UNITED STATES BUREAU OF EDUCATION
BULLETIN, 1911: NO. 4 . . . . . WHOLE NUMBER 450

REPORT OF THE COMMISSION APPOINTED TO STUDY THE SYSTEM OF EDUCATION IN THE PUBLIC SCHOOLS OF BALTIMORE

WASHINGTON
GOVERNMENT PRINTING OFFICE
1911

CONTENTS.

LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, June 20, 1911.

SIR: On the 7th of February of this year I addressed to the Secretary of the Interior the following letter:

"I have the honor to transmit herewith a communication from the chairman of the committee on rules of the board of school commissioners of Baltimore city, informing me of the action of that board in providing for the appointment of a commission to investigate and report upon the system of education now in force in the public schools of that city, and requesting me to become the chairman of such commission. I would respectfully request your opinion as to the question whether I may properly accept this invitation.

"I may say that, on careful consideration of this communication from the Baltimore board of school commissioners, my own judgment inclines strongly to the view that the proposal is in accord with the statutory functions of the Commissioner of Education, and that the rendering of such service as is requested is one of the ways in which this office can most effectively collect 'such statistics and facts as would show the condition and progress of education' and diffuse 'such information respecting the organization and management of schools and school systems, and methods of teaching, as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country.' I am accordingly disposed to accept the invitation if in your opinion I may properly do so. It is understood that I could not accept compensation from the school authorities of Baltimore for any such service, nor receive from them any payment other than a reasonable allowance for personal expense incurred in making the inquiry."

This letter was returned to me with the following indorsement:

"Approved February 8, 1911.

"Such engagement not to interfere with the official duties of the commissioner.

"R. A. BALLINGER, *Secretary.*"

The work of the commission referred to has now been completed and its report is ready for publication. This report, in the preparation of which the commission has been largely assisted by the staff of two divisions of this bureau, is mainly concerned with a comparison of the Baltimore system of education with the systems found in others of our greater American cities. It seems to me that it will accordingly be of very general interest to educational authorities and students of education throughout the country. I beg, therefore, to recommend that it be published as one number of the bulletin of the Bureau of Education, and have the honor to transmit the manuscript herewith for such publication.

Very respectfully, ELMER ELLSWORTH BROWN,
Commissioner.

The SECRETARY OF THE INTERIOR.

THE COMMISSION.

Members:

Elmer Ellsworth Brown, Commissioner of Education of the United States, Washington, chairman of the commission.

Ellwood P. Cubberley, professor of the theory and history of education in the Leland Stanford Junior University.

Calvin N. Kendall, superintendent of schools, Indianapolis, Ind.

Assistants:

Milo B. Hillegas, chief of the editorial division, Bureau of Education, Washington, secretary of the commission.

Harlan Updegraff, chief of the division of school administration, Bureau of Education, Washington.

REPORT OF THE COMMISSION APPOINTED TO STUDY THE SYSTEM OF EDUCATION IN THE PUBLIC SCHOOLS OF BALTIMORE.

LETTER TO THE BOARD OF SCHOOL COMMISSIONERS.

BALTIMORE, MD., *June 1, 1911.*

The BOARD OF SCHOOL COMMISSIONERS.

GENTLEMEN: Your commission appointed to inquire into the system of instruction in the public schools of Baltimore has the honor to present herewith a report of such inquiry. In so doing, we beg to call attention at the outset to those observations and recommendations which seem to us of chief importance. This letter accordingly presents the main outcome of our inquiry. The subjects here mentioned are discussed at greater length in the pages which follow, along with many others which have seemed to us worthy of consideration.

It will be remembered that the commission was charged with an inquiry touching only the educational side of the city school system. The business side has received notice only in so far as has seemed necessary to an understanding of the system of instruction. On the educational side, too, those topics have received chief attention which have appeared to be of chief significance in the Baltimore situation, leaving other important topics for only incidental treatment. An exhaustive study of so large a system of schools would have required a much longer time than that which we have had at our disposal. As it is, some parts of our work have had to be done too hastily. Join to this the fact that we have had to proceed with no well-defined precedents for our guidance, and it will appear that there is some ground for indulgence if defects are found in our report.

It should be added, however, that within reasonable limits every effort has been put forth to make this inquiry thoroughgoing and comprehensive. At our request, the time originally proposed for its completion has been extended by some weeks. The members of the commission and their assistants have given close personal attention to the matters coming under consideration, having spent much time in Baltimore for this purpose and having made many comparisons with the educational systems of other cities. The methods which we have pursued are described more particularly on pages 20–21 of this report.

In arriving at conclusions and making recommendations, our aim has been, as far as possible, to avoid presenting mere opinions of our own, and to set forth instead conclusions drawn from the most fruitful experience of other American cities.

SUMMARY.

(1) As regards the outward organization of its educational affairs, under the charter of 1898, Baltimore shows elements both of strength and of weakness. On the whole, however, the school provisions of that charter are of the better class, and offer a reasonable opportunity for effective school administration. We have received from many sources the information that under the earlier form of organization, with a large board of school commissioners elected by wards, the school affairs of the city were involved in local and partisan politics. There is abundant evidence that conditions have changed for the better under the charter provisions now in force. It would carry us beyond the proper scope of this report to point out particulars in which those provisions might still be improved. But what is of chief importance here is that we call attention to the danger, always present, even under improved forms of administration, of a return to pernicious political conditions. The health of a system of schools depends upon the fidelity of that system to the interests of the whole community, quite apart from private and factional interests. To keep the schools on this high plane of public service, above all partisanship, is the first concern of those charged with their administration.

(2) The expenditures for education in the city of Baltimore are relatively low. It is to be remembered when adverse criticism is presented in this report that the operations under review have been conducted on a comparatively narrow allowance of public funds. At certain points, chiefly those touching supervision, the salaries of teachers, and elementary school buildings, the recommendations which we present involve an increase of expenditures. We have, however, refrained from suggesting any increase which would carry the expenditures for the school department of Baltimore above the expenditures for the schools of other cities of approximately the same population, or above the average per capita expenditures for education in the larger cities of this country.

(3) The net result of our inquiry into the system of education is an opinion favorable to that system. While we find much to criticize adversely, we have taken into account the historical development of the system and its very moderate cost at the present time. In view of these considerations, we are justified in rendering a report which, in its main outlines, is positively favorable. With reference to any

school system the important thing is not so much the question, What is its present status? as that other question, Is it moving in the right direction? It is clear to us that, under the charter of 1898, in spite of certain particulars in which changes are still called for, the general movement in Baltimore has been unmistakably in the direction of improvement. We have, in fact, been repeatedly struck with admiration for progress which has been made in the face of more than ordinary difficulties.

It seems to us that this forward movement in Baltimore has been checked of late by those controversies which are a matter of common knowledge. The many personal bearings of such controversies, which apparently constitute a considerable element in the actual situation, lie outside of the field of this inquiry, and your commission has endeavored to keep entirely clear of all such considerations. We have become convinced, however, that an urgent need of the school system is the united support of the community. The aims and plans of the school authorities, as well as the measure of success that has thus far been attained in carrying those purposes into effect, are worthy of the confidence of the people of Baltimore. Such recommendations as are made independently in this report are found to be in general accord with the present policies of the school administration and point in the direction of a rational development of those policies.

Some measure of difference of opinion respecting any school system is always to be expected. When controversy becomes embittered, however, it not only arrests the progress of improvements and accentuates reactionary tendencies, but in particular it increases the danger that the schools will be brought into political entanglements. We call repeated attention to this danger, because we believe it is a vital consideration in any public-school system.

(4) In its general scope the school system calls for approval. Expenditures have been concentrated upon what may be called the central core of the system, the ordinary elementary and high schools, and very little has gone to extensions and appendages of the school system. We do not commend the Baltimore system for the relatively slight attention which it has devoted to the so-called "wider uses of the school plant," but we do regard it as good judgment on the part of the school authorities that, so long as the funds available for the schools have been relatively low, they should have been employed for ordinary school purposes.

In the time at our disposal, it has been impossible to make any examination of the City College, the high schools, and the Polytechnic Institute. We have visited a number of the schools for colored people, but have been unable to give attention to the special questions which relate to such schools.

Within the scope of the ordinary elementary schools, important provision has been made for variety in the instruction and training offered, to meet the various needs of pupils. We refer particularly to the variety of needs which grows out of a variety of abilities. We know of no system of schools in which better provision is made for pupils of more than ordinary ability than that which Baltimore offers in the so-called preparatory classes. After observing these classes and considering the arguments concerning them, both pro and con, we are unanimous in regarding them as among the best features of the Baltimore system. The provision which is made for backward pupils and for pupils who are hard to govern, as well as for habitual truants, calls in the main for decided commendation.

One provision which has been a subject of controversy should be mentioned here, namely, that relating to the so-called sectional teaching. This is an arrangement by which, in a portion of their studies, the pupils under one teacher are not taught as a single class but are divided into two groups. The arguments for and against this practice have been admirably summed up in the superintendent's annual report of the New York City schools for the year 1910 (see Appendix A). We agree with Supt. Maxwell in his favorable judgment regarding the group or sectional plan. We have found in different schools in Baltimore a wide divergence among teachers and principals in their understanding of the present requirements as to sectional teaching. It would seem to us probable that the opposition to that system would disappear if the regulations, both nominal and implied, were more generally understood. This is one point out of many in which we have found a larger provision for school supervision desirable.

(5) The system of school supervision has received particular attention. We regard the supervision of schools as a means of helping the class teachers and increasing their efficiency. Where the supervisory force is small the members of the board of superintendents can meet the individual teachers only at long intervals, and supervision must be too largely carried on through general orders and directions. These are liable to misunderstanding. As a consequence supervision by a small staff of superintendents is sometimes felt as repressive and onerous, where supervision directed to the same ends by a fairly large and efficient staff would be found altogether helpful. In comparison with other cities Baltimore appears to be provided with an insufficient corps of supervisory officers.

At the time of its adoption, the division of the schools into groups, each of which was placed in charge of a group principal, was manifestly a wise and useful arrangement. It still serves a useful purpose, and we recommend that it be modified only by a gradual process. It provides for supervision by "vertical" divisions; that is, one

group, embracing all of the elementary grades from the first to the eighth, under a single head, stands side by side with a similar group, and the same arrangement is repeated throughout the city. This system is supplemented with supervision by "horizontal" divisions, as in the case of certain special subjects, music, drawing, and others, the supervisor of instruction in one of these subjects having relations with the teachers in all of the groups so far as they are concerned with teaching that subject. We recommend an increase in the amount of such "horizontal" supervision. Whether by special subjects or by certain grades in the schools or by any other convenient arrangement, such supervision should bind the different groups together in a common understanding of a common work.

This will involve a moderate increase in the number of assistant superintendents or of supervisors in special subjects or of both. It is of the utmost importance that the city should secure for such positions the persons best equipped, by native endowment and by professional training and experience, that can be had in any part of this country.

With the development of such a supervisory body it may be found desirable to replace the group-principal system with provision for a supervising principal in each school building. Such a change, however, must depend in many instances upon the erection of large schoolhouses in place of the small and unsuitable buildings which are now in common use.

(6) As regards the teaching staff, there are aspects of the situation in Baltimore which call for careful consideration. Under existing charter provisions the teachers have permanent tenure of their positions. While they may be dismissed for cause, the prescribed procedure is such as to render dismissal practically impossible save in extreme cases. Such an arrangement has its advantages, particularly when it protects a sifted body of trained and competent teachers. Here it has been applied to a body of teachers the great majority of whom were appointed to positions in the school department under the conditions obtaining before the present charter provisions went into effect, and upon a requirement of only the most meager preparation.

The teaching body as we have seen it, even leaving out of account those members appointed under the requirements now in force, is much better than those earlier requirements might lead one to expect. We have seen teachers in Baltimore whose work would rank with the best with which we are familiar, and we are glad to pay honor to the service they are rendering. But alongside of much that is good and some of it extremely good, there is much that we should regard as poor and much more that, at best, is of mediocre quality. In this matter, it is not sufficient to have a high average, the low grade of

efficiency at one point being offset by a high grade of efficiency at another point. The pupils under the teacher of low efficiency are not helped by the fact that there is high efficiency somewhere else. It is a high general level of efficiency that the school administration must seek to establish and maintain. It has seemed to us that much of the complaint which has come from the parents of school children in Baltimore is caused by the imperfect work of the weaker members of the teaching force, who are practically secure in their positions, under the conditions referred to above.

It is not to be forgotten that what is needed in a modern teaching body is not only efficiency but progressive efficiency. The requirements in teaching are changing from year to year as are the requirements in other fields of activity. A body of public-school teachers should be so well trained, both professionally and in general, that they can carry forward a program of continuous educational improvement.

So far as the future is concerned, this requirement is fairly well met by the higher standard which has been set for entrance upon a teaching position, and by provision for the preparation of teachers in city training schools. As was noted above, the more efficient of the teachers appointed in earlier years are doing good work. The problem which has confronted the educational authorities has been that of raising the general level and of raising the minimum level of the less progressive and efficient portion of the corps of teachers.

Closely connected with this problem is the question concerning the salaries of the teachers. We have no hesitation in expressing the opinion, based on the experience of other cities, that the present scale of salaries is too low. This seems to us so clear as to call for no extended discussion at this point.

The commission regards promotional examinations as a proper and serviceable method looking to the improvement of a body of teachers, many of whom are below a reasonable standard for the present day as regards general and professional education. It is not the only method to that end, but is probably as effective, under ordinary circumstances, as any that might be employed. We see no reason accordingly to condemn the system in principle. The real question regarding its employment in Baltimore seems to us merely the practical question as to how far it can be made to work. The fact that a majority of the Baltimore teachers are opposed to it and that this opposition has produced something like a deadlock, in that many of the teachers have even sacrificed a chance for an increase of salary rather than take the examinations, seems to us, accordingly, to present not so much a question of principle as a question whether better results can be secured by a modification of the method.

There is, however, a fundamental principle back of the whole matter, and that is the principle that, for the good of the whole people, the teaching force of the city should be made as effective as possible. It seems to us that the educational authorities of the city, on the one hand, and those teachers who are opposed to the promotional examinations, on the other hand, agreeing upon this fundamental principle, should come to agreement as to the methods of carrying it into effect; and that on both sides there should be a readiness to make some concessions with a view to such agreement. It is reasonable to expect that such agreement may be reached when both sides are seeking the same end, and it is worth while to make every effort to accomplish this result. Failing in that, the board of school commissioners, in whom the legal responsibility for the conduct of the schools is reposed, should adopt and carry into effect such regulations as may seem to them to meet the case; and in so doing they should have the general support of the community and the support of the teachers themselves.

Various circumstances combine to give to the training school for white teachers a position of unusual influence in the school system. This is a situation which has been turned to the advantage of the schools in a variety of ways, and can be made of still greater advantage. As soon as practicable the training school should be adequately housed and equipped. Its management and that of the corresponding school for colored teachers, together with the oversight of the work of substitute and probationary teachers, might with profit be unified and given a large place in a general plan for the more adequate supervision of the schools.

(7) One striking instance has come to our notice in which the Baltimore teachers have been individually consulted regarding an important question of general policy, in cooperation with the supervisory officers and the staff of the training school for white teachers. That is in the framing of the present courses of study. While many criticisms of these courses have appeared, we find on careful comparison that they do not differ greatly from the courses now followed in others of our large American cities. On the whole, the Baltimore courses appear from such comparison to be moderately conservative. They devote somewhat more than the average time to the old and universally recognized subjects of instruction, including reading, writing, and arithmetic. Certain minor particulars are noted in which they seem to deviate unduly from the general practice of the present time, as in the relatively large amount of time devoted to the study of common fractions. The changes which have been made in these courses in recent years do not seem to have been more numerous or extensive than those which have been made in other cities.

About an average amount of experimentation with new plans and materials, as well as new methods, has taken place, and the general

trend in these changes and experiments has not varied greatly from that in the country at large. This is well illustrated in the case of English grammar, concerning which there has been adverse criticism. The formal study of this subject has changed in Baltimore very much as it has changed in other American cities. That is, it has here as elsewhere come more and more to be restricted to the upper grammar grades.

Nearly a generation ago Baltimore was among the first of American cities to introduce manual training into the schools. The time now devoted to such training is not unreasonable in amount, being only a little above the average for the larger American cities. As yet Baltimore has made only a slight beginning in the more strictly industrial training. We regard it as desirable that experimentation in this difficult and important branch of the newer education should be carried steadily forward, but not too rapidly for a careful appraisement of results and methods.

(8) With occasional exceptions we have found the order and government of the schools deserving commendation. We should judge from what we have seen that the ordinary and traditional relations between pupils and teachers are good. We can not pass an opinion, from personal observation, upon the more difficult and critical aspects of the government of the schools, inasmuch as the most troublesome pupils seldom show their worst side when visitors are present. On general principles we should not advise the restoration of the rod as a means of discipline. It may, however, be found advisable to make its use permissive, under proper safeguards, in the rooms provided for pupils who are more than ordinarily hard to govern, where it may offer one more "last resort" in dealing with really insubordinate pupils. Even if its use should be permitted in these special rooms, the best teachers of such classes would have recourse to it but rarely.

The subject of coeducation of boys and girls has not, so far as we can learn, aroused such serious question in other cities as has recently been raised in Baltimore. The preponderance of American opinion seems to be very markedly on the side of coeducation in both primary and grammar schools. In the absence of any well-ascertained information which would show plainly that coeducation in these grades presents fewer advantages and greater evils than separate education, we can not advise the transformation of the mixed schools into schools in which the sexes are separated. Public schools of both types exist in Baltimore to-day. Considerable expense would undoubtedly be involved in the attempt to reduce all of these to the one type of the school in which boys and girls are separated, and such expenditure must inevitably delay improvement in other directions where the need of change is more manifest.

(9) Finally, attention should be called to the unsatisfactory condition of many of the schoolhouses. Baltimore is not the only city that is at fault in this respect, and the newer schoolhouses of Baltimore mark a great improvement over the old. We should not be excusable, however, if we failed to call attention to the serious condition of many of the older buildings as regards danger from fire and their unsuitable and insanitary character in general.

The commission has been harmonious throughout, and it presents a unanimous report. With only negligible exceptions we have been treated with the utmost courtesy by all of those with whom we have had to do in the course of this inquiry. We desire to return our thanks for all of these courtesies. On our own part we have endeavored to give full and impartial consideration to all information and suggestions which have come to us, from whatever source. It has been our single purpose to aid the city of Baltimore, as represented by its board of school commissioners, in the effort to make the city system of schools as efficient as possible. We have become convinced that a highly efficient system may be built up, from the beginnings already made, by measures of constructive improvement, such as we have outlined in part, rather than by any revolutionary procedure.

All of which is respectfully submitted.

ELMER ELLSWORTH BROWN,
ELLWOOD P. CUBBERLEY,
CALVIN N. KENDALL,
Commission.

CHAPTER I.

HISTORY AND METHOD OF THE STUDY.

THE APPOINTMENT, ORGANIZATION, AND WORK OF THE COMMISSION.

On January 25, 1911, the board of school commissioners of the city of Baltimore adopted the following resolution:

"Whereas the committee on rules, curriculum, and textbooks of this board has heretofore been charged by this board with the duty of considering the curriculum now in effect in the public-school system of this city; and

"Whereas it is the sense of this board that for the purpose of assisting the committee in its labors it is advisable that a commission shall be appointed to investigate and report upon the system of education now in force in the public schools of this city:

"*Resolved*, That the committee on rules, curriculum, and textbooks be, and it is hereby, directed to employ a commission of three disinterested, competent persons to investigate and report upon the system of instruction now in force in the public schools of Baltimore City and to spend a sum not exceeding $2,000 for this purpose."

After an informal conference between the Commissioner of Education and Gen. Lawrason Riggs, president of the board of school commissioners of Baltimore, and Mr. George A. Solter, chairman of the committee on rules, textbooks, and curriculum, held in Washington January 27, 1911, the chairmanship of the commission was tendered to the Commissioner of Education by letter dated January 31, 1911, and was accepted by him by letter dated February 10, 1911. The correspondence referred to is as follows:

BALTIMORE, MD., *January 31, 1911.*

Dr. ELMER E. BROWN,
United States Commissioner of Education,
Washington, D. C.

DEAR SIR: In conformity with our interview on last Friday, I inclose you herewith a copy of the resolution of the board of school commissioners of this city, providing for the appointment of the commission of which we spoke to you.

It is the earnest desire of the committee on rules and curriculum that you accept the chairmanship of this commission, which we hereby respectfully tender to you, and as you spoke so highly of the attainments of Mr. E. P. Cubberley, we respectfully suggest him as one

of the members of the commission, and that you and Mr. Cubberley decide upon the third member.

