158
Organizations within the Service	150

P.		Page
Parents' Associations		158
Penmanship		105
Physical Defectives, Work with		12, 69
Physical Training		18
Practice and Training		33
Prevocational Centers		10
Prevocational Classes for Girls		55
Prevocational Shopwork		51
Publications of Teachers and Others		153
Q.		
Questions on Teaching for Self-Improvement of Teachers		97
R.		
Rapid Advancement Classes		21
Rating of Teachers		110
S.		
Salesmanship, Organized Courses in		8
In Continuation Schools		75
In High Schools		72
School Attendance of Unemployed		82
School Centers		128
School Hygiene		26
Secondary Teachers, Important Step in Training of		23
Selection of Candidates, Basis for		24
Sewing		18, 54
Special Classes, Work with		64
Spelling		103
Standards in Arithmetic		107
Summer Review Schools		20
Syllabuses:		
New Features in Part I.		87
Present Status and Future Plans		89
T.		
Teachers:		
Opportunities for Professional Activity		5
Plan for Promotion on Merit		89
Rating the Efficiency of		95, 110
Teacher Committees, Elementary Course of Study		85
Teacher Conferences, Purposes of		86
Tests in Arithmetic		105
Trade School for Girls, The		13
V.		
Vocational Guidance		14, 15, 37

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