We are asking that this commission make a study of the curriculum and methods of instruction now obtaining in our schools, with a view of determining how they conform to the established standards in other large cities in this country. We feel that this study will be beneficial, not only to us but to all other cities in the country, and that a report thus made by skilled and unbiased experts will become a valuable document to be used by your department.

The appropriation is to be devoted to the payment of the members of the commission for their services, and the expense incident to making this study and the disposal of it will be left to the commission itself.

We sincerely trust that you will see your way clear to accept the position, and we beg to assure you that we will do everything possible to facilitate and make pleasant the work of the commission.

I am, believe me,

Very truly, yours,

GEORGE A. SOLTER,
Chairman of the Committee on Rules,
Board of School Commissioners of Baltimore City.

WASHINGTON, *February 10, 1911.*

Mr. GEORGE A. SOLTER,
600 Maryland Telephone Building,
Lexington and Courtland Streets,
Baltimore, Md.

MY DEAR MR. SOLTER: I beg to acknowledge the receipt of your letter of January 31, and to say in reply that, after due consideration and consultation, I have decided to accept the invitation of the committee on rules and curriculum of the Baltimore board of school commissioners, to become the chairman of the proposed commission to "make a study of the curriculum and methods of instruction now obtaining in your schools, with a view of determining how they conform to the established standards in other large cities in this country."

In accordance with the suggestion conveyed in your letter and the informal conference I have had on the subject with yourself and Gen. Riggs, I have arranged with Prof. Ellwood P. Cubberley, of the Leland Stanford Junior University, to serve as a second member of this commission, and Prof. Cubberley and I have agreed to unite in nominating Mr. Calvin N. Kendall, superintendent of schools of the city of Indianapolis, as the third member. Supt. Kendall has signified his willingness to serve in this capacity.

Trusting that these arrangements will prove satisfactory to your committee and to the board of school commissioners, and that the inquiry which this commission is to undertake may be of assistance to your honorable body, I am, believe me,

Very truly, yours,

ELMER ELLSWORTH BROWN,
Commissioner.

The commission met in the office of the Commissioner of Education in Washington at 11 a. m. March 7, 1911, all members being present. The chairman announced that Dr. Harlan Updegraff and Mr. Milo B. Hillegas, of the Bureau of Education, would assist him in the inquiry. The commission proceeded to organize, and elected Milo B. Hillegas as secretary.

Its personal examinations and inquiries in Baltimore were conducted for the most part in March. The time since April 1, except for occasional visits to Baltimore, has been occupied with the work indicated in the method of the study and in the preparation of this report.

LIMITS OF THE STUDY.

Any general inquiry into a city system of education would naturally concern itself with the following topics:

(1) The relation in general of the educational system to the economic and social conditions and needs of the community.

(2) The legal basis of the school system. The relation of the school department to other departments of the city government.

(3) Constitution, powers, and duties of the board of education and the committees of the board.

(4) The business management of the school system (including divisions of finance, sites and buildings, supplies, etc.; also system of accounting and records).

(5) Scope, organization, etc., of the school system.

(6) The school plant: Sites, buildings, and equipment.

(7) External relations of pupils to the schools (including the administration of child-labor and school-attendance laws, attendance upon other than public schools, transportation, etc.).

(8) Provision for safeguarding the health of school children (medical inspection, the employment of school physicians and school nurses, open-air schools, fire drill, playgrounds, play, physical exercises, etc.).

(9) The control and discipline of pupils.

(10) The system of training and instruction in the ordinary day schools, embracing the following chief divisions:

(A) The system of supervision; organization of schools and other units of supervision and teaching.

(B) The teaching force (preliminary training, appointment, salaries, promotions, personal quality, control and influence in classes, individual and organized relations with the school system and with the community, scholastic and professional improvement while in service).

(C) The curriculum or course of study in day schools, elementary and secondary (with particular reference to such questions as the choice of studies, the addition of new subjects, the distribution of the hours of instruction in the several grades, the proportion and sequence of the several topics, etc.).

(D) Methods of training and instruction.

(E) Apparatus and materials for the purposes of training and instruction (textbooks, laboratories, workshops, libraries, schoolroom decoration, etc.).

(F) Tests of the attainments of pupils, promotion, graduation, the proportion of retarded members in the several classes, the moral quality of pupils and graduates, their health, intelligence, and efficiency.

(G) Auxiliary agencies and arrangements for increasing the effectiveness of the ordinary course of instruction and training (including provision for varying the rate of promotion, schools and classes for exceptional pupils, parental schools, etc.).

(11) Educational extension (including evening schools, continuation schools, public lectures, and other subjects embraced under the familiar title "Wider uses of the school plant").

Of the topics mentioned, the one which has been assigned to this commission is that numbered (10). In this report passing mention is made of other subjects as bearing on this central theme. The legal basis of the system and its financial support have been treated with some fullness, because of their intimate connection with the problem of the making of an adequate system of education. Of the subdivisions of topic (10), it has not been possible that all should be treated with equal fullness, because of limitations of time. It having been the desire of the board of school commissioners and also of this commission that the inquiry be completed by the 1st of April, or as soon thereafter as possible, the commission has found it necessary to center their chief attention upon the following:

(A) The system of supervision,

(B) The training and efficiency of the teaching force,

(C) The school curriculum, and methods of instruction,

devoting such additional attention as has been possible to other divisions of the tenth general topic, as enumerated above.

THE METHOD OF THE STUDY.

The method pursued by the commission in making this study has for the most part been as follows:

(1) The history of the public-school system has been reviewed. For that purpose we have made use of official reports and other published materials. These have been supplemented by personal interviews with citizens of Baltimore, both within and outside of the school system, who have had direct knowledge of different stages of that history.

(2) A study has been made of recent and current criticisms of the system. We have gone over all published and written material of this kind which has come to our notice, both favorable and unfavorable. As is usual in such a case, the unfavorable criticism has been the more outspoken and voluminous. We have considered attentively this adverse comment, as presented from the most widely different points of view.

In order that there might be a full and free expression of present opinion on the subject, we addressed to the chairman of the committee on rules of the board of school commissioners a letter, in which we stated that the commission would welcome well-considered opinions, specific information, and suggestions as to ways in which the inquiry might be made most fruitful. The letter was made an official circular issued from the superintendent's office and was also given to the public press. In response to this announcement we received 50 communications, some of which had numerous signatures; 29 of the number were anonymous.

All of these communications, which for the most part were carefully and seriously written, have been attentively read and considered. Further than this, we have conferred personally with many citizens, representing different shades of opinion; with all of the members of the board of superintendents; with the faculties of the training schools; with all of the group principals of schools, with many of the vice principals, and with more than 300 of the teachers. At their request, we have given hearings, with all members of the commission present, to groups of representative teachers.

(3) We have given particular attention to observation of the actual work of the schools. This has involved personal visits by the members of the commission and their assistants to schools in every one of the 22 groups in the city. Of the 165 schools in Baltimore, we have visited in this way one-half, and in so doing have been in about 250 classrooms. Some of these visits were brief, and others of longer duration. Inasmuch as we were not passing judgment on individual teachers but on the system as a whole, it was more to our purpose to gain a general view by visiting many rooms in all sections of the

city than to attempt a more detailed examination of a smaller number of classes. The fact that all of the members of the commission, and their assistants as well, had had practical experience in the inspection of schools, was an added reason why this procedure might be expected to yield fairly accurate information.

(4) Our first reliance for the interpretation of the materials so collected has been a comparison with other cities. With this end in view, visits have been made to half a dozen other cities; the published reports, regulations, and courses of study of a larger number of cities have been carefully examined by members of the staff of the Bureau of Education at Washington; and special inquiries have been sent to such cities, from the bureau, for the clearing up of certain points. For these comparisons, reference has been had ordinarily to the 13 largest cities in the country, according to the census of 1910, each having a population of over 350,000. Baltimore is the seventh city in population, and accordingly stands at the middle point of this list of 13. For certain particulars in which they are conspicuous, reference has been made to several other cities of less population than those in this list. Comparisons relative to financial affairs have been based on a special inquiry made by agents of the Bureau of the Census in the year 1909, covering a part but not all of the cities of 300,000 population and over. By a mere coincidence, the number of cities included in this list of the Census Office is also 13.

In making comparison with other cities, we have found it important to consider not only present conditions and practices but also the directions in which change has been made within the past generation, and particularly since the beginning of the twentieth century.

(5) Judgments, however, have not been based solely upon current practices and tendencies in our larger cities. The commission has deemed it proper and necessary that it should discriminate between the better and the less good in these tendencies and practices, and should express opinions based upon general conceptions of educational excellence. We realize the danger that such judgments may easily come to represent mere personal bias, and for this reason have recommended, in the main, only those practices which have been proved by experience. Where larger liberty has been taken in setting forth general principles and ideals of education, it has been done on the basis of substantial unanimity on the part of the several members of the commission and their assistants.

CHAPTER II.

PRELIMINARY TOPICS.

THE RECENT HISTORY OF CITY SCHOOL SYSTEMS.

City school systems as organized at present in the United States had their beginnings about the time of the educational revival in the second quarter of the nineteenth century, when the simplicity of the older district units began to give place to the complexity of city organization. By the time of the Civil War the more highly developed form of educational organization was generally found in the larger American municipalities.

The history of city schools during the latter part of the nineteenth century may be briefly outlined by calling attention to some of the problems which arose into prominence at different times. After the problem of organization came that of the adjustment of the schools to the school population. Soon after the war the cities began an extraordinary growth—a growth, moreover, which was made by the addition of heterogeneous elements to the population. The enactment of compulsory school attendance laws followed.

Massachusetts had passed its attendance law as early as 1852, but it was not until the early seventies that the wave of such legislation swept over the country. In that decade nearly half of the States which now have compulsory school attendance passed such enactments. Out of these conditions arose questions touching the grading of schools, the promotion of pupils, school discipline, and kindred topics. In the eighties the problem became more generally one of instruction and the enrichment of the course of study. It was in the early eighties that manual training fairly made its appearance in American schools. Introduced at first into the high schools, it spread over the country and began to push its way down into the elementary grades. In the eighties and nineties the beginnings were made in the wider differentiation of school studies. In the nineties, particularly, more attention began to be given to such subjects as music, drawing, and physical culture. This broadening of school instruction made necessary a greater complexity of organization, the development of special functions in administration, supervision, and teaching, and increased attention to the training of teachers. The "Quincy methods," the Forum articles on city school systems, the report of the Chicago Educational Commission, and the organization

of the Greater New York system of schools, are among the landmarks of this period.

During the first decade of the twentieth century the population of the United States increased about 21 per cent. In general, the cities have shown a greater growth than that of the country as a whole, and on the material side at least their school systems have kept pace with the growth in population.

On the side of school administration certain tendencies have been apparent during the decade, among which the following may be mentioned: The movement to reduce the number of members of school boards, the increasing demand for the removal of the schools from the influence of partisan politics, and the employment of specialists in different departments of the business management and the scholastic supervision of the educational system. As regards the teaching force, it may be said that the trend has been in the direction of higher salaries and the requirement of superior qualifications and greater efficiency. Closer supervision, a more flexible course of study for high schools, provision of special classes for exceptional children, more varied and more specialized teaching in the upper elementary grades, a closer adaptation of the ordinary school work to the ordinary needs of life, and provision in continuation schools for children who are compelled to go to work early in life, are some features of educational endeavor that have been uppermost of late in the minds of our educational authorities.

The decade has been marked by the extension of the school system to include various special activities, such as those of social and recreation centers, playgrounds, school gardens, baths, school lunch rooms, and savings banks operated by pupils in school, all of which seem destined to render the school more widely serviceable to the people.

Within the decade some movements of still larger significance have made notable headway. Perhaps the most important of these has appeared in the demand for vocational training. Within the past decade the emphasis in manual training has shifted from the cultural to the vocational aim, and now many school systems offer training which looks directly to a vocation in the industries. In addition to this industrial training, commercial courses and courses in domestic economy for girls have grown in popularity and are now widely offered in public schools.

Speaking in the most general terms, it may be said that a widening of the range of school activities, greater variation within that wider range, a closer touch with the actuality of industrial and civic interests, more expert and professional direction, with greater insistence on the moral aims that arise along with tendencies such as these, have been characteristic of these earlier years of the twentieth century.

HISTORY OF THE BALTIMORE SYSTEM AND GENERAL STATISTICS OF THE CITY OF BALTIMORE.

CHRONOLOGICAL TABLE.

1826. State legislature passed laws permitting the mayor and council to establish, regulate, and support public schools; it was also provided that if the city did not avail itself of this privilege the State laws regarding public schools should apply. (Laws, 1825, 2d sess., chaps. 130, 162.)

1827. The mayor and council accepted the responsibility for the conduct of the public schools in Baltimore under these acts, which remained the fundamental State laws until 1868. (Ordinance of Jan. 17, 1827.)

1828. Board of school commissioners appointed by two branches of council. Composed of mayor, ex officio, and one member from each of six districts. Tenure, one year. Directed by council to establish a school of two departments (male and female) on monitorial plan; make rules and regulations; examine and appoint teachers and fix their compensation; report annually to city council including account of expenditures and estimates of expenses for ensuing year. The board was also authorized to appoint a superintendent of schools and to fix his compensation. (No superintendent appointed until 1866.) His duties were defined as follows: To inspect each school weekly and make monthly reports to commissioners regarding the number attending, tuition fees collected, discipline, and such other objects as may be required. (This ordinance vested the commissioners with full power to establish schools, but failed to provide adequate means for their organization and support.) (Ordinance of Mar. 8, 1828, No. 19, p. 17.)

1829. Public school fund placed in the hands of board of school commissioners. They were also authorized to receive bequests, donations, and grants. (Ordinance, Apr. 6, 1829.)

———. First school opened.

1830. Revision of ordinances—mayor no longer member of board. Mayor required to call body together within ten days after the election. President and secretary elected from members of board. Board authorized to establish other schools; required to furnish books and stationery for pupils, who were to pay in advance a sum not exceeding $1 per quarter each; authorized to lease buildings, procure lots, and erect buildings in name of the mayor and city council. (Ordinances of Apr. 7, 1830, No. 42, p. 138, and No. 29, p. 199.)

——— First public schoolhouse erected, on Aisquith Street near Fayette.

1834. Board of school commissioners increased to 9 members. (Ordinance, May 12, 1834, No. 33, p. 41.)

1838. Revision—board increased to 13 commissioners. (Ordinance of May 22, 1838, No. 44, p. 110.)

1839. Male Central High School opened October 20. (Name changed to Baltimore City College, 1866.) Monitorial institutions entirely dispensed with.

1842. Board of school commissioners increased to 14 members, one from each ward. (Ordinance of Jan. 26, 1842, No. 1, p. 18.)

1844. Two female high schools established; one in the eastern and the other in the western part of the town.

1846. Board of school commissioners increased to 20 members, one from each ward. (Ordinance of Jan. 23, 1846, No. 1, p. 5.)

1848. Treasurer given duties of a superintendent. Treasurer reports 427 visits in 1861.

1851. Two normal classes organized; discontinued 1858.

1857. "Floating school" opened (nautical school maintained jointly with board of trade). (No. 38, p. 60.)

1866. Revision.—Secretary given charge of rooms, books, papers, and documents of board and required to perform such clerical duties as directed by the board or any of its committees. His salary must be approved by two branches of city council.

———. The appointment of a superintendent of public instruction was authorized. He must have been a resident of the city, possess literary and scientific acquirements, and skill and experience in the art of teaching. His term of office was to be four years. He was to devote his entire time to general supervision, "subject to such rules and regulations as the board of school commissioners may establish." He was also required, in conjunction with a committee of three commissioners, to examine applicants for teaching positions "in the forms prescribed by the board." His salary was to be fixed by the school commissioners subject to the approval of the two branches of the council.

The city register was directed to take charge of all school moneys and to pay out the same on bills examined by committee of accounts of the board and countersigned by the secretary of the board. (Ordinance of June 20, 1866, No. 74, Code 1869, p. 658.)

———. J. N. M'Jilton superintendent of public schools till 1868.

1867. Ordinance adopted directing board of school commissioners to establish separate schools for the colored children, under the same rules as governed the white public schools. (Colored children had previously been instructed in private schools or in the free schools which had been organized by the Association for the Improvement of Colored People, and which had been supported by private contribu-

tions.) The board organized such schools but the city council failed to make an appropriation for their support.

1868. Separate schools for colored children authorized, to be supported from taxes paid for school purposes by colored people. (Ordinance of May 5, 1868, No. 68, p. 36.)

———. Statute. The relative powers of the mayor and council and of the board of school commissioners fixed by law. The full power and authority to establish schools was placed in the mayor and city council, who "may delegate supervisory powers and control to a board of school commissioners; may prescribe rules for building schoolhouses and for locating, establishing, and closing schools." "The board of school commissioners of Baltimore City, or by whatsoever name the body may be known that has supervisory powers and control over the public schools of Baltimore City, shall have power to examine, appoint, and remove teachers, prescribe the qualifications, fix the salaries, and select the textbooks for the schools of said city." (Laws of 1868, chap. 407.)

———. William R. Creery superintendent of public schools till 1875.

1872. Appointment of assistant superintendent ordered. He must be a resident of Baltimore. Same term of office as superintendent. To visit primary schools; to assist in the examination of teachers; to report to superintendent. (Ordinance of Apr. 22, 1872, No. 50.)

———. Normal class for instruction in "theory and practice of teaching" organized. Discontinued 1881.

1874. An English-German school established as an experiment.

1875. Free library established for the use of teachers and pupils of public schools.

———. Henry E. Shepherd superintendent of public schools till 1881.

1877. Commission of five citizens appointed by mayor and city council to inquire into public-school systems. (The Latrobe commission, reported in 1880.)

1881. Henry A. Wise superintendent of public schools till 1900.

1884. Manual training school organized.

———. Payment of $1 per quarter by each pupil as tuition or incidental fee abolished. (Ordinance of Oct. 6, 1884, No. 141.)

1886. Term of school commissioners changed from one year to four years. Members of board may be expelled by joint vote of two branches of council.

———. Appointment of superintendent of supplies authorized "to supervise, take care of, and have general control of all furniture, stoves, furnaces, fuel, repairs, and other incidental supplies," and such other duties as board may direct. (Apr. 8, 1886, No. 31, from Revised Code, 1892, p. 876.)

1888. Mayor again became a member ex officio of the board of school commissioners, which body was increased to 22 members by reason of two additional wards formed from the "annex." Members of board elected to fill a vacancy by the board might hold office only until the next session of the council. (Mar. 2, 1888, No. 56, from Revised Code, 1892, p. 876.)

1890. "The schedule of salaries of all officers, employees, and teachers shall stand as now fixed." (Ordinance of June 12, 1890, No. 135, p. 195.)

1891. Board required to advertise for all purchases of $50 and over; proposals to be opened in presence of city comptroller, city register, and a committee of the board, who, together, should constitute a committee on awards. The comptroller, register, and committee were each to have one vote. (Ordinance, Apr. 1, 1891, No. 18.)

1892. Eight evening schools opened, under charge of 38 teachers, with 1,413 pupils enrolled. Cooking school opened.

1898. Present city charter passed. (Mar. 24, 1898, chap. 123.)

1900. James H. Van Sickle superintendent of public schools to date.

1901. Group system of supervision introduced.

———. Training school for teachers established.

1902. Manual training centers established.

———. Preparatory classes introduced.

GENERAL STATISTICS OF BALTIMORE FOR 1900–1910.

Population, etc., 1900.

Total population, 1900	508,957
White	429,218
Colored (15.6 per cent)	79,258
Other races	481
Total public school enrollment, 1900	79,659
Average attendance	54,403

Occupations of inhabitants 10 years of age or over, 1900.[1]

	Males.	Females.	Totals.
Agricultural pursuits	1,303	127	1,430
Professional service	7,197	3,092	10,289
Domestic and personal service	36,091	28,417	64,508
Trade and transportation	54,143	7,666	61,809
Manufacturing and mechanical pursuits	57,715	21,599	79,314
Totals	156,449	60,901	217,350

[1] Twelfth Census of the United States, 1900: Special Reports, Occupations, pp. 488–494.

Number engaged in the principal occupations, 1900.

	Males.	Females.
Trade and transportation:		
Clerks and copyists	11,622	.....
Merchants and dealers (excluding wholesale)	8,018	1,197
Draymen, hackmen, teamsters, etc	6,988	.....
Salesmen	4,937	3,042
Steam railroad employees	3,488	.....
Agents	2,646	.....
Bookkeepers and accountants	2,463	.....
Manufacturing and mechanical pursuits:		
Tailors	6,157	2,230
Carpenters and joiners	4,280	.....
Painters, glaziers, and varnishers	3,083	.....
Machinists	2,957	.....
Tin-plate and tinware makers	2,561	.....
Manufacturers and officials, etc	2,411	.....
Boot and shoe makers and repairers	2,089	.....
Seamstresses	.....	5,593
Dressmakers	.....	4,912
Shirt, collar, and cuff makers	.....	1,967
Cotton-mill operatives	.....	1,470
Milliners	.....	1,095

Statistics of manufacturing.

Number of manufacturing establishments, 1905 [1]	2,163
Capital	$148,763,503
Wage earners	65,224
Wages	$25,633,550
Cost of material used	$81,014,029
Value of products, including custom work and repairing	$151,546,580

Assessed valuation and rate of taxation.

Assessed valuation of property subject to general property tax (1908) [2]	$433,343,182
Rate per $1,000 valuation, 1908	20
Assessed valuation of property subject to special property tax (1908)	226,688,857
Rate per $1,000 valuation, 1908—securities	3

Population, etc., 1910.

Total population, 1910 [3]	558,485
White	473,388
Colored (15.2 per cent)	84,749
Other races	348
Total public school enrollment	79,838
Average attendance	55,103

THE LEGAL BASIS OF THE SYSTEM.

The history of school administration in Baltimore may be divided into two periods: (1) From 1826 to 1900; (2) from 1900 to the present time. The first period is characterized by the predominance of the mayor and city council; the second by the limited ascendancy of the board of school commissioners and the board of superintend-

[1] Special reports of the Bureau of the Census: Manufactures, Pt. II, 1905, p. 403.
[2] Special reports of the Bureau of the Census, Statistics of Cities, 1908, p. 56.
[3] Statement of Director of the Census, May 15, 1911.

ents. From a point of view of practical administration these periods may be described as the political and nonpolitical, respectively.

The first period.—Under the act of January 17, 1826, the city council exercised full authority in the management of schools, subject to such special laws as were passed by the legislature. These were, however, few in number and did not change appreciably the practice that had grown up under city ordinances.

The functions of the board of school commissioners just previous to 1900 were confined to the examination of applicants for teaching positions, the appointment of teachers and other employees, and the fixing of their salaries, the selection of textbooks, the prescription of the course of study, the purchase of equipment and supplies, the contracting for repairs, the framing of the rules and regulations, and the making of annual reports and annual estimates to the mayor and the council. In the performance of these functions they were limited by the mayor and the council in the following ways:

(1) Under its authority to approve salaries, the council actually fixed the salaries of all officers and teachers.

(2) In all purchases and contracts of over $50 a committee of the board had one vote in three (the city comptroller and the city register had one each) in making the awards after proper advertising.

(3) No goods or services could be bought from members of the board.

(4) Expenditures must have been for no other purposes than those stated in estimates, and must have been kept in as exact proportion as possible to the amounts as given.

(5) Powers and duties of superintendent, assistant superintendent, secretary, and superintendent of supplies were fixed by the council.

At the same time the mayor and the council exercised the power of revision of estimates, of taxation, of purchasing sites and erecting schoolhouses, of delegating "supervisory powers and control" to a subordinate board whose members were chosen by them, and of defining its authority in any way except in the matters of examination and appointment of teachers and selection of textbooks.

The mayors and the councilmen of Baltimore from 1840 to 1899 were presumably no better and no worse than the men who held like positions in the other large cities of our country under similar charters. Such motives and rewards as have appealed to the incumbents of such positions in our cities doubtless influenced them in the performance of their duties. While, in theory, the board of school commissioners was selected by the council in joint assembly, in practice each first branch councilman selected the school commissioner from his own ward, his nomination being equivalent to an election by virtue

of so-called "senatorial courtesy." There were 22 wards. The mayor was also a member of the board ex officio. The school commissionership was very frequently used as a stepping stone to the council or else was given to the outgoing councilman by the man who had defeated him.

In the conduct of the business of the board political considerations were of the greatest importance. The president of the board was always of the political party having the majority of the membership. In making his committee appointments the members of his own party received the chairmanships, which carried predominant influence, and a majority of the places on the general committees, of which there were 30 in 1898. However, each member was chairman of the local committee for the schools of his own ward, and through courtesy was given by the one other member of the committee full freedom as regards those schools. Those administrative functions which were directly or remotely connected with the building up of political influence were guarded closely by the school commissioners and kept for the most part in their own hands.

The superintendent was relegated to the rear. He was a "fifth wheel." The ordinance provided that he must be a man "of literary and scientific acquirements and of skill and experience in the art of teaching," but his duties were limited to visitation, suggestion, and reporting. He had little real authority in the conduct of schools. Teachers and principals looked to the local committeemen, and in some cases to the chairman of a general committee, for their positions, increase in salaries, and additional supplies and textbooks. That which the superintendent accomplished was largely by "moral suasion." He was also by ordinance a member of the examining committee, together with three commissioners and later with the assistant superintendent. But the ordinance provided that the examinations should be conducted "in the forms prescribed by the board," and the superintendent was powerless in preventing the passing of incompetent and poorly prepared applicants when any such persons acquired or possessed the support of a commissioner who could secure the support of a majority of the committee or of the board.

The second period.—The charter of 1898 created a department of education upon practically the same footing in regard to freedom of authority as other departments. In consequence, the board of school commissioners is still limited in the exercise of its authority to an unusual degree as compared with the authority usually exercised by school boards. The following statement relating to the different officers and boards which participate in the general control of schools, together with the principal powers and duties of each, presents an outline of the present system of school administration:

(1) The mayor, who appoints the board of school commissioners, serves upon various boards described below, and approves the ordinances of estimates.

(2) The second branch of the city council, which confirms the appointments to the board of school commissioners made by the mayor.

(3) The first and second branches of the city council, which pass the ordinances of estimates. They may reduce but they can not increase the amount of any item in the ordinance; neither may they introduce any new item.

(4) The board of estimates, composed of the mayor, the city solicitor, comptroller, president of the second branch of the city council, and president of the board of public improvements, which prepares the ordinances of estimates.

(5) The inspector of buildings, who has charge of the construction and repair of all school buildings and of their fixed equipment. The responsibility is also placed upon him for securing action by the various commissions and boards mentioned in the succeeding section.

(6a) The commission for the selection of sites, composed of the mayor, comptroller, and president of the board of school commissioners as head of the department of education.

(6b) The architectural commission, composed of three members appointed by the mayor with the approval of three members of the art commission. This commission selects the designs and the architect for each school building; but the board of school commissioners must approve the plans before the construction of the building is begun.

(6c) The board of awards, composed of the mayor, comptroller, city registrar, city solicitor, and the president of the second branch of the city council, which opens the bids submitted for the erection of buildings and awards the contracts. The mayor signs all such contracts.

(7) The board of school commissioners, composed of nine members serving for six years without pay, three being appointed every even numbered year for terms beginning March 1. A school commissioner may be removed by the mayor at his pleasure at any time within six months after his appointment; after that date he may be removed only for cause after charges have been preferred and trial had before the mayor. The president of the board is designated by the mayor at the time of his appointment.

The powers and duties of the board of school commissioners are not clearly defined. In general they lie in the field between those given the other departments and those given the subordinates of the board—the board of superintendents, superintendent of public

instruction, supervisor of buildings, and secretary. The board is constituted the "head" of the department of education. It is empowered to confirm or reject all nominations of teachers, to appoint and remove at its pleasure all officers, secretaries, clerks, and employees; to appoint secondary teachers; to fix the salaries of all appointees; to remove teachers after charges preferred by superintendent and trial had; to instruct the building inspector regarding plans for proposed schoolhouses, and to purchase textbooks and stationery. In fact, the board has exercised full authority within the field not definitely assigned to other agencies. It has directed the general policy of the schools upon the advice of its professional experts and has issued rules and regulations to govern the operations of the school plant and the conduct of instruction.

(8) The board of superintendents is composed of a superintendent of public instruction and one or more assistant superintendents elected by the board of school commissioners for indefinite terms. The duty of this board that is made most prominent in the charter is that of "the examination of teachers and their nomination to the board of school commissioners for appointment or promotion." The charter emphasizes the board of superintendents as opposed to the superintendent, requiring that the board hold regular meetings and keep a record of the same, and even going so far as to provide that in case of disagreement its members may present majority and minority reports to the board of school commissioners. The ordinary duties of such officers—supervision and inspection, reports, advising the board respecting courses of study, textbooks, and methods of instruction—are also provided for. The rules of the board strengthen the position of the superintendent. He is named the chief executive officer of the board and is authorized to assign and transfer all teachers, to define their duties, to call meetings whenever he deems them necessary, and to regulate by orders, written or otherwise, the operation of the school system in any manner not inconsistent with the rules.

(9) The charter provides that the supervisor of school buildings shall aid the superintendent of public instruction in ascertaining the sanitary condition of every school and in reporting to the proper authorities what repairs or improvements are necessary, and in addition to having general supervision of school buildings in respect to heating, plumbing, and ventilation he shall perform such other duties as the board may direct. The board has given him the authority to nominate engineers, firemen, janitors, and janitresses (there are great numbers of the latter, at least one to every floor in each school house), and to remove them without reference to the board. He

also passes upon requisitions for repairs and equipment made by principals, but his responsibility connected with purchases is confined entirely to fuel. He is elected by the school commissioners for an indefinite term.

(10) The secretary of the board of school commissioners is named in the city charter, but none of his duties are defined in that document. Under the rules of the board he performs the functions of clerk in the recording of the proceedings of the board and in attending to that part of the correspondence that has to do with business affairs. All records of the action of the board are in his charge. He examines vouchers and keeps a memorandum account of bills approved by the board. Requisitions for supplies from the offices of the superintendent of public instruction and the supervisor of school buildings are either purchased directly by him or through the municipal authorities. He is also the custodian of supplies after their purchase. He also is elected by the board of school commissioners for an indefinite term.

FINANCIAL SUPPORT OF THE SYSTEM.

This portion of the report is divided into three parts: (1) Total school expenses; (2) total receipts from general revenues for municipal purposes; (3) school expenses in detail.

TOTAL SCHOOL EXPENSES.

The absolute figures upon which all percentages, average costs, and ratios are based are taken from schedules made out by agents of the Bureau of the Census after personal investigation of the records, or from the bulletin of that bureau upon statistics of cities, 1908. The percentages, average costs, and ratios are taken from a study of these figures, not yet published, which is in preparation in the Bureau of Education. In each of the three parts of the study, comparison is made between the expenses and receipts of 13 cities, including Baltimore, having in 1910 a population of 300,000 or over. The statistics of the various cities are in all cases for fiscal years ending between July 1, 1908, and June 30, 1909; those of Baltimore are for the year ending December 31, 1908. These are the latest satisfactory statistics that are available. New York and a few other of our larger cities are omitted because not reported by the Census Office in the year referred to.

As compared with the 12 other cities in this group Baltimore's expenses for schools in 1908 were less per capita of population than those of any other city except one—New Orleans. The average cost of Baltimore was $3.32, or 94 cents less than the median. If Baltimore had spent as much per capita of population as the median city

during 1908 she would have increased her expenditures for public schools by almost $515,000. The following table and diagram illustrate the relative amounts per capita for each city in the group:

TABLE 1.—*Total expenses of schools per capita of population, 1908.*[1]

Chicago, Ill	$4.54	Milwaukee, Wis	$3.66
St. Louis, Mo	4.20	Newark, N. J	6.02
Cleveland, Ohio	4.53	New Orleans, La	2.89
Baltimore, Md	3.32	Washington, D. C	6.40
Detroit, Mich	4.00	Los Angeles, Cal	4.76
Buffalo, N. Y	3.96	Minneapolis, Minn	4.78
San Francisco, Cal	4.26		

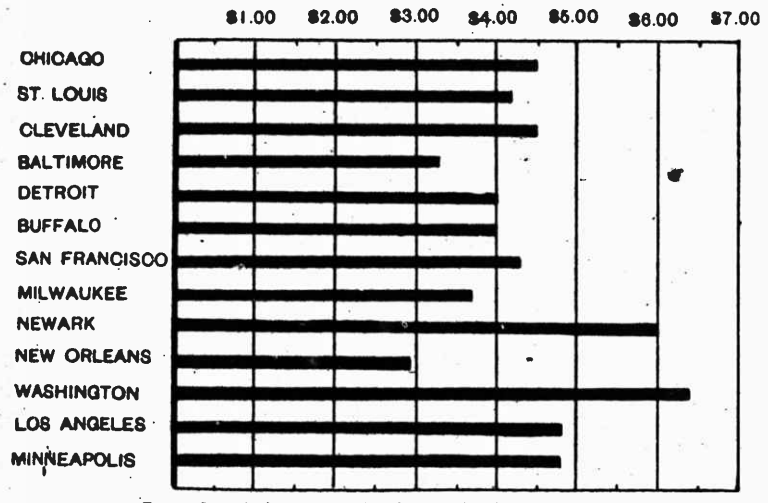

FIG. 1. Cost of schools per capita of population, based on Table 1.

A comparison of the relative amounts of school expenses and of total city expenses in these 13 cities shows that Baltimore expended for school purposes a larger percentage of the total city expenses than 4 cities and a smaller percentage than 8. The median or average percentage was 25.9; Baltimore's percentage was 24. In other words, in the average, or normal city, 25.9 cents out of every dollar expended for all municipal purposes went for schools, while in Baltimore only 24 cents were so expended. The following table and diagram present these facts:

[1] The revised estimates of population in June, 1908, as made by the Census Office have been used in making this and the following computations. This estimate is for Baltimore 549,017.

TABLE 2.—*Ratio of total school expenses to total city expenses, 1908.*

Chicago, Ill	0.26	Milwaukee, Wis	0.25
St. Louis, Mo	.23	Newark, N. J	.32
Cleveland, Ohio	.32	New Orleans, La	.23
Baltimore, Md	.24	Washington, D. C	.26
Detroit, Mich	.28	Los Angeles, Cal	.35
Buffalo, N. Y	.24	Minneapolis, Minn	.37
San Francisco, Cal	.20		

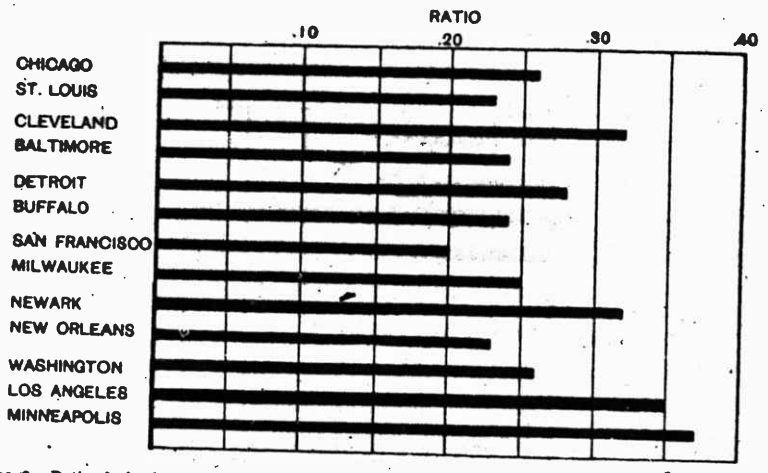

FIG. 2.—Ratio of school expenses to city expenses, based on Table 2. The various ratios, .10, .20, etc., may be read also as 10 per cent, 20 per cent, etc.; for example, the school expenses of San Francisco were 20 per cent of the city expenses.

A comparison of expenses for schools and for police in these 13 cities shows that 2 cities spent smaller relative amounts for schools than Baltimore, while 10 cities were relatively more liberal. For every dollar spent for police, Baltimore spent only $1.47 for schools, while the median or average city spent $2.12. The following table and diagram present the facts:

TABLE 3.—*Ratio of total school expenses to expenses for police.*

Chicago, Ill	1.55	Milwaukee, Wis	2.42
St. Louis, Mo	1.41	Newark, N. J	2.56
Cleveland, Ohio	2.94	New Orleans, La	3.01
Baltimore, Md	1.47	Washington, D. C	1.86
Detroit, Mich	2.12	Los Angeles, Cal	2.93
Buffalo, N. Y	1.69	Minneapolis, Minn	4.24
San Francisco, Cal	1.22		

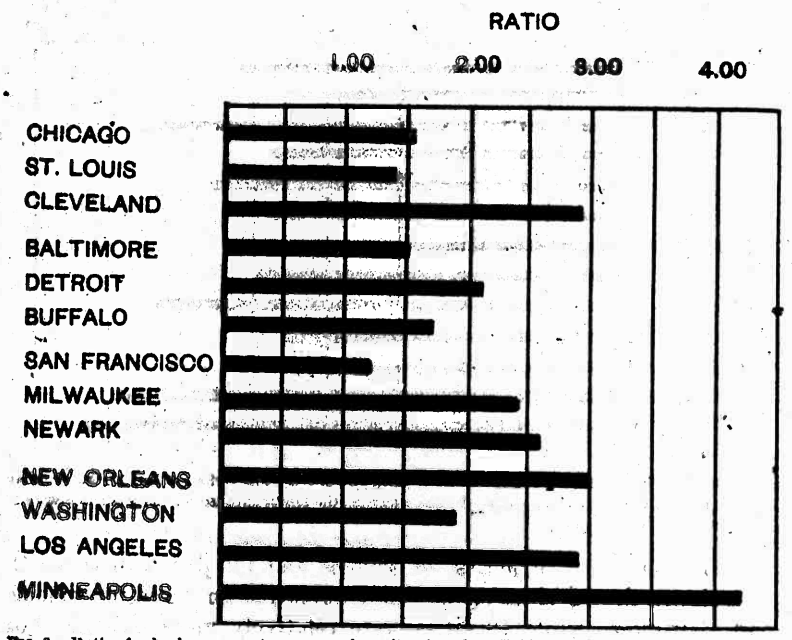

FIG. 3.—Ratio of school expenses to expenses for police, based on Table 3. The various ratios, 1, 2, etc., may be read also as 100 per cent, 200 per cent, etc.; for example, the school expenses of New Orleans were 301 per cent of the expenses for police.

The above facts would suggest that Baltimore did not expend so much per capita to maintain its municipal affairs in general as did the most of the cities. Upon inquiry it is found that Baltimore expended for current expenses a less amount per capita than 10 and a greater amount than 2 of the 13 cities. The median city of this group paid $16.02 per capita to carry on its municipal affairs while Baltimore paid but $13.29, a difference of $2.73. The following table and diagram represent the facts:[1]

[1] From Special Reports of the Bureau of the Census: Statistics of Cities, 1903, p. 296.

TABLE 4.—*Per capita payments for general and special service expenses.*

Chicago, Ill.	$16.34	Milwaukee, Wis.	$15.57
St. Louis, Mo.	17.53	Newark, N. J.	20.28
Cleveland, Ohio	15.09	New Orleans, La.	12.37
Baltimore, Md.	13.29	Washington, D. C.	24.52
Detroit, Mich.	16.02	Los Angeles, Cal.	13.52
Buffalo, N. Y.	16.88	Minneapolis, Minn.	12.41
San Francisco, Cal.	23.68		

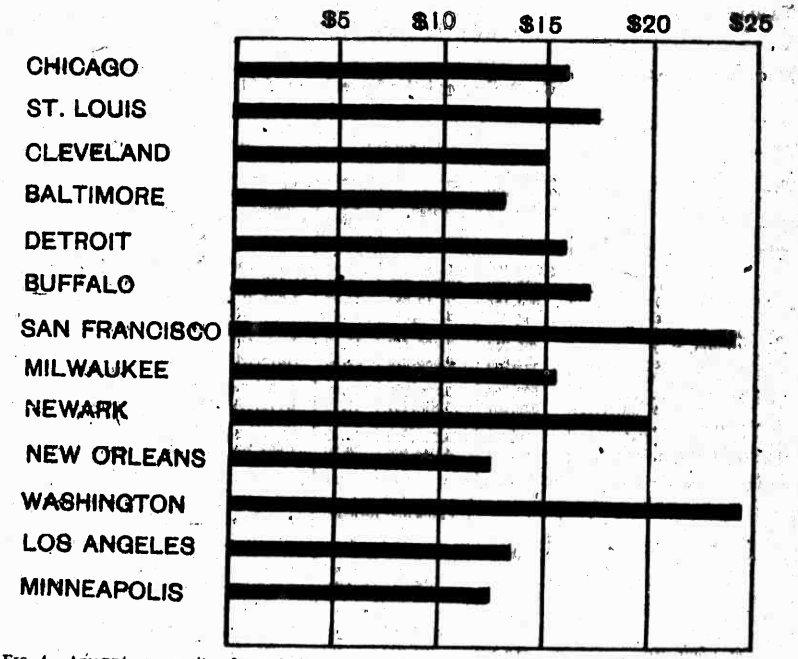

FIG. 4.—Amounts per capita of population expended for general and special service expenses; based on Table 4. These expenses include practically all current expenses.

Had Baltimore's expense per capita for all municipal purposes equaled $16.02, the median or average per capita for the group of cities, and had the department of education expended the median or average proportion of the total city expenses, about $390,000 would have been added to the support of the schools.

TOTAL RECEIPTS FROM GENERAL REVENUES.

Inasmuch as Baltimore did not expend for its schools or for its municipal affairs generally as much as the average or normal city, it is pertinent to inquire into the credit side of municipal finances. The results of a study of receipts from general revenues in cities of 300,000 population or over in the United States in 1908, which formed over 70 per cent of the receipts from all city revenues, shows

that Baltimore's receipts were but $16.32 per capita of population, while those of the median or average city were $18.07. The same per capita for Baltimore during 1908 as that enjoyed by the median city would have added to its receipts over $960,000. The following table represents the facts in this matter and also shows the amounts per capita of population that each of the various cities obtains from each principal source of revenue:

TABLE 5.—*Total amounts and amounts per capita received from each of the principal sources of revenue in 1908.*

[The amounts are taken from special reports of the Bureau of the Census: Statistics of Cities, 1908, pp. 192–193; the population figures from p. 343.]

No.	Cities.	Estimated population.	All receipts.		Taxes.		Licenses and permits.	
			Total.	Per capita.	Total.	Per capita.	Total.	Per capita.
1	Chicago, Ill.	2,092,869	$41,546,465	$19.95	$31,843,470	$15.25	$8,608,914	$4.12
2	St. Louis, Mo.	665,802	13,799,932	20.71	11,773,339	17.67	1,495,724	2.25
3	Cleveland, Ohio.	523,187	9,345,285	17.88	7,628,341	14.59	1,329,358	2.54
4	Baltimore, Md.	549,079	8,963,040	16.32	7,518,725	13.69	902,959	1.65
5	Detroit, Mich.	426,592	7,037,586	16.49	5,457,955	12.79	867,432	2.03
6	Buffalo, N. Y.	405,714	7,499,983	18.49	6,556,446	16.18	709,633	1.75
7	San Francisco, Cal.	402,836	9,385,013	23.35	7,073,395	17.55	1,562,537	3.93
8	Milwaukee, Wis.	350,852	6,142,214	17.50	4,859,602	13.87	869,525	2.48
9	Newark, N. J.	322,784	5,826,020	18.07	3,732,374	11.57	615,199	1.91
10	New Orleans, La.	329,207	5,848,151	17.79	4,771,561	14.50	734,212	2.23
11	Washington, D. C.	321,128	12,168,378	37.93	5,169,874	16.12	644,750	2.01
12	Los Angeles, Cal.	270,491	5,273,272	19.53	3,446,268	12.78	717,594	2.66
13	Minneapolis, Minn.	286,241	4,633,924	16.20	3,868,398	13.55	483,334	1.69

No.	Cities.	Estimated population.	Fines and forfeits.		Subventions and grants for education.		Other subventions and grants and gifts.	
			Total.	Per capita.	Total.	Per capita.	Total.	Per capita.
1	Chicago, Ill.	2,092,869	$548,790	$0.263	$340,585	$0.164	$204,706	$0.099
2	St. Louis, Mo.	665,802	107,020	.161	283,243	.425	140,585	.211
3	Cleveland, Ohio.	523,187	23,901	.457	251,565	.481	111,115	.213
4	Baltimore, Md.	549,079	9,569	.174	531,787	.969	.....	.....
5	Detroit, Mich.	426,592	12,334	.289	670,119	1.570	29,746	.069
6	Buffalo, N. Y.	405,714	35,020	.086	145,798	.359	53,086	.131
7	San Francisco, Cal.	402,836	33,718	.084	674,194	.167	19,683	.048
8	Milwaukee, Wis.	350,852	56,105	.160	263,393	.751	93,589	.238
9	Newark, N. J.	322,784	23,672	.073	1,360,293	.421	94,482	.293
10	New Orleans, La.	329,207	32,485	.098	185,257	.563	121,239	.369
11	Washington, D. C.	321,128	112,067	.349	2,697,137	8.403	3,543,064	1.103
12	Los Angeles, Cal.	270,491	66,147	.245	1,029,542	3.813	13,721	.051
13	Minneapolis, Minn.	286,241	57,616	.202	210,196	.735	14,380	.050

From the above table it will be seen that Baltimore, as compared with other cities, secured the smallest amount per capita from licenses and permits, was fifth in the amount per capita received from taxes, seventh in amount received from fines and forfeits, and tenth in amount per capita received from subventions and grants from other civil divisions for education, while nothing was received from subventions and grants for other purposes. Had Baltimore received as much per capita from licenses and permits as the median city, about $318,000 would have been added to its resources in 1908; and had as

much been raised per capita from taxes as the median city, about $445,000 would have been added to its available funds for 1908. While it is true, on the other hand, that the subvention received from the State for educational purposes was paid by this city, and still more in addition, as the State school tax, the same may be said of other cities. In fact it seems almost universally true that cities pay more into the State treasuries than they receive back from them, and it is altogether probable that Baltimore fares no worse in this respect than most cities.

EXPENSES IN DETAIL.

The various items of expense of a city school system should be judged from two standpoints: First, as to the distribution of the total expenses among the various schools and activities and the various objects necessary to their operation; second, as to the unit costs of the various schools, activities, and objects for which expenses were incurred.

The following table shows (1) the median or average percentages of the total expenses that were expended in 1908–9 in 13 of the cities of the United States of 300,000 population and over for each of the principal divisions of school expenses; (2) the same for Baltimore for 1908; (3) the divisions in which there was an excess in Baltimore of expenses above the average percentage and the amounts thereof; and (4) the divisions in which there was a deficiency and the amounts thereof.

Principal divisions.	Median percentages of total expenses in all cities.	Median percentages of total expenses in Baltimore.	Excesses in Baltimore.	Deficiencies in Baltimore.
General control[1]	2.5	2.2	.....	0.3
Elementary schools	77.5	78.4	0.9	.....
Secondary schools	14.2	14.2	.....	.....
Normal, evening, vacation, and special schools	3.5	1.2	.....	2.3
Miscellaneous expenses	2.3	4.0	1.7	.....
Total	100.0	100.0	2.6	2.6

[1] Under general control are included expenses of board of education, of finance offices, of superintendent's office, and other overhead charges.

As measured solely by the standard of other cities combined, Baltimore gave too large a part of her limited funds to elementary schools and to miscellaneous expenses, too small a proportion to general control and to normal, evening, vacation, and special schools, and exactly the correct proportion to secondary schools. Only 3 cities of the 13 gave a larger proportion to elementary schools, and 9 gave less, while 1 other city gave a larger proportion to miscellaneous expenses. On the other hand only 4 cities gave less for general con-

trol, and only 2 less for normal, evening, vacation, and special schools. Six cities gave less and 6 gave more toward the support of secondary schools.

Certain expenses involved in the maintenance and operation of these schools and activities deserve particular notice. The most uneconomical expense connected with the Baltimore system was that of rent. Two and six-tenths per cent of the total expenses went for this purpose, 1.4 per cent greater than in any other city and 2.3 per cent more than the median, or average, for the group of cities. The next greatest excess was for textbooks, stationery, and supplies: 1 per cent in the secondary schools and 0.8 per cent in the elementary schools. No other city spent so large a percentage for rent, although Minneapolis spent but one-tenth of 1 per cent less, while 3 cities spent more for elementary texts, etc., than did Baltimore. The next widest departure proportionately was for fuel in the elementary schools, but one city, Washington, spending a larger proportion for this purpose. The amount of the percentage in Baltimore was 3 per cent, in Washington 3.2 per cent.

As regards the proportion of the total expenses devoted to salaries of teachers in elementary schools, Baltimore gave more than 8 cities and less than 4. The entire list of cities, with the percentages of the total expenses, follows: Cleveland, Ohio, 46.8; Washington, D. C., 50.6; Buffalo, N. Y., 51.4; St. Louis, Mo., 53.7; New Orleans, La., 57.7; Newark, N. J., 57.8; Chicago, Ill., 58; Detroit, Mich., 58.4; Baltimore, Md., 58.5; Milwaukee, Wis., 58.6; Minneapolis, Minn., 60.3; San Francisco, Cal., 61; Los Angeles, Cal., 63.7.

While, after rent, textbooks, and fuel, the proportion of the total expenses paid to elementary teachers constituted the next greatest excess above the median, or average, percentage paid for this purpose by the group, it must not be forgotten that Baltimore had a low scale of expenses, and that for this reason the average cost per child for these purposes was low as compared with the other cities, as will be seen when comparisons of average costs are made. This fact also makes the deficiencies in percentages of total expenses all the greater from the standpoint of average cost than would appear from the average cost figures taken alone. It also follows that should the scale of expenses be raised, the percentage of expenses for fuel and textbooks would be lowered, for it would not be necessary to increase the actual expenses for these purposes, and as the percentages would be reckoned on the basis of higher total expenses caused by the greater expenses for other purposes, those for fuel and textbooks would be decreased.

There are three classes of expenses for which, relatively, the deficiencies appear almost equally large—supervision of elementary schools, salaries of janitors of elementary schools, and supplies for janitors of elementary schools—for each of which Baltimore spent a

less percentage than any of the other cities. For the first she expended 0.2 per cent, or 0.7 per cent less than the median or average; for the second 3.5 per cent, or 1 per cent less than the average; and for the last 0.01 per cent, or 1.1 per cent less than the average.

Unit costs.—With less money to spend, a lower scale of expenses was the necessary result. The extended variations from the standard distribution of expenses was shown above. It would be expected that the items showing low percentages would have low average costs and that the items showing high percentages would have the highest average costs. But differences in enrollment and other factors affect the averages and this does not always follow. On the whole, however, the scale of expenses in Baltimore was so low as to cause low average costs even for items that have an excess in percentages of expenses.

This is true of total expenses of elementary schools and of salaries of teachers in elementary schools, in both of which Baltimore has the lowest average costs of all the cities. This is caused in part by the large enrollment in the elementary schools. The following tables and diagrams show the exact figures and relationships. To have brought up the expenses of elementary schools from $18.71 per pupil to the median amount for all of the 10 cities included—$26.54—would have required an additional expenditure for the year of about $600,000. Of this amount in order to have brought up the average salary of teachers from $13.95 to $20.36 per pupil about $500,000 per year would have been required.

TABLE 6.—*Per capita costs of total expenses of elementary schools, based on enrollment.*

Chicago, Ill	$26.77	San Francisco, Cal	$33.57
St. Louis, Mo	23.17	Newark, N. J	28.19
Baltimore, Md	18.71	Washington, D. C	31.32
Detroit, Mich	26.31	Los Angeles, Cal	25.40
Buffalo, N. Y	22.51	Minneapolis, Minn	27.11

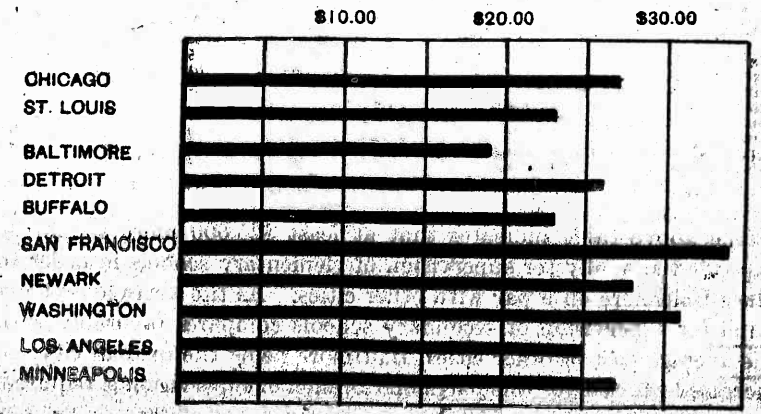

FIG. 5.—Per capita costs of total expenses of elementary schools, based on enrollment; based on Table 6.

TABLE 7.—*Per capita costs of salaries of teachers in elementary schools, based on enrollment.*

Chicago, Ill.	$20.03	San Francisco, Cal.	$26.43
St. Louis, Mo.	18.39	Newark, N. J.	20.94
Baltimore, Md.	13.95	Washington, D. C.	21.24
Detroit, Mich.	20.20	Los Angeles, Cal.	21.48
Buffalo, N. Y.	14.32	Minneapolis, Minn.	20.52

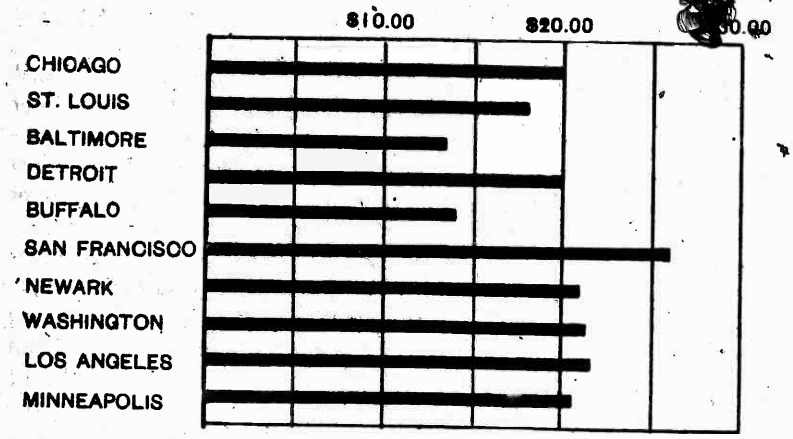

FIG. 6.—Per capita costs of salaries of teachers in elementary schools, based on enrollment; based on Table 7.

The following table brings together these facts and others relating to low average costs in elementary schools. While the computations are in the rough, they are sufficiently accurate for the purpose. The enrollment of the elementary schools in Baltimore is figured as 76,500 in each case.

Items.	Median average costs, all cities.	Baltimore's average costs.	Unit differences.	Total Baltimore deficiencies.
Total expenses	$26.54	$18.71	$7.83	$600,000
Salaries, teachers'	20.36	13.95	6.41	500,000
Supervision	.365	.04	.325	25,000
Janitors', engineers', etc., salaries	1.73	1.32	.41	34,000
Janitors' supplies and sundry expenses of maintenance and operation	.37	Trace.	.37	28,000
Libraries	.05	.00	.05	4,000
Apparatus and manual training equipment	.09	.03	.06	4,500
Repairs and replacement of equipment	.20	.14	.06	4,500

The above table indicates that at least $25,000 more should be expended annually for supervision of elementary schools in order to place Baltimore on a par with other cities. As the average cost per pupil for supervision of secondary schools compares favorably with the average cost of other cities, Baltimore being the median city, no increased expense for this particular branch of supervision is required.

It should be remembered, however, that the percentage of the total expenses which was expended in Baltimore for the superintendents' office was below the average.

Expansion in the board of superintendents' office is demanded if Baltimore is to meet the standard set by other cities. Our statistics do not permit us to fix the exact amount of increase; but it should be at least $10,000, and most probably $20,000, per year. This amount added to the $25,000 for elementary schools makes a total of from $35,000 to $45,000 required for increased supervision of all classes of schools in order that Baltimore's practice may be in agreement with that of other cities of her class.

While the percentage of expenses devoted to secondary schools was the median amount, the average cost of these schools in Baltimore was above the median, due to the comparatively small enrollment in the high schools. The median average cost per pupil for the group was $64.39, and for Baltimore $72.82, a difference of $8.43 per pupil, or an excess of about $31,000. While this shows that the secondary schools were more adequately supported for each pupil enrolled than any other part of the system, nevertheless it was no more than was properly due this type of schools.

On the other side of the account is an item that must not be lost sight of—rent. A large portion of the amount expended for this purpose—$47,089—would have been spent by other cities for other objects.

SCOPE AND ORGANIZATION OF THE SYSTEM OF EDUCATION.

SCOPE OF SYSTEM.

(See diagram opposite.)

The following statistics show the scope of the system. All of the various parts are well adjusted to each other, except the kindergarten which is not an integral part of the system:

Groups:		
White	19	
Colored	3	
		22
Elementary buildings		105
Classrooms (approximate)		1,500
Preparatory class centers		4
Preparatory classes		23
Secondary schools:		
White (female)	2	
White (male)	2	
Colored (male and female)	1	
		5
Training schools:		
White	1	
Colored	1	
		2
Cooking centers		20
Manual training centers		17
Kindergarten classes		21
Ungraded classes		31
Special classes		5
Evening schools:		
Secondary—		
White	2	
Colored	1	
		3
Elementary—		
White	9	
Colored	5	
		14
Cooking centers (white)		10

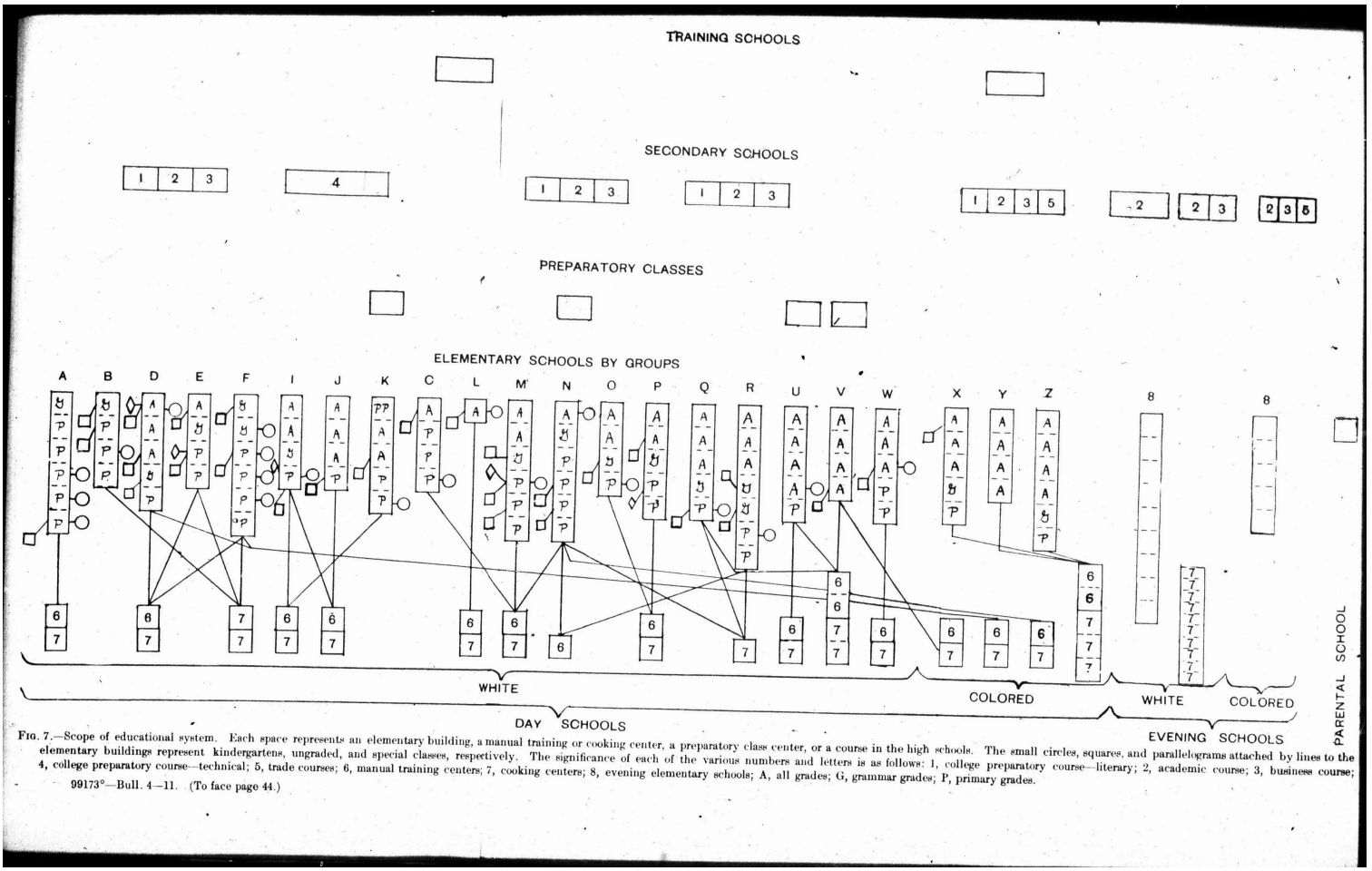

FIG. 7.—Scope of educational system. Each space represents an elementary building, a manual training or cooking center, a preparatory class center, or a course in the high schools. The small circles, squares, and parallelograms attached by lines to the elementary buildings represent kindergartens, ungraded, and special classes, respectively. The significance of each of the various numbers and letters is as follows: 1, college preparatory course—literary; 2, academic course; 3, business course; 4, college preparatory course—technical; 5, trade courses; 6, manual training centers; 7, cooking centers; 8, evening elementary schools; A, all grades; G, grammar grades; P, primary grades.

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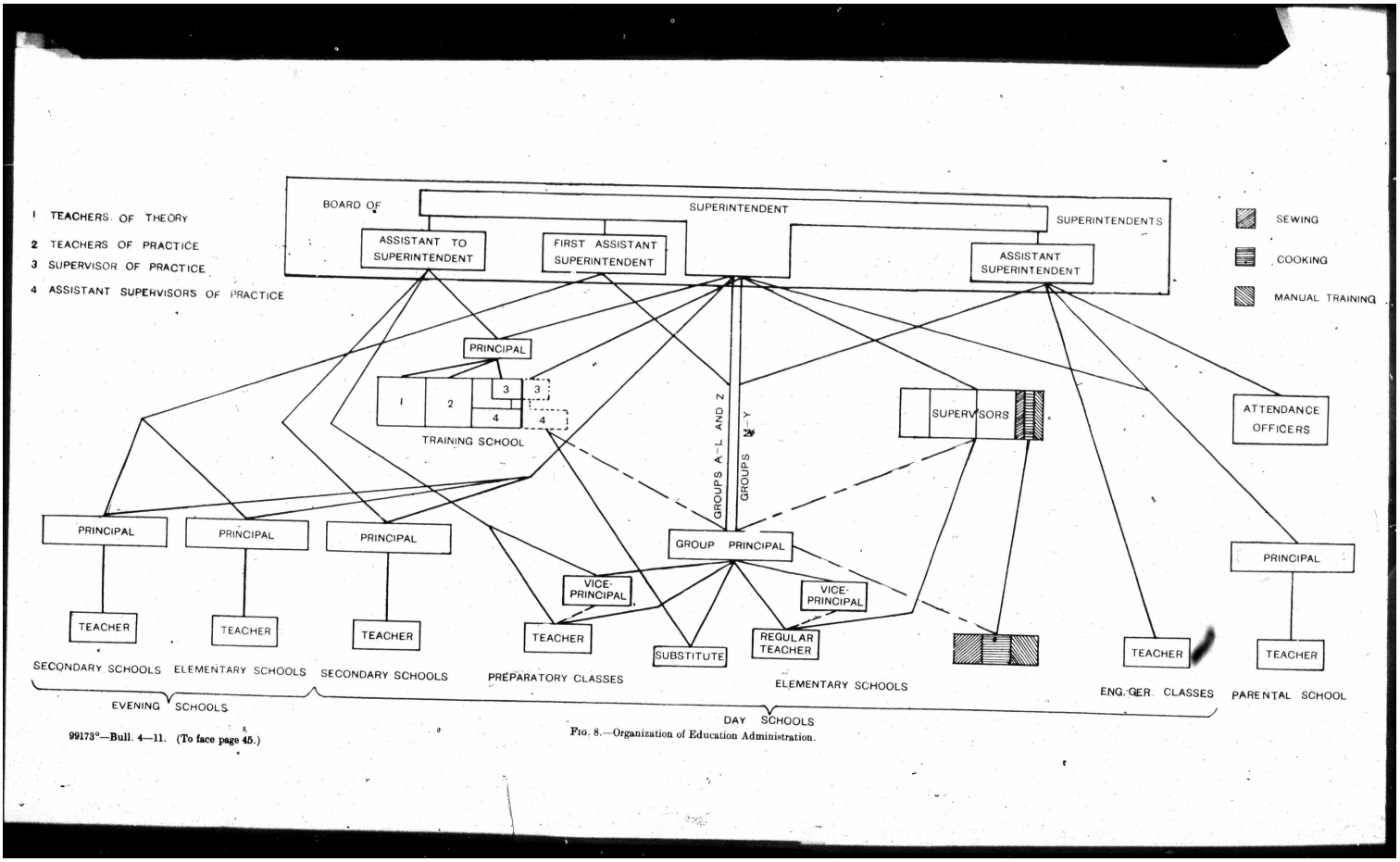

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FIG. 8.—Organization of Education Administration.

ORGANIZATION OF ADMINISTRATION.

(See diagram opposite.)

On page 32 may be found a statement of the authority of the board of superintendents and of the superintendent. In fact, the superintendent and assistant superintendents act as a unit, with the superintendent as the directing head and the assistant superintendents as the extensions of his eyes and hands. The superintendent performs at will the identical functions that ordinarily would be performed by the assistants. In matters of routine upon which policies have been determined, the assistant superintendents act with freedom. If an unusual application of an established policy, a modification of such policy, or the determination of a new policy is involved, the matter is acted upon by the superintendent or after a meeting of the board of superintendents. Such conditions require very close personal relations among all members of the board of superintendents.

The supervisor of practice and her assistants form one of the three divisions of the training-school faculty. For matters pertaining to the practice teaching of training-school pupils or other things connected with the training school they are responsible to the principal of the training school, but the assistant supervisors of practice can be reached only through the supervisor of practice. Again, the supervisor of practice and her assistants are responsible to the superintendent alone in matters pertaining to the supervision of substitutes after they have completed the training-school course.

The broken lines leading to and from the group principal indicate that the desired relations have not as yet been effectively established. The vice principal exercises little control over the teachers, none relating to supervision of instructors.

PROGRESS OF PUPILS THROUGH THE COURSE.

(See diagram opposite.)

Classes are formed each half year. The pupils are divided into three groups according to ability to perform the work whenever the number of pupils permits such division. Otherwise, into two divisions or not at all, as the numbers dictate. In certain groups particularly in one, the course of study has been adapted to each grade of ability. This may be considered as the ideal toward which all groups are approaching, although very imperfectly in some groups.

Pupils of highest ability are admitted to preparatory classes at the close of the sixth grade. Such pupils may complete the twelfth grade in five years, except those that enter the Polytechnic Institute. Graduates of this school are admitted, however, as sophomores to Lehigh and Sibley (Cornell), and those who have completed the eleventh grade are admitted as freshmen to these institutions. There are no preparatory classes for colored pupils.

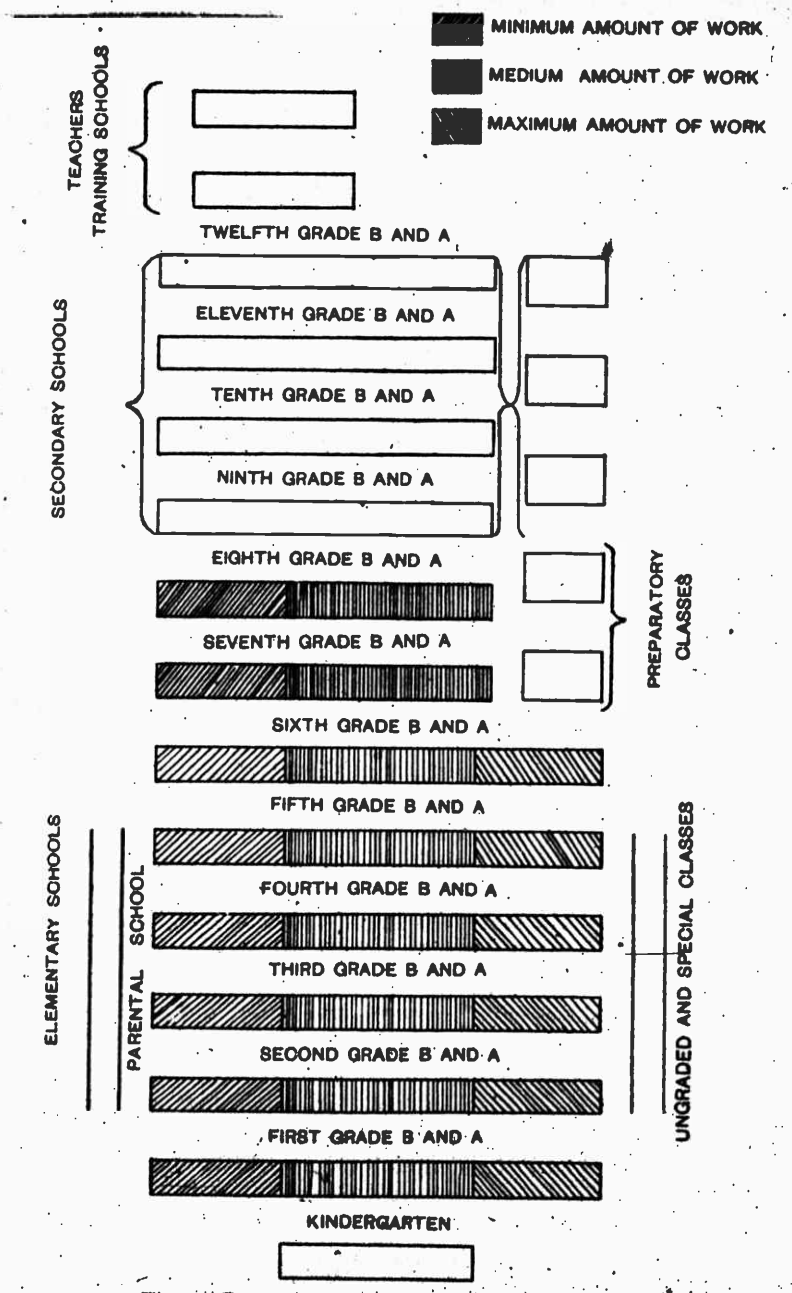

Fig. 9.—Progress of pupils through the course of study.

CHAPTER III.

THE MAIN TOPICS OF THIS REPORT, RELATING TO TRAINING AND INSTRUCTION IN ELEMENTARY DAY SCHOOLS.

A. THE SYSTEM OF SUPERVISION.

CONDITIONS IN THE PAST.

At the time of the adoption of the new charter and the reorganization of the school department, as it appears from such information as we have gathered, the system of supervision for the schools of the city of Baltimore was altogether inadequate. There were at that time (1899) 1,802 teachers employed and 65,289 pupils enrolled in the schools. For general supervision of the work of this large number of teachers there was one superintendent of schools and one assistant superintendent. The size and method of election of the board of school commissioners at that time, and the limitations upon the powers of the supervisory officers, as well as the very magnitude of the school system, rendered it impossible for these two men to give an effective professional supervision to the schools of the city. The larger business and educational problems of the system as a whole naturally absorbed the greater part of their time and energy.

In the schools themselves there was one principal for each department, male and female, of each grammar and primary school; there was usually one principal, and sometimes two, for each floor of a building; and not infrequently there were, under this arrangement, from two to four principals to a single schoolhouse. Each principal taught a class, but where seven or more teachers were under his care, an assistant was provided for two hours in the day, during which time the principal was expected to supervise the work of the teachers. In practice, however, the principals exercised only nominal control over the few teachers in their school or division. They were principals in name rather than in fact. In some instances there was duplication of work in the same building and, although a uniform course of study was in existence, there was little of real organized unity.

There were supervisors of special subjects of instruction (music, drawing, sewing, and physical training), and they introduced something of uniformity and purpose into the teaching of these special subjects in the grades in which they were taught; but their work

was of necessity but little related to the great bulk of elementary school instruction and management and probably influenced it but little.

Each high school had a principal of its own, who looked after its supervision. These schools, however, were but loosely related to the elementary schools. For a long time the high schools examined the pupils coming from the elementary schools to see if they were prepared for high-school instruction.

PRESENT POLICY AND PRACTICE.

With the reorganization of the school system following the adoption of the charter of 1898, a new system of school supervision was instituted. An experienced superintendent of schools was called from another city. The different schools were organized into a number of school groups, and two additional assistant superintendents were after a time employed. For each of the groups of schools a group principal, devoting all of his time to supervision and work related thereto and made responsible directly to the superintendent of schools, was put in charge. At present 104 of the 105 elementary-school buildings are arranged in 21 groups (18 white and 3 colored). These groups vary in size from one of 48 to one of 105 teachers, the average being 72 teachers.

The following table shows the number of elementary-school buildings and the number of teachers in each group:

Groups.	Buildings.	Teachers.	Groups.	Buildings.	Teachers.
A	6	79	O	4	48
B	4	63	P	5	61
C	4	56	Q	5	68
D	5	105	R	7	85
E	4	75	U	5	65
F	6	71	V	4	70
I	4	74	W	5	82
J	4	86	X (colored)	5	93
K	5	69	Y (colored)	4	71
L (not a group)	1	19	Z (colored)	6	63
M	6	67			
N	6	92	Total	105	1,562

A group of schools consists ordinarily of a central school, enrolling children in the upper grades, and a number of primary schools, whose pupils go to the central school after completing three or four years of work. In the newer and larger buildings, however, all of the grades are commonly found under one roof. All of the schools of a group are regarded as practically one school, being managed by one (group) principal. In disciplinary and executive matters the principal is assisted by one vice principal in each building. Each teacher is directly responsible to the principal, and through him to the superintendent.

The introduction of the group system of supervision marked an advance toward effective supervision for the schools of Baltimore. The good results obtained under it were evident to the commission and were frequently mentioned by teachers who have worked under both systems. It has brought into the school system its first unifying supervision, except in the few special subjects of instruction for which special supervisors were already employed.

The number of such supervisors, compared with 12 years ago, is shown by the following table:

Special supervisors.	1899	1911
Music supervisors	2	4
Drawing supervisors	1	1
Assistants in drawing	18	10
Sewing supervisors	1	1
Physical-training supervisors	2	1
Physical-training teachers	8	5
Manual-training supervisors	.....	1
Totals	32	23

The special supervisors travel about from group to group, meeting the teachers of the city by grades rather than by groups, and instructing them in subject matter as well as in methods of presentation. The subjects covered by these special supervisors, however, added together do not represent more than 20 per cent of the work of the eight years of elementary-school instruction. For the 80 per cent or more of instruction remaining, and involving nearly all of the general administrative problems of group and school supervision, dependence must be had almost entirely upon the group principals.

So far as close personal supervision of the elementary schools by the superintendent of public instruction and his assistant superintendents is concerned, the size and extent of the school system of the city of Baltimore (about 1,550 teachers and supervisors being employed, with about 80,000 children enrolled, and the 105 elementary-school buildings being scattered over an area of approximately 30 square miles) make this manifestly impossible. If the superintendent and his three assistants should attempt to spend half a day with each teacher in the schools, and should do nothing else during the time the schools are in session during each year, it would require nearly four years and a half for each one to make the round once. It would require more than a year to make the round, if each teacher were visited by only one member of the board of superintendents, the members of that board devoting the whole of each school day to this business exclusively.

Under these conditions the board of superintendents can at best only indicate a policy and procedure, in general terms, and must of necessity depend very largely upon the several group principals to carry such policy and procedure into effect within their respective groups. The group principals thus become, in a way, the key to the whole situation. In so far as they are educationally efficient and assume a helpful and cooperative attitude toward the school administration, much can be accomplished; but in so far as they are lacking in educational insight and effectiveness, or assume a different attitude, little or nothing of a constructive nature can be made effective. (See Fig. 8.)

CRITICISM.

The commission has been impressed with the large amount of general constructive work which has been accomplished, under such conditions, by the board of superintendents, with the cooperation of group principals. The first unfavorable criticism which we would present is that the supervision is inadequate in amount. This will appear from the following table, showing the provision for school supervision in Baltimore along with that in other cities with which Baltimore may fairly be compared:

TABLE 8.—*Ratio of teachers to supervising officers in cities of 300,000 population and over, 1910.*

	Teachers.[1]	Supervising officers.[2]	Number of teachers to one supervising officer.
New York	16,089	926	18
Chicago	6,104	286	21
Philadelphia	4,297	260	17
St. Louis	1,987	124	16
Boston	2,779	95	29
Cleveland	1,936	123	16
Baltimore	1,778	56	32
Pittsburg	1,371	53	26
Detroit	1,399	101	14
Buffalo	1,511	79	19
San Francisco	1,034	96	11
Milwaukee	1,150	70	16
Cincinnati	1,238	118	11
Newark	1,266	64	20
New Orleans	1,029	95	11
Washington	1,659	43	39
Los Angeles	1,227	83	15
Minneapolis	1,082	73	15

[1] Number of teachers in kindergartens, day elementary and high schools, schools for the training of teachers, schools for exceptional children, and teachers of special subjects.
[2] Number of superintendents, associate and assistant superintendents, principals of elementary and high schools, and schools for the training of teachers, who devote half or more than half of their time to supervision.

Some teachers were inclined to assert that too much uncertainty exists regarding the exact policy of the superintendent in respect to some important matters of instruction and administration. It would

undoubtedly be well to make use of a more effective means for keeping the teachers in touch with the policy of the system. The usual method employed for acquainting teachers with the wishes of the superintendent is the circular of information which is mailed to vice principals, and by them posted on the bulletin board. Teachers' meetings are confined to a few groups, and meetings for teachers of particular grades are now unusual. To bring this all about, additional general supervisory officers should be provided.

The group system of school administration, while possessing certain advantages from the standpoint of the grouping and grading of children, is nevertheless at best a somewhat imperfect plan of school supervision. It is found in only a few cities—Boston, New Haven, Washington, Indianapolis, and Baltimore. Except in Washington, in none of the cities using the plan do the group principals have so many teachers to look after as in Baltimore, as is shown by the following table:

Cities.	Number of teachers to the group.		
	Average.	Highest.	Lowest.
Baltimore	72	105	48
Boston	(1)	(1)	(1)
Indianapolis	30	50	15
New Haven	45	55	35
Washington	91.6	113	85

[1] No data at hand.

The general practice elsewhere is to have a principal for each school building, and wherever the building has 10 or more teachers the rules of boards of education for the different cities generally provide that the principal shall have all of his time free for supervisory work.

We find that a teacher in Baltimore rarely submits the program of studies in her grade to any superior officer. There are often uneconomical arrangements of subjects, such as a penmanship period directly after opening exercises, or a physical-culture period following a recess.

Our second unfavorable criticism is that the supervision exercised by the several group principals seems to us extremely variable in quality, and accordingly lacking in anything like uniform professional effectiveness.

Group autonomy is one of the marked characteristics of the schools of Baltimore. It seems a safe generalization to say that there are about as many school systems as there are group principals. In many matters it is very desirable that a freedom of action on the part of group principals should exist. A clear distinction, however, should be made between liberty to do more than is required and

license to do as one pleases. Local and individual liberty has in the past been excessive in the schools of Baltimore. The school administration has been compelled to proceed with great caution, to use suggestion instead of authority, and to exercise an undue amount of patience in dealing with individuals. What superintendents of schools elsewhere are accustomed to ask of principals and teachers, and to expect them to do—not because it is a command, but because the judgment and larger knowledge of the executive officer is respected, and his authority is upheld—the superintendent in Baltimore must offer largely as a suggestion, explain its merits to his group principals, and then frequently wait for them voluntarily to put the suggestion into effect. The different school groups naturally reflect to a large degree the spirit and attitude of the group principal. In the majority of the groups there is an apparent willingness on the part of the principals to cooperate with the superintendent in matters which are deemed best for the system. In some cases, however, there is an apparent lack of readiness to follow explicit directions. It seems to us clear that in some of the groups the group supervision fails to second, vigorously and intelligently, the supervision from the central office. Such supervision is that of the letter rather than that of the spirit, and the teachers of such groups, though faithful and earnest, lack that pedagogic insight and professional enthusiasm which is so contagious when possessed by a school principal.

We may repeat that the commission does not concern itself with individuals. Its criticism is wholly impersonal, such observation as it has made of individual instances being used solely for the formation of judgments concerning the system as a whole, these judgments in turn serving as the basis for recommendations concerning possible improvements.

Baltimore has now to integrate the different school groups into a united system. Between the schools of each group there is a uniformity that does not exist between the schools of different groups. In other words, the unification which has thus far been attained is a vertical one. The groups need now to be brought together by a horizontal unification.

RECOMMENDATIONS.

The commission believes that one of the most pressing needs of the schools in Baltimore is a very material increase in the supervisory force. While the commission does not desire to make too specific recommendations, it does, however, believe that it should indicate a few of the more obvious and immediate needs. These needs may be enumerated as follows:

(*a*) An increase in the number of assistant superintendents, one of whom might be the principal of the white teachers' training school.

(b) The creation of a staff of primary school supervisors and some increase in the staff of special supervisors.

(c) In all elementary schools having 20 or more teachers, with all of the grades represented, it might be well to have a principal to devote all of his or her time to the supervision of instruction.

The question of cost naturally enters into all of these proposals. In a previous section (pp. 42, 43) it was shown that in order to spend an amount comparable to the median amount spent by other cities for supervision in 1908, Baltimore would have been required to spend from $35,000 to $45,000 more than was then used for this purpose. It has been estimated by the commission that the total expense of securing the additional assistant superintendents and supervisors suggested under *a* and *b* would be less than $35,000. This would represent an added one-fourth of 1 per cent to the present cost of the school system, an amount that is insignificant when compared with the benefits to be derived from it.

The commission recommends that the authority of the board of superintendents in all matters pertaining to supervision should be materially strengthened. The policy of suggestion and recommendation which this board has heretofore followed has much to recommend it, but it has decided limitations, and progress under it, though substantial, is frequently slow. It is desirable that the schools of Baltimore make more rapid progress than has thus far been made, and one of the means for accomplishing this must be this increased authority.

It may not be out of place for the commission to suggest that in the primary schools the superintendent needs for his assistants a small group of capable women of experience. The work of primary schools is essentially and naturally the work of women. It is needless to say that such women should be well trained, broad-minded, sincere, and sympathetic. To secure such women good salaries must be paid, for the supply throughout the country is by no means equal to the demand.

In order to secure persons properly qualified for all of these important positions, larger salaries than are now paid should be provided. There should be no mistaken local pride about going outside of Baltimore to secure such persons, and it would be well if some were drawn to Baltimore from other city school systems. The new points of view and the new methods of work which such individuals would bring would tend to greatly improve the school system.

B. THE TEACHING FORCE AND ITS TRAINING.

CONDITIONS IN THE PAST.

The commission has been repeatedly and reliably informed that prior to 1899 considerations other than special aptitude for the work of teaching frequently controlled the election of new teachers. No professional preparation was required, and then, as now, the city of Baltimore furnished the entire supply of new teachers. Many of those who began teaching under good principals, and who possessed the right attitude toward the work, developed into very good teachers. On the other hand, those who received little help or encouragement, or those to whom the work of teaching made no strong appeal, became formal, stereotyped, and professionally unprogressive teachers. The commission has met examples of each kind of teacher in the schools of Baltimore.

Of the 1,788 teachers in the service of the city of Baltimore on January 1, 1911, the terms of service by decades are as follows:

Entered prior to 1860	5
Entered between—	
1860 and 1869	52
1870 and 1879	137
1880 and 1889	292
1890 and 1899	535
1900 and 1905	329
1905 and 1911	438

More than 1,000 of the teachers now employed began their service prior to 1900. These, with few exceptions, have received their entire professional training while serving in the schools of Baltimore, and consequently have no intimate knowledge of the practice in other large cities.

Shortly after the adoption of the new charter, in 1898, efforts were made to improve the professional condition of the teachers. These efforts extended in four directions:

(1) Improved and increased supervision. (2) City training schools for teachers. (3) Competitive examinations for admission to the eligible list of teachers. (4) Promotional examinations for teachers in service.

The first of these means was treated in Section A; the remaining three belong to this section.

CITY TRAINING SCHOOLS.

In September, 1851, the eastern and western normal classes were organized. They were established for the benefit of teachers; and the graduates of the female high schools having passed the full term and desiring to adopt the profession of teaching were allowed to remain another year in this class to receive instruction in the theory

and practice of teaching. All newly appointed teachers were required to attend one of these classes for six months. These classes were discontinued in 1858.

In 1872 the board of commissioners organized a normal class for the purpose of giving instruction in the theory and practice of teaching. This was placed under the supervision of an experienced teacher with a corps of competent assistants. The class met on Saturdays. This class was continued until 1881, at which time "the exercises of the normal class were suspended during the year in consequence of objections made to the methods of instruction." Almost immediately there was a strong agitation for the establishment of a teachers' training school. Year after year the board of school commissioners renewed their recommendation on this matter to the city council, but without effect. The city continued to face a somewhat unusual situation in regard to the supply of teachers; it could not depend upon strong State normal schools for the training of its teachers; and the low salaries offered, coupled with the strong feeling of local pride, prevented the city from drawing trained teachers from other cities. In 1900, a concurrence of favorable circumstances enabled the city to start a training school for the first year at an expense of a little over $3,000, and arrangements were made for the opening of such a school in January, 1901. Under the circumstances, the only recourse was to establish such schools for both races and to require that all future teachers complete the course of preparation provided by these schools, or present evidence of having equivalent preparation.

The principal of the Teachers' Training School for white teachers has a triple faculty of assistants, namely, (1) the assistant teachers of pedagogic subject matter and method in the training school itself; (2) the teachers of practice classes and the vice principals with whom student teachers are placed for practice teaching; (3) the supervisor of practice teaching and the assistant supervisors of practice teaching, in so far as their work concerns the practice teaching of student teachers. The principal of the Teachers' Training School has authority in all matters pertaining to candidates for admission to the service, both as to theory study and practice teaching, from the time of the candidate's entrance into the junior year of the training school up to the time of the candidate's passing the "professional examination" which gives admission to the substitute list.

At first the training course covered but one year; later it was extended to two years, and graduation from a high school was required for admission. One-half of the time is devoted to practice teaching in the schools under the direction of practice teachers. The course is planned as a combination of theory and practice. It aims to give technical training and to develop professional aptitude, and thereby to assure growth in scholarship and professional skill. The school

grants no diplomas of graduation. Should the number completing the training-school course ever largely exceed the number needed by the schools, a condition which may exist under an increased salary scale, the advantage of this provision will be apparent. Those who complete the training-school course are placed on the eligible list.

ADMISSION TO THE ELIGIBLE LIST OF TEACHERS.

In 1887 the board of school commissioners passed a rule which made those who were graduated from the city college, high schools, and State normal school with the requisite average, and those who passed the semiannual examinations, eligible for appointment as teachers for 10 years; if selected for promotion, they were eligible to any position in a primary or grammar school. The records show that the rules were frequently suspended in order to allow the names of applicants to be placed upon the list of eligibles without complying with the rules relating to the eligibility of candidates. At present every candidate for a position in the elementary schools of Baltimore must pass the competitive examination, which consists of two parts. The first part is professional in nature and covers, as far as possible, the prescribed course in the teachers' training schools of the city. The second part consists of a test in actual teaching done under ordinary classroom conditions; first as substitute of class 2, and afterwards as substitute of class 1. After the candidates have demonstrated ability as substitutes in class 2, the superintendent is required to place them in class 1 in such numbers as the needs of the service may require. Candidates serve as substitutes in class 1 for one year. The records of both parts of the examination are of equal value in fixing the final average assigned the candidates when they are placed upon the graded list. The superintendent of public instruction reports the names of all candidates placed upon the graded list to the board of school commissioners. He also reports the names of all substitutes of class 1 who fail to demonstrate their aptness for teaching at the end of the year's trial, with a recommendation for such action as he may deem advisable. All permanent appointments of teachers in the elementary schools are made from the regular substitutes, and vacancies in the staff of substitutes are filled from those who have the highest rating on the graded lists.

PROMOTIONAL EXAMINATIONS FOR TEACHERS IN SERVICE.

In 1902 the board of school commissioners had an unexpended balance of about $10,000. It was decided to use this in increasing the salaries of the best teachers in the school system. On the assumption that the good teachers were equally divided between the various groups, each group principal was asked to name, in order of merit, a few of his best teachers, who had been teaching not less than 5 years

and who were receiving salaries less than $600 per year. The board of superintendents visited the teachers thus named and others and selected 100 who were invited to take an examination which might be written in answer to set questions subject to the usual limitations of time and place, or which might take the form of an oral discussion of a paper of not fewer than 1,500 words prepared for the purpose. In all cases the second plan was chosen—the thesis and its defense. The increase in salary was based on merit as determined chiefly by inspection of regular school work. The examination served merely as an evidence of the possession of ideas and of the ability to express those ideas in clear and concise English. After some rejections and substitutions 100 teachers were thus chosen, each of whom received an increase in salary.

In 1904, 150 teachers were advanced in the same way. In 1905 the board of school commissioners received an appropriation of $78,000 to be used in increasing the salaries of teachers. At this time the so-called promotional examination system was adopted. In addition to the preparation of a paper such as had heretofore been required, teachers desiring to compete were now required to pass an examination in English. It is stated that the reason for introducing this part of the examination was the very poor English used in many of the papers which had been submitted. The examination now consisted of two parts, the first of which was an examination in English and the second a professional examination similar in nature to the first examinations that were given. By these examinations teachers were promoted in salary but not in position. The maximum annual salary for teachers who had not taken the promotional examination was $504. When part 1 of the promotional examination was passed, the teacher's salary advanced to $552 the first year, and unless an adverse report on her work was made, increase was automatic to $600 the second year. After receiving $600 for at least one year, those who had passed part 1 of the promotional examinations and who continued to do satisfactory work were eligible to advance to $700 per year by three annual increments of $24, $36, and $40, respectively, provided they had passed part 2 of the promotional examinations. Certain provisions were made for those teachers who had been in service prior to the establishment of these examinations. In no case was the salary of a teacher decreased.

These promotional examinations and the scale of salaries are still in force. The records seem to indicate that almost from the first there was a strong opposition on the part of the teachers to the examinations for promotion. The following table shows the number of those who have passed parts 1 and 2 of the examinations from 1903 to 1911, inclusive:

Years.	Part 1.	Part 2.	Years.	Part 1.	Part 2.
1903		109	1908	80	24
1904		145	1909	50	27
1905		20	1910	54	28
1906			1911	18	14
1907	70	99			

While but few large cities are reported as having promotional examinations for certain increases in salaries, this small number includes some of the most progressive educational systems of this country. The list so far as our information goes is as follows: Chicago, Ill., Boston, Mass., Baltimore, Md., Cincinnati, Ohio, Kansas City, Mo., and Paterson, N. J.

CRITICISM AND RECOMMENDATIONS.

(*a*) *Training schools.*—The training school for colored teachers is well located. It has the beginnings of an equipment for teaching and has good practice-school facilities. The training school for white teachers, however, is in a building poorly adapted for the purpose of a training school. It is unattractive and poorly equipped. The salaries in this school are not what they should be to attract and hold the best teachers. There has been a lack of coordination between the different divisions of the training school faculty. The students who become student teachers find that the methods and devices they have been taught by the theory teachers are not always those which the supervisors of practice require.

These training schools are now and probably will continue to be essential to the building up and the preservation of a real professional spirit among the members of the teaching force. It is important, therefore, that they should be made equal to the best of their kind. The training school for white teachers should be in a building suited to its purposes.

It should be officered and equipped in such a way that it can be made the center of the educational life of the public-school system. Among them should always be some who have had experience outside of the schools of Baltimore. The amount of purely apprenticeship work done during the two years of the course might to advantage be somewhat shortened, and in its place more attention be given to such subjects as will enlarge the professional conceptions of the students. It is greatly to be desired that in the pursuit of such subjects they should gain a clear idea of the service of education to a democratic society, a certain loyalty to educational institutions and ideals, and a good beginning for long-continued growth in the occupation of teaching. In order to make these changes as effective as possible it is desirable that the influence of the training school in the supervision of its graduates after they have left the school should be increased.

The commission believes that opportunities for study on the part of teachers in service should be extended. It therefore heartily approves of an arrangement which would give the superintendent power to establish such classes. These classes should be formed in both pedagogical and academic subjects. In the opinion of the commission attendance upon professional classes should be made compulsory for those teachers whose work is not reasonably satisfactory.

One of the great needs of the schools in Baltimore and elsewhere is more accurate and broader scholarship as well as professional attainments on the part of teachers. Progressive teachers recognize these facts and are ready to respond if opportunities are presented. The fact that a great university and a woman's college of high grade are located in Baltimore gives the school authorities exceptional advantages for the organization of study classes.

(*b*) *Eligible list.*—The commission recommends that increased attention be given to securing teachers who have had training and experience outside of the schools of Baltimore. We believe that if Baltimore could draw into its teaching force a number of first-class teachers from the better school systems of the United States there would in a short time be a general change for the better in the outlook of the teaching force. The superintendent should be free to go outside of the city in the selection of teachers, in accordance with the prescribed standard of qualifications.

(*c*) *Salaries.*—The salaries paid the teachers in the elementary schools of Baltimore are decidedly low, as compared with the ordinary scale of living expense for those in an occupation of this grade of responsibility, and as compared with the salary schedules of other cities. The most significant facts that we are able to present by way of a comparison between Baltimore and other cities in this particular are set forth in the following table:

TABLE 9.—*Salaries of elementary school teachers in cities of 300,000 population and over.*[1]

Cities.	Minimum.	Maximum.	Cities.	Minimum.	Maximum.
New York	[2] $600	[2] $1,400	Buffalo	$500	$900
	[3] 900	[3] 2,400	San Francisco	840	1,224
Chicago	650	1,125	Milwaukee	540	1,020
Philadelphia	520	920	Cincinnati	600	1,000
St. Louis	600	1,032	Newark	580	1,100
Boston	552	936	New Orleans	450	700
Cleveland	500	1,000	Washington	600	1,350
Baltimore	444	700	Los Angeles	744	1,080
Pittsburg	480	900	Minneapolis	600	1,000
Detroit	500	1,000			

[1] Compiled from data supplied by superintendents. [2] Women. [3] Men.

In view of these comparisons it seems clear that Baltimore will need to provide for a considerable increase in the salaries of these teachers. It would carry us beyond the proper scope of this report if

we were to advise concerning the salary scale that should be adopted. The figures presented above will, however, be found suggestive at this point.

(*d*) *Promotional examinations.*—The action of the board of school commissioners in providing that an increase in salary at certain points should depend upon the passing of the so-called promotional examinations, has given rise to one of the most acute of the controversies which have of late affected the Baltimore school system. We have seen with regret many indications that personal animosities have entered so largely into this controversy as to have overshadowed the simple question of administration which is involved. The commission, however, is not concerned with any of the personal aspects of the matter, but only with its general bearings. We have very attentively considered these general bearings in the light of argument freely presented from both sides of the question.

The question seems to us an incidental rather than a fundamental one. The permanent interest of the public in the schools is the interest in a good system of education. It is interested in seeing the teachers receive such salaries, within reasonable limits as will contribute to this result; and it is interested in such requirements regarding teachers' qualifications as will best assure this result. The Baltimore school authorities have under their direction a body of teachers, in permanent tenure, who show serious inequalities as regards teacher qualifications. Having at their disposal only a limited fund for the increase of teachers' salaries, they apparently used their best endeavor to give the increase to the better equipped and the more progressive of those teachers. Such action seems to us abundantly justified.

That the opposition of a large number of the teachers to the plan adopted for that purpose should have become a serious element in the situation, even reaching the stage of a deadlock, through the refusal of many of them to qualify for the higher salary on the conditions prescribed, presents a practical administrative problem, to be dealt with in practical ways. That is, the difference seems to us to relate more to a method than to a principle. A careful consideration of the arguments presented by those in opposition to these examinations fails to reveal any deeper principle than that the plan will cause dissatisfaction on the part of those who under its operation do not receive the desired increase in salary. As a mere question of method, the difference seems to us one that should be settled in conference, with a readiness to make concessions from both sides.

A real principle lies back of the question of method, and it is one concerning which there should be no difference of opinion. It is the principle that the schools should render the best possible service to

all of the people and that the teaching force should be made as efficient as possible to this end.

The board of school commissioners and the company of teachers who have opposed the promotional examinations should both keep this principle in view. And mutual concessions, if such are made, should aim at the best working method that can be devised for carrying this principle into effect.

CHARACTER OF THE TEACHING IN GENERAL.

It has been difficult in the brief time at the disposal of the commission to form a wholly satisfactory estimate of the character of the teaching in the elementary schools. There are so many elements which make up efficient teaching that it would be necessary to make a prolonged stay in the schools in order to form accurate conclusions as to the effect of the teaching upon the children of the city.

The commission, however, is able to state some of the conclusions it reached as a result of its study and observation in the large number of schools which the different members visited.

First. There is excellent teaching to be seen in the Baltimore schools. Such teaching is by no means common here; but it should be added that nowhere is such teaching to be found to the extent that might be wished. Fine teaching is an art, in Baltimore and elsewhere, and is therefore rare.

Here and there, in both lower and higher grades, the commission found clear, intelligent, forceful teaching, and correspondingly alert, active children who are making very substantial progress in their work. In certain districts this fine teaching was more in evidence than in other districts.

Second. There is some very poor teaching; not in a large number of schools, but nevertheless in too large a number, if the interests of the children are paramount. In a few classes it is questionable whether the children are gaining anything from their school life. This poor teaching is due largely to the presence in the schools of a few teachers whose usefulness has seriously declined, whatever their former usefulness may have been. In a half dozen rooms the children were actually being harmed by being in school, for they were contracting habits of idleness, inattention, and disorder. Some way should be found of dispensing with teachers of this class.

Third. There is a large amount of teaching which may be classed as ordinary or mediocre. It is mechanical and perfunctory. The work is without that life and spirit which is found in schools of high rank in Baltimore and elsewhere. In these schools is to be found a routine of exercises in which the children do not appear to be vitally interested.

The work of these teachers, however, is not unproductive of good results. The order in their rooms, as a rule, is good; the discipline

can not be seriously criticized; the children have confidence in the teachers; the teachers are interested in their work. The pupils, too, make progress in the conventional work of the school. The schools are worth to the community much more than they cost.

The point which the commission seeks to emphasize is this, that while the work of this class of teachers is of value, it is not so valuable as might be wished, nor as might reasonably be expected.

It is important to ask what is the underlying reason for the condition one finds in these schools. From such study as the commission has been able to give to the matter, we are of the opinion that it is largely due to the presence in the schools of a large number of untrained teachers. The schools still suffer from the fact that the systematic training of teachers did not begin in Baltimore until 1900. No other American city of importance was so late in establishing a normal training school of the modern type as was Baltimore. As a consequence it is probably true that no other American city of the same class as Baltimore has so large a proportion of untrained teachers in the service of the elementary schools.

The commission is not unaware of the fact that there are some excellent teachers in the Baltimore schools who were untrained for teaching. These are teachers of natural ability who have been quick to learn from experience. The fact remains, however, that the preparation afforded by a well-conducted training school is needed for schoolroom efficiency, taking ordinary high-school graduates as they are. Of course the theory that a graduate of a high school is fit without special training to teach school has long ago been discarded in Baltimore, as it has been elsewhere.

In view of these general considerations regarding teaching and teachers, especial attention is called to the considerations brought forward in the preceding sections touching provisions for the improvement of the teaching force of the city.

C. THE ELEMENTARY SCHOOL CURRICULUM.

HISTORICAL SUMMARY.

As early as 1855 a definite curriculum had been set for the public schools of Baltimore. In the elementary schools, that is, the primary and grammar schools, provision was made for teaching reading, penmanship, spelling, etymology, grammar, composition, arithmetic, algebra, geometry, mensuration, bookkeeping, geography, natural philosophy, and history. Algebra, geometry, mensuration, and bookkeeping were omitted in the schools for girls.

In 1883 the board adopted a detailed course of study covering three years for the primary schools and three years for the grammar schools. At that time arrangements were made for teaching drawing, although drawing had been taught in the high schools since 1846

and in the primary schools since 1872. Vocal music had been taught since 1843.

In September, 1885, a course was adopted which provided for eight years in primary and grammar schools. In this course provision was made for elementary science, including physiology, and United States history, which was introduced in the seventh year. The first part of algebra and four books in geometry were taught.

The course of study used in 1898 provides for the definite teaching of sewing to girls, beginning in the third year. This subject had been introduced in 1892.

A manual training school was established in 1884. The sixth, seventh, and eighth grades were taught in this school. Later these grades were dropped from this school and provision for teaching manual training to the boys was made in certain schools which are known as manual training centers. In these centers girls are taught cooking or domestic science.

Physical training has had a place in the curriculum since 1898.

It will be seen by an examination of this list of subjects taught in the elementary schools and comparing it with a corresponding list taught at the present time, that no subjects have been added to the curriculum since 1898.

It is somewhat commonly assumed that the schools are now attempting to teach more subjects than were taught 10 years ago. This assumption is not borne out by the facts.

The subjects now taught in the Baltimore schools correspond to those commonly taught in other cities, large and small, throughout the country.

The following subjects occur in the Baltimore course of study and in that of each of the cities with which Baltimore is compared: English, including language and composition, spelling, grammar, and penmanship; history; geography and nature study; arithmetic; music; physiology and hygiene; drawing; and manual training and domestic science. New York outlines a course in ethics; Chicago has a "Chicago course" and also a course in humaneness; Boston has a moral-training course; Buffalo has a course in agriculture which is a continuation of the nature-study course. The fact that these subjects are named specifically in only the courses of study for the above cities does not mean that other cities are not giving some attention to them, but the work is not as definite as it is in the cities above named.

METHODS EMPLOYED IN MAKING THE COURSES OF STUDY.

The methods employed in making the present courses of study for English, mathematics, geography, and history are noteworthy. All grade teachers through their principals were notified to criticize the old courses of study, and to offer suggestions for improvement by omit-

ting, adding, or simplifying requirements. These suggestions were given to committees of members of the superintendents' round table as the basis from which new outlines were to be derived. These new outlines, tentatively worked out by the committee, were put into multigraph form and abundantly discussed in round-table meetings, and also in group meetings of the various grade teachers concerned. The new outlines were then put into the schools for one year's trial, and at the end of the trial year further suggestions for improving the same were requested. The board of superintendents embodied the best of these suggestions in the outlines before finally presenting them to the school board for adoption. Following the adoption of the outlines the board of superintendents freely answered any query coming from the grade teachers. Whenever a query was received the answer was put in multigraph form and went to all of the teachers of that particular grade.

TIME ALLOTMENTS IN THE SEVERAL GRADES.

Each teacher in the Baltimore schools is required to post a schedule of her work in a conspicuous place in the room so that the children may see it and that the principal and other supervisors may learn, without interrupting the teacher, when to come to the room to observe a given exercise. The only explicit directions given the teachers in regard to the time allotments are contained in the following extract from the general directions.

> Except in the few instances * * *, or for extraordinary reasons, the following time limits are not to be exceeded: Grade one, 15 minutes; grades two, three, and four, 20 minutes; grades five and six, 25 minutes; and grades seven and eight, 30 minutes. Painting, drawing, or construction may require 30 minutes in grades one to six.

It has been contrary to the policy of the superintendent to prescribe the amount of time per week that a teacher must devote to the various subjects, excepting drawing, music, sewing, and physical training. In practice, however, the commission has found that the suggested schedules in the Supplement to the Outline of Studies for the Elementary Schools, 1906–7, is very generally followed by the teachers. Its use at any rate is sufficiently general to warrant the commission in forming a schedule of time allotments according to these schedules. The time allotments in particular subjects is given in connection with the treatment of the subjects themselves and need not appear at this point. The following table shows the percentage of the school time allotted in the suggested schedules to the subjects that are generally called the essentials, namely, English, including reading, writing, spelling, and language; arithmetic, geography, and history, which are here designated as the "old" subjects. Similar

allotments in certain other subjects are also shown, which are here designated as "new" subjects, such as drawing, manual training, etc.

TABLE 10.—*Percentage of school time devoted to old subjects and new subjects.*

Cities.	Old subjects.	New subjects.	Cities.	Old subjects.	New subjects.
New York	62.48	37.52	Baltimore	77.90	22.10
Chicago	52.60	47.40	Pittsburg	81.00	19.00
Philadelphia	67.60	32.40	Detroit	83.80	16.20
St. Louis	70.87	29.13	San Francisco	79.90	20.10
Boston	73.36	26.64	Milwaukee	75.45	24.55
Cleveland	79.55	20.45	Cincinnati	76.69	23.31

One feature in the derivation of the time allotments in Baltimore deserves particular attention. The time allotment given in the tables is that suggested for the year 1906–7. In the first grade the suggested allotments covered both forenoon and afternoon sessions. At present the first grade pupils are not required to come back in the afternoon in most instances except for the special drill work. This of course influences the amount of time devoted to the various subjects. The proportion of time, however, used for the various subjects is not influenced by this change in the length of the school day. Since comparison is to be made with other cities in which the day consists of two sessions, it has seemed advisable to leave the allotment in the first grade in Baltimore as it stands in the suggested schedules. Therefore, the actual time indicated in the tables will not be correct, but the percentage of time is approximately correct.

Criticism.—Baltimore is the only one of the cities considered from which information could be obtained that does not have a definite time allotment for the various subjects. It should be stated, however, that virtually Baltimore has such an allotment. It is in the form, however, of a suggestion rather than an explicit direction.

The commission gives its unqualified approval to the time allotment for recitations in the ordinary subjects in each of the several grades.

This schedule is in agreement with the prevailing practice elsewhere, and, moreover, it is in accord with the results of investigations of child specialists as to the length of time which should be given to recitations.

SUBJECTS IN DETAIL.

The Language, or English, Group.

Under this heading, the following closely related subjects are included: Reading and literature, spelling, composition, grammar, and penmanship.

The plan of work for English instruction is laid out in a pamphlet of nearly 200 pages, entitled "The Course of Study in English." This

pamphlet presents the ideals and practice of the schools with reference to teaching the various branches of English instruction.

After examining this pamphlet carefully, the conclusion is reached that the English course has been worked out with care and intelligence, and in its content is in general accord with the theory and practice of teaching English which prevails in the other large cities.

An attempt is made in the course to establish a correlation or connection between the various branches of English instruction and the remaining subjects of the curriculum.

> Not only the resources of literature are to be drawn upon for English lessons, all other studies of the curriculum furnish stores of material rich in content, and therefore of vital interest. (Course of Study, p. 25.)

There is a good presentation of the importance of oral composition, and suggestions are made for the teaching of this important but much-neglected branch of English instruction. No better statement of aim in the teaching of oral English can perhaps be found than this, from the Course of Study:

> But in every grade the teacher should have regular practice for the development of ease and fluency in talking, should give to the children an increasing vocabulary, should lead them to acquire the habit of using correct forms of speech, should insist unceasingly upon a clear and distinct utterance.

Detailed suggestions are made for teaching the difficult art of written composition, which if followed must be productive of good results in the schools. It would not be easy to find a more rational statement of procedure than the following, taken from the Course of Study:

> All lessons in composition should be based upon the principle that thought content must precede any expression, and that oral exercises should precede written ones. A child's habits of oral expression tend to create habits in written expression; and after a time the power to write his thoughts clearly and vigorously will increase his power to talk better and more coherently. The art of composition is a difficult art. Facility in expressing one's thoughts with precision and grace comes only by practice under skilled guidance, and it is therefore recommended that a brief period be given daily to written composition. This does not mean that in the upper grades there should not be an occasional long composition.

In treating the language group it seems advisable to give particular attention to those parts of the group which have been most freely criticised before the commission. It has been repeatedly asserted that not enough time has been devoted to grammar. The term "grammar" in this case needs careful definition. In Baltimore, as in other cities, the course of study calls for the teaching of grammar in all grades, but in the lower grades it is to be taught incidentally and in connection with other subjects. The course of study provides

definitely for systematic language training before the seventh year is reached. We quote:

> In addition to this continual incidental training in correct language forms, there must be special daily lessons in the use of good English.
>
> Through the upper grades special directions are given for work toward the improvement of the pupil's sentences.
>
> During the first six grades the language lessons and composition exercises, both oral and written, will give without formal grammatical study most of the grammatical facts of the language.

In the upper grades, however, the subject is to be taught either by the use of texts or otherwise in a definite manner or as the exact subject matter of grammar. The following table shows the year in which this definite study of grammar begins in the various cities:

TABLE 11.—*The year of the course in which the study of grammar is begun.*

	Year.		Year.
New York	6	Pittsburg	4
Chicago	7	Detroit	7
Philadelphia	6	Buffalo	7
St. Louis	5	San Francisco	7
Boston	7	Milwaukee	7
Cleveland	6	Cincinnati	6
Baltimore	7		

The commission believes that there is abundant authority for deferring the formal study of English grammar until the latter part of the grammar-school grades. Those who have investigated the subject believe that the formal study of grammar should not be undertaken by young children. Grammar is an abstract subject and makes severe demands upon the intellectual powers. To force the study of the subject upon immature minds is productive of neither intellectual training nor of facility in the use of good English. The commission believes that there is as much study of formal grammar in the Baltimore elementary schools as the pupils may be expected to "apprehend and apply."

Reading.—The suggestions and directions for teaching reading in the course of study are excellent and the commission feels are in accord with the best prevailing practices elsewhere.

In the course of study the following statement is found:

> The material at first should be only those sentences which the child knows and uses in speech. Gradually the teacher will present sentences using such additional words as are to be found in the first portion of the primer which the child will use later. The sentence is the unit of reading. Later, by the process of analysis, the individual words become known as words, and are afterwards analyzed into their phonic and alphabetic elements. The process of learning to read should be conducted in carefully graded steps. For the first 8 or 10 weeks all the reading should be from the blackboard.

Definite drills in phonics are continued through the first five grades. Reading texts are used in the first six grades, but beginning with the sixth grade literary wholes are introduced.

The complaint is made that reading is not thoroughly taught in Baltimore in conformity with the established standards of large cities. The Milwaukee course of study for 1909 has the following:

> The first steps in teaching little children to read are more easily taken if the children are taught to recognize at sight a limited number of words, used from the first in easy sentences. This plan is usually spoken of as the "sentence" or "thought method," and is a modification and improvement of the "word method" of teaching reading.

School Document No. 8, 1909, Boston public schools, a preliminary course of study (p. 37), gives the following directions for teaching reading in the first grade:

> Lessons from the blackboard: (*a*) Short, simple sentences interesting in content and connected in thought, so varied as to prevent monotonous repetition and reciting from memory. (*b*) Study of phonic elements, including phonograms.
>
> NOTE.—Children should read easily from the board, using a good vocabulary, before attempting the use of books. In all lessons, from the board or book, thought getting should be the important feature.

Careful study of the courses of study of the various cities shows that the "sentence" or "thought method" of teaching reading is employed in all; that this method is supplemented by definite drill in phonics; that the blackboard and chart is used in beginning the teaching of reading, and that in the upper grades whole literary masterpieces are introduced to take the place of reading books. In all these particulars Baltimore's course of study is in full accord with the courses for other cities.

Penmanship.—The vertical system of penmanship was introduced in the Baltimore schools in 1898, and its use was continued until 1910. Various criticisms have been directed against the character of this writing. Recently the system has been changed so that now the children begin in the first grade with the large round forms characteristic of vertical writing; in the second grade the forms are slanted slightly; as the child progresses the slant becomes more pronounced until the writing becomes what is known as the "medial slant." It is probable that the system now in use will correct any deficiencies that characterized the old system.

The commission is of the opinion that the penmanship of the pupils in the Baltimore schools is of average quality in comparison with that of pupils in other important cities of the country. The commission believes that the successful teaching of penmanship is an art which requires not only intelligence and teaching skill, but which requires, too, the application of certain psychological principles.

Spelling.—Spelling has been taught in the Baltimore schools by the so-called "flash method." One finds upon examination of the course,

however, that this is by no means the only method of teaching spelling that prevails in the Baltimore schools. This method is suggested, it is true, but no teacher is obliged to follow it to the exclusion of other methods which make a larger appeal to her judgment.

A spelling book is used in three grades—the third, fourth, and fifth. In other grades teachers are asked to make use of words commonly misspelled by the pupils.

It is difficult to see how exception can be taken to the following statement made in the course of study:

> It is to be emphasized, however, that the words children should learn to spell correctly are those words they need to use in their own daily intercourse and writing and not artificially constructed lists of words illustrating the anomalies of English orthography.

Because a spelling book is not used in every grade, it is no indication that spelling is not taught. There is considerable divergence of opinion among educational authorities as to whether the teacher should find her material for teaching spelling in a spelling book, or in the words which children commonly misspell in their written work.

The method of teaching spelling has been criticized and the statement made that it is not in conformity with the established standards of large cities. The following table shows the methods employed in 11 of the large cities:

TABLE 12.—*The practice in certain cities regarding the use of spelling books and prescribed lists of words to be learned.*

Cities.	Methods employed.	Grade in which book is introduced.
New York	Words selected	
Chicago	do	
St. Louis	Book	Third grade.
Cleveland	Prescribed list	
Baltimore	Words selected and book	
Pittsburg	Book	Do.
Detroit	Prescribed list and book	Fifth grade.
Buffalo	Words selected and book	Do.
San Francisco	do	Third grade.
Milwaukee	Prescribed list and book	Fourth grade.
Cincinnati	do	Third grade.

The above table shows that there is considerable diversity among cities regarding the use of a textbook in teaching spelling. Three of the cities use the flash methods through the eight grades—at least through the first and second—after which some text in spelling is employed. From this it appears that a combination of the flash method and the use of a textbook is the most common method employed by the large cities in teaching spelling.

The commission could find no evidence that spelling is neglected in the Baltimore schools. It is probably true that children do not spell as well as their parents, the teachers, the superintendent, or the gen-

eral public would like. The golden age when everybody could spell correctly is an age which exists purely in the imagination of critics of the schools, who do not realize the efforts that teachers are making in training children to spell and who do not realize the enormous difficulties in acquiring spelling on the part of some children.

Mathematics.

The course of study in mathematics, like the course in the language group, represents the cooperative efforts of the teachers, principals, and the board of superintendents.

Briefly described, the course provides for the introduction of all the fundamental processes with integers within the limits of 18, and the development of the fractions one-half, two-halves, one-third, two-thirds, and three-thirds in the first year. The learning of the 45 combinations in addition is completed in the second year; the multiplication tables are completed and the addition and subtraction of fractions introduced in the third year. Long division, multiplication and division of fractions, and decimals are introduced in the fourth year. Percentage is begun in the sixth year. Mensuration is taught in each grade. Throughout the course emphasis is placed on practical subjects and methods. In the sixth grade and above, teachers are encouraged to use the algebraic equation whenever it will assist in arithmetic.

In the opinion of the commission there is not much to criticize in the course in mathematics in the Baltimore schools. The methods employed are in accord with those used quite generally elsewhere in mathematical study. There is some question, however, in the minds of the commission as to the amount of work in ratio and proportion required in the lower grades. Moreover, there are a few topics in the course of study which might also be questioned. These are the treatment of the fraction two-thirds in the first grade; the measurements of wood and lumber in the sixth grade; partnership in the seventh; life and accident insurance, the volumes of cylinders, and the treatment of drafts in the eighth. But it should be said there is a difference of opinion as to these matters on the part of those whose opinion is of value.

The criticism of the "spiral method" has been insistent in Baltimore.

The method employed in teaching arithmetic depends very largely upon the character of the textbook used. The new edition of the textbooks used in Baltimore is not made on the spiral plan, but the old edition was made somewhat on that plan. From the following quotations from the prefaces and introductions to various texts that are used in the larger cities it will be seen that the textbook writers

are not thoroughly agreed as to the best method of procedure in introducing topics in arithmetic:

The amount of work that may be accomplished in a half year has been taken as the unit of classification, and within that unit the various subjects have been treated topically, though, of course, not exhaustively. With this order of presentation it is believed that the most satisfactory results may be obtained.

1. These lessons have been prepared in the belief that it is a mistake to assume that one topic is to be finished before another is begun. The elements of many topics are here given in the lower grades in explanations, illustrations, and examples easily understood by the younger pupils, and then the work in each topic is made more and more difficult through the various grades until it is finished. These examples have stood the test of the schoolroom, and in no case have they been found too difficult.

2. The arrangement of the topics is such that pupils on passing into a new grade find but few new topics, and many pupils are prepared for promotion from grade to grade at various times during the year and are not obliged to wait for the annual promotions.

3. Such practical subjects as percentage and interest are introduced in the lower grades where many pupils are found who are obliged to leave school before they reach the more advanced grades.

The following ideas have been prominent in the preparation of this book:

1. In sequence of topics to follow as closely as possible such of the recent courses of study as have been most carefully prepared for our public-school systems. However an author may feel as to details, he is in the main bound by the consensus of opinion as thus expressed. The purely "topical" method is scrappy, uninteresting, and lacking in the continuity so essential to thoroughness. Between these two comes the best type of our modern courses of study, somewhat spiral in arrangement, in that most subjects extend over several terms, but admitting of a topical arrangement within any one term, thus securing thoroughness and maintaining an interest. * * *

2. In the matter of method to recognize the valuable features of the best contributions, avoiding their extremes. For example, there should always be some attention to a spiral arrangement, but its extreme is unscientific and uninteresting. The ratio idea in fractions has much to commend it, but its extreme is unnatural and unbusinesslike. The actual measuring of things is valuable, but that, like paper cutting and folding, may be carried beyond reasonable bounds.

In the distribution of the subject matter care has been taken to combine the best features of the spiral and topical arrangement and to adapt the work at every stage to the growing powers of the pupil. A large quantity of material for drill is provided under each subdivision before a new one is taken up, while carefully graded reviews are continued throughout.

The commission finds its own opinion on the subject of "spiral" teaching voiced in the following extract taken from The Teaching of Primary Arithmetic, by Dr. Henry Suzzallo, of Columbia University:

The courses of study, *which have been most familiar to us in the past decade, have used the "concentric circle" or "spiral" methods of arranging the subtopics of arithmetic.* These arrangements are "psychological" in type. They are attempts to give a systematic order of mastery which shall approximate the child's order of need in knowing. Here the first mathematical facts and skills taught are those the child first requires, regardless as to whether they are first integers or fractions, additions or divisions. A little later, he deals with the same subjects and the same numbers in more complicated manipulation and in more extended application. The field is recovered, as it were, by ever widening circles or by an enlarged swing of the "spiral" progression.

The older "logical" plans are thorough and definite in their demands; the teacher always knows just what he is about. But such a system of procedure is unnatural and remote from the child; it lacks appeal and motive. The child pursues the subject as a task laid down for him, not as an answer to his own curiosities or necessities. The newer psychological plans meet the different levels of child maturity effectively; they are nearer the natural order of acquiring knowledge. But it is not easy for the teachers to keep account of the work of their own, previous, or subsequent grades. Nor does the supervising official find it easy to locate responsibility for definite arithmetical subtopics. As an order of teaching it is psychologically natural but administratively ineffective.

The result is that, to-day, the two types of arrangement are modifying each other and giving a mixed method, partly "logical" and partly "psychological." That line of least resistance in which the children study arithmetical facts and processes with greatest success is modified by definite demands that topics, e. g., addition, be mastered thoroughly "then and there." The method is partly "topical" and partly "spiral." The child in the second grade may have a little of all the fundamental processes, a few simple fractions, and United States money; but just there he will be held definitely responsible for a very considerable number of the addition combinations. The pupil may have had fractions in every grade, but the fifth grade will be responsible for a thorough and systematic mastery of the same. *Such is the mixed arrangement which is to-day prevalent in American schools.* (The italics are our own.)

This mixed arrangement in the presentation of arithmetical topics is the one which may be said to prevail in the Baltimore schools. If the children are deficient in arithmetical skill, such deficiencies can not be attributed to any particular "method." The cause must in the main be sought elsewhere.

Dr. David Eugene-Smith, one of the leading authorities of the country in the teaching of mathematics, says, "There is no 'method' that will lead to easy victory in the teaching of arithmetic. There are a few great principles that may well be taken to heart, but any single narrow plan and any single line of material must be looked upon with suspicion."

The course of study contains the following directions to teachers, which the commission heartily indorses:

A large part of the work in each grade should be oral. In the grammar grades at least one-half should be oral. In the primary grades even a greater proportion will be found needful.

Give special attention to oral arithmetic—mental arithmetic—to the end that facility and accuracy in handling integers and fractions through the fundamental operations are attained.

A large proportion, too, of all review work should be oral. This kind of work should be given systematically. Instead of devoting several weeks solely to reviews to the exclusion of new work, they should precede, accompany, or follow nearly every written exercise. Reviews should not be confined to the work of a particular grade, but should include also all topics previously taught. It should be the aim of each teacher by this means to perfect and augment the work of the previous grades, as well as to discover weak points and strengthen them.

Methods are left to the choice of the teacher, who, it is presupposed, is acquainted with all the approved ways and means and will use the plan best suited to the case in hand.

It has been frequently asserted that arithmetic is not thoroughly taught in the elementary schools in Baltimore in conformity with established standards of larger cities. The following table shows the time allotted to arithmetic in the various grades in certain cities:

TABLE 13.—*The minutes per week devoted to the study of arithmetic and algebra in certain cities.*

Cities.	Year.								Total.
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	
New York	125	150	150	150	150	200	200	200	1,325
Chicago	.....	150	200	250	150	150	150	150	1,200
Philadelphia	150	200	200	200	225	225	225	225	1,650
St. Louis	100	125	150	150	150	150	150	150	1,125
Boston	25	210	210	270	270	230	210	210	1,635
Cleveland	60	200	250	250	250	250	300	300	1,860
Baltimore[1]	250	200	200	200	250	250	275	275	1,900
Pittsburg[2]	60	120	180	300	200	240	300	360	1,660
Detroit	75	150	200	225	250	250	275	275	1,775
San Francisco	150	150	150	200	250	250	250	250	1,650
Milwaukee	75	100	150	175	175	200	200	212	1,287
Cincinnati	150	250	240	240	240	300	300	360	2,080

[1] See page 76. [2] Estimated.

In the table above it will be noted that Baltimore devotes 250 minutes every week to the study of arithmetic in the first grade. This is 100 minutes more than the corresponding allotment in any other city. Baltimore devotes a total of 1,900 minutes a week through the 8 grades. This is the largest total save one. The allotments are suggestive merely of the relative emphasis that various cities place on the different subjects, and inasmuch as the length of the school day will influence the amount of time that can be devoted to any subject, but does not change the percentage of the school time used for the various subjects, percentage is the more reliable guide. In all of the cities under consideration the length of the school year is practically the same.

In order to make comparisons the total time devoted to the study of arithmetic and algebra in the grades in each of the several cities has been changed to percentages and the results shown in the following table:

TABLE 14.—*The percentage of school time exclusive of recesses and opening exercises devoted to the study of arithmetic and algebra in the grades, in 1890 and in 1910–11, in certain cities.*

Cities.	Year.		Cities.	Year.	
	1890	1910-11		1890	1910-11
New York	20.2	13.4	Detroit	17.2	16.0
Chicago	9.3	10.0	Buffalo	.....	.....
Philadelphia	.....	16.1	San Francisco	14.0	16.6
St. Louis	19.3	15.0	Milwaukee	15.5	14.7
Boston	16.0	15.5	Cincinnati	13.4	18.8
Cleveland	14.1	15.5			
Baltimore	19.5	18.3	Average	16.5	15.9
Pittsburg	.....	18.0			

When the facts for the 10 cities comparable in the above table are sented in tabular and graphic form, we have the following:

TABLE 15.—*Distribution of 10 cities according to the percentage of school time, exclusive of recesses and opening exercises, devoted to arithmetic and algebra in the grades in 1890 and 1910–11.*

Percentages.	Number of cities.	
	1890	1910–11
9–11	1	1
12–14	3	2
15–17	3	5
18–20	2	2
21–23	.....	.....
24–26	1	.....

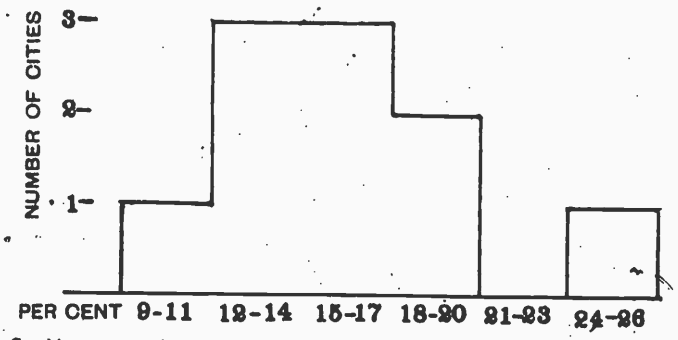

FIG. 10. Graphic representation of the distribution of the percentages of school time devoted to arithmetic in 1910–11 in 10 cities.

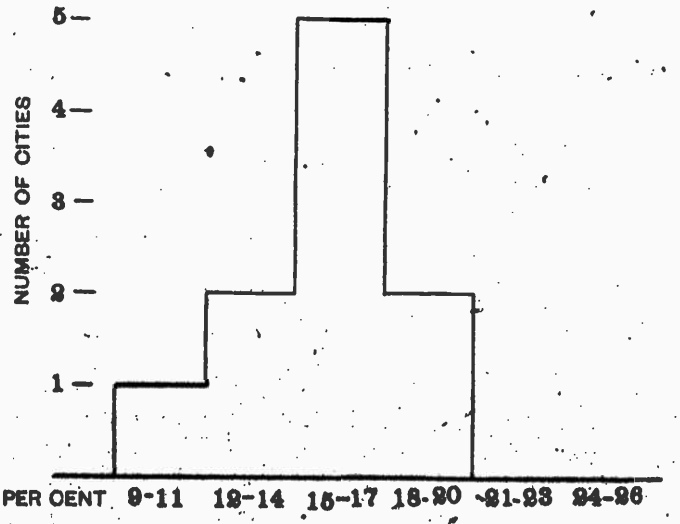

FIG. 11. Graphic representation of the distribution of the percentages of school time devoted to arithmetic in 1890 in 10 cities.

In 1910–11 the average percentage of school time devoted to the study of arithmetic and algebra in the grades in 12 cities is 15.8. Baltimore devoted 18.3, or 2.5 per cent more time to the study of arithmetic and algebra in the grades than the average in the 12 cities.

In 1890 the average time devoted to the study of arithmetic and algebra in the grades in 10 cities was 16.5. At that time Baltimore was devoting 19.5 per cent of the school time to these studies. This was 3 per cent more than the average for the cities considered. Between 1890 and 1910–11 there has been a decrease of 1.1 per cent in the time devoted to the study of arithmetic and algebra in the 10 cities considered. During the same time there has been a decrease of 1.2 per cent in the time devoted to the study of arithmetic and algebra in the grades in Baltimore.

The following table shows the grade in which certain topics in arithmetic are treated in the various cities:

TABLE 16.—*The year of the course in which specified topics in arithmetic are treated in the certain cities.*

Cities.	45 combinations learned.	Multiplication tables learned.	Long division taught.	Addition and subtraction of fractions taught.	Multiplication and division of fractions taught.	Decimals taught.	Percentage taught.
New York	2	3	3	4	5	5	
Chicago	2	4	4	5	5	6	
Philadelphia	2	2	3	5	5	6	6
St. Louis	2	3	4	3	4	4	5
Boston	2	4	4	5	6	5	6
Cleveland	2	4	4	5	6	5	6
Baltimore	2	3	4	3	4	4	6
Pittsburg	2	3	4	4	5	5	6
Detroit	2	3	4	4	5	5	6
Buffalo	2	3	4	5	5	5	6
San Francisco	2	3	4	4	5	4	6
Milwaukee	4	4	4	5	5	6	7
Cincinnati	2	3	3	4	5	4	6

From the above table it appears that the 45 combinations in arithmetic are learned in all but two of the cities in the second grade. The most common grade in which the multiplication tables are learned is the third. Long division is taught most commonly in the fourth grade; addition and subtraction, multiplication and division of fractions, and decimals are most commonly taught in the fifth grade; and percentage in the sixth. This would indicate that Baltimore deals with fractions and decimals earlier than the normal for the 13 cities considered.

More specifically it has been charged that too much work in fractions is introduced in the earlier grades. The following table shows the time of completion of the 45 combinations in addition and subtraction, the number of multiplication tables, and the fractions having for the numerator 1 and denominator 2, 3, 4, 5, etc., learned in the first two years:

TABLE 17.—*The grade in which the learning of the 45 combinations in addition and subtraction is completed, the number of multiplication tables learned and the fractions having for numerators 1 and denominators 2, 3, 4, etc., learned in each city during the first two years, and the cities and grades in which algebra is taught.*

Cities.	Completion of the 45 combinations.	Work completed in first and second years.		When algebra is first taught.
		Multiplication tables.	Fractions, numerator 1.	
New York	Second grade	5 x 9	½ ⅓ ¼	7 A.
Chicago	do	3 x 12	½ ⅓	None.
Philadelphia	do	3 x 10	None.	8 A.
St. Louis		5 x 10	½	None.
Boston	Second grade	(1)	(1)	None.
Cleveland	do	(2)	None.	8 A.
Baltimore	do	5 x 10	½ ⅓	None.
Pittsburg	do	4 x 10	½ ⅓	7 A.
Detroit	do	None.	None.	None.
Buffalo	do	5 x 10	½	None.
San Francisco	do	4 x 9	None.	None.
Milwaukee	Fourth grade	3 x 10	½	None.
Cincinnati	Second grade	None.	None.	8 B.

[1] No definite data at hand.

[2] Not formal.

From the above table it appears that other cities are doing as much in arithmetic in the first two years as is outlined for Baltimore. Buffalo, for example, has the same limits as Baltimore. St. Louis does not complete the 45 combinations in the second grade, but it has the multiplication tables to the fives and develops the fractions from one-half to one-eighth. The work outlined in fractions is not more than is given in other cities. Many of the teachers, however, have criticized the work in fractions and have asserted that they were required to teach relations with involved mixed numbers, such as $21 = 1\frac{1}{2} \times 14$. The commission has found that in many schools this work is done in the second grade; in others it is not done. Such work is not outlined in the course of study, but under date of November 13, 1908, the board of superintendents furnished answers to questions submitted by teachers in the second grade on interpretation of the course of study in mathematics. This answer contains the following statement:

B CLASS—TOPIC 1.

(1) For the proper development of each series it is necessary that all the relations in the series be taught.

Example—

In the series 8, 16, 24, 32 the number 8 should be taught as equal to one-half of 16, one-third of 24, and one-fourth of 32.

The number 16 should be taught as equal to two times 8, two-thirds of 24, and one-half of 32.

The number 24 should be taught as equal to three times 8, one and one-half times 16, and three-fourths of 32.

The number 32 should be taught as equal to four times 8, two times 16, and one and one-third times 24.

Besides these fractional relations, the teaching of the combinations and separations of the four numbers within each series is also necessary.

Example—

Add.			Subtract.				
8	8	8	32	24	16	32	32
8	16	24	8	8	8	24	16
16	24	32	24	16	8	8	16

To present these relations properly, it is necessary that concrete material—solids, rectangles, lines, etc.—showing these relations be used.

It is further necessary that an application of these relations to the child's everyday experience be made through problems in denominate numbers.

And, finally, tests are necessary, both at the close of each lesson and of each series of lessons, upon these relations without illustrative material.

A similar interpretation had been sent out by one of the supervisors of practice teaching.

Complaints have been received regarding the omission of algebra and geometry from the course of study. Formerly both of these subjects had a distinct place in the curriculum; at present the course of study provides that algebra may be taught incidentally.

Such problems in the arithmetic as lend themselves usefully to such treatment should be solved by means of algebraic equations. The teaching of the processes involved should be done without the use of textbooks, by development exercises, when the occasion for their use arises, not by formal instruction given beforehand at special periods. Carry on the work in connection with that in arithmetic, so that each subject is made to illustrate and supplement the other; and a better understanding of both subjects is secured. In this way pupils will not only acquire an intelligent understanding of the general method of solving problems, but also the correct idea at first hand of equations and their use, clearing them of fractions, transposing a term from one member to another, something of the fundamental operations, and of fractions, the greatest common divisor, the least common multiple, factoring, and of the meaning and use of algebraic language and processes.

No special amount of algebra is required. It is left to the teacher to do what she finds herself able to do so as to improve the teaching of arithmetic.

The commission has not found that algebra is taught to any extent in the elementary schools. Geometry is not required as a distinct subject. In Baltimore, as in all the other cities, the work in mensuration includes much of the computations formerly required in geometry. In no one of the 13 cities is geometry now given as a distinct subject, and in only 5 of these cities has algebra a distinct place in the curriculum.

Geography.

The course of study provides for the study of geography from the third to the eighth grades, inclusive. "Beginning with the study of the home environment, it gradually introduces the study of our own country, then of far-away countries and their people, and closes with a year's work upon the general principles of physical and commercial geography."

When the Baltimore course of study in geography is compared with the courses for other cities, no significant differences appear. The general movement in all the courses is from the home and its environment to the earth as a whole, and from this to North America and a detailed study of the United States. After this, the foreign countries are studied and the work ends in the upper grades with a more or less definite study of world relations.

The Baltimore course emphasizes the study of home or local geography to a degree found in few courses elsewhere. "Recognition is made of the fact that for Baltimore children the most important city is Baltimore, the most important State is Maryland, the most important country is the United States. This point of view accounts for the length of time devoted to these areas."

The following statement from the course of study is not novel to those who have observed the trend of late years in geography teaching. It is quoted to show that the Baltimore course recognizes the prevailing tendencies in the teaching of the subject:

> Emphasis is laid upon the use of excursions and pictures, especially through the earlier grades, because, through their use, accurate ideas are gained and greater interest is aroused. Actual experiences, knowledge of home conditions, and contact with things near at hand furnish the only known means of interpreting conditions elsewhere. At the same time the warmth of feeling and stimulus to action aroused in one's own locality help to stir the imagination and to develop social sympathy toward people whom we can not know personally.

The treatment throughout the course is largely by topics and the facts are organized about important centers of interest. The commission believes that there is little in the course of study in geography which is open to valid criticism. Indeed, it is of the opinion that it is one of the most logical courses of study to be found in the subject. Teachers are not required to teach all of the topics presented, but may choose from the topics. The liberty that is granted the Baltimore teachers in this respect is presented elsewhere in the report of the commission. As bearing upon this, however, it is well to quote from the course of study:

> Topics are marked short, medium, and long, to indicate the judgment of the committee as to the relative amount of time to be spent upon each, but there are no absolute standards; teachers need to use their own judgment in determining the number of lessons to be given to any topic. As indicated in the course of study, a short topic may be completed in from one to three lessons, a medium topic in from three to seven lessons, a long topic in from seven to ten lessons.

It is true that the course makes large demands upon the scholarship and resources of teachers. Indeed the commission has received several anonymous criticisms from teachers, concerning the course of study in geography. The particular point of these criticisms has been the necessity of treating subjects which are not contained in the textbook. The statement is made that this method of instruc-

tion imposes a disproportionate amount of labor upon the teachers compared with the results to be obtained.

It should be remembered that efficient teaching of geography in Baltimore or elsewhere is by no means the simplest or easiest of the teacher's tasks. In a recent report of the Massachusetts Board of Education are the following statements:

> It is hard to realize the immense distance that separates the scanty sailor geography of half a century ago from the complicated network of relations of physical and social and political facts, gathered in 50 years of untiring research, which now, under the name of geography, form a part of the daily food of all children in the elementary schools.
>
> A qualified teacher of geography in a grammar school must possess intellectual power of a high order—a comprehensive grasp of details and ability to master extended trains of inductive reasoning. There is no subject in the high school curriculum which makes severer demands on the teacher considered simply as a scholar.

Bearing upon the question of procedure elsewhere, the following quotations from courses of study are made; these are typical of other courses throughout the country:

> In the study of geography, it is important to use not only the basal text but also supplementary material, such as maps, graphs, pictures, globes, and supplementary readers. (Chicago Public Schools, Course of Study, p. 23.)
>
> Geography, in the grades where the study of history has not been taken up, furnishes the best means available for arousing a wide-awake interest, and cultivating the child's power of research and his independent judgment. The textbook is useful chiefly as a book of reference, and as a source of information which the child is to find and arrange for himself. Other geographies, both recent and ancient, encyclopedias, books of travel, pamphlets of information issued by railway and steamship companies, bird's-eye views, current magazines and periodicals—all may be laid under contribution, and are especially valuable in the study of commercial geography. (Milwaukee Public Schools, Course of Study, 1909, p. 118.)
>
> The greater part of the work in geography should be done in the presence of the teacher in the classroom. It seems useless to assign daily lessons to be prepared at home. * * * The text of any section of the subject to be read aloud—first as a reading lesson, that a general idea may be obtained; then a specific study from the open textbook—pupils answering exactly and concisely the definite questions of the teacher. Selections from a supplementary reader or geography introduced just where the specific subject matter is closely related. (Pittsburg Public Schools, Syllabus, 1910, p. 116.)

While the commission indorses the plan of the course of study, yet it believes that in working it out in school-room practice so large an amount of oral and blackboard work is required of teachers as to make very large demands upon their time and strength. This is necessary in order to present the material to pupils. The Baltimore course of study in geography should not, in the opinion of the commission, be essentially modified, but a larger number of books should be supplied for the use of pupils, to the end that they may more readily obtain at first hand the information and facts for which the course of study calls. Pupils would

also by this means be somewhat relieved from keeping notebooks, which is desirable. In some intermediate grades, children keep several notebooks, as many as five in certain schools. The notes that are kept in these books consist very generally of rather elaborate outlines of subjects. Too often teachers neglect to consistently examine these books.

The suggested allotment of time for the study of geography in the Baltimore schools is 11 per cent of the total school time, exclusive of opening exercises and recesses. The following table shows the suggested time allotment for the study of geography in the various cities in 1890 and again in 1910–11:

TABLE 18.—*The percentage of the school time, exclusive of opening exercises and recesses, devoted to the study of geography in various cities in 1890 and in 1910–11.*

Cities.	1890	1910–11	Cities.	1890	1910–11
New York	2.7	6.2	Detroit	8.6	8.2
Chicago	4.9	4.4	Buffalo	(1)	.....
Philadelphia	.....	7.0	San Francisco	8.9	7.5
St. Louis	8.9	7.3	Milwaukee	6.0	6.7
Boston	6.8	6.2	Cincinnati	6.5	6.1
Cleveland	6.9	7.2			
Baltimore	6.3	11.0	Average	6.55	7.23
Pittsburg	.....	9.0			

[1] No data at hand.

When the facts concerning the 10 cities whose time allotments are given for both 1890 and 1910–11 are shown in tabular and graphic form, we have the following:

TABLE 19.—*Distribution of percentages of school time, exclusive of opening exercises and recesses, devoted to the study of geography in 10 cities in 1890 and the corresponding allotments in 1910–11.*

Percentages.	Number of cities.	
	1890	1910–11
3	1	.....
4	.....	1
5	1	.....
6	3	3
7	2	4
8	1	1
9	2	.....
10	.....	.....
11	.....	1

The above tables show that Baltimore is devoting a larger percentage of the school time to the study of geography than is given by any other city. The average for the 12 cities reporting in 1910–11 is 7.23 per cent. This is 3.77 per cent less than Baltimore's allotment. In 1890, Baltimore devoted 6.3 per cent of the school time to the study of geography. This is 4.7 per cent less than is now devoted to this

subject. A comparison shows that the most characteristic percentage of time devoted to geography in 1890 was between 6 and 7, while in 1910–11 it was between 7 and 8. Thus, while the tendency has been to increase the amount of time devoted to the study, Baltimore has probably erred in giving so large a percentage of the school time to this subject.

Nature study.

The Baltimore course of study provides for nature study in each of the grades. It suggests many more topics than any of the teachers is expected to take up. The work is correlated with language, physiology, and geography, and in the upper grades the course takes on much of the nature of elementary science. Experiments that are the outgrowths of work in geography and physiology, as well as nature study, are introduced. The course is in line with modern tendencies in the teaching of the subject.

The time allotted to this study varies from 60 minutes to 100 minutes per week, depending upon the grade. The total time devoted to this work throughout the eight grades is 4.5 per cent of the total school time, exclusive of opening exercises and recesses.

The tendency among cities, Baltimore included, to correlate nature study with English, geography, and physiology makes it impossible to present definite comparisons between the course suggested for Baltimore and those suggested by other cities. In each city much more work is outlined than any teacher is expected to do, and a great deal is trusted to the discretion of the teacher. Each course emphasizes the necessity for dealing with objects rather than with the literature concerned with the subject. To this end several cities make use of the school garden. Each course aims to make the work in nature study serve as a basis for oral and even written composition.

The object of introducing this study in all of the cities is to cultivate the habit of observation and to impart a body of useful information. In all of these particulars the course suggested for Baltimore is entirely in keeping with the courses suggested by other cities.

The fact that there is a tendency among the cities to give no separate time allotment to this subject, but rather to include it in the time devoted to other subjects, makes it impossible to compare the time allotment in Baltimore with that of other cities. A reading of the conditions under which the work is given in those cities indicates that the time devoted to this subject in Baltimore does not vary greatly from the time devoted to it in other cities.

The fact that the Baltimore nature-study outline is mentioned in the Cleveland outline for work in nature study indicates the estimate that at least one superintendent places upon this course.

History.

The course of study in history provides for the teaching of United States history in the fourth, fifth, sixth, seventh, and eighth grades. This is in general accord with the subject material of history in many of the progressive school systems of the country.

Parallel with the history of the United States, as set forth above, are the history stories relating to other countries, taught in the fourth and fifth grades. The subject material of these stories has been carefully selected and is much the same in its general character as that which is found in courses of study elsewhere.

In the sixth, seventh, and eighth grades, a series of exercises, based upon important phases of European history, is presented. These exercises have in the main been selected with reference to their relation to the periods of United States history which the pupils are at the time studying. For example: The subject chosen for the periods of the Revolutionary War in the United States is the Revolution in England and the Revolution in France. There is much to be said in favor of presenting to pupils an outline of important phases of European history, particularly those parts of it which have a bearing upon United States history. There is an increasing conviction among historical scholars that the history of the United States should not be taught apart from those phases of European history which have affected our own history.

In the Baltimore course of study is an application of this theory, and the course is in accord with plans in operation in some other cities.

The commission feels that it is questionable whether, with the limited time at the disposal of teachers, with the meager scholarship of some teachers, and with the large number of activities which have been forced upon the schools by outside public demands, it is advisable to attempt so much in the way of European history as the Baltimore course at present provides. It is not wholly a question of the value of such instruction, nor is it a question as to whether children are interested in it, but it is also a matter of deciding which is the best possible use of the children's time.

The commission is not to be understood, however, as being opposed to the correlation of United States history with European history; it is only a question of the extent of this correlation which the commission raises.

The members of the commission saw some excellent work in history instruction in the Baltimore schools. The commission was particularly impressed with the attention which is given to local, or Maryland, history. The teaching of this local history was in evidence in many schools which the commission visited, and it has only words

of commendation for this phase of the instruction. Local history is too much neglected in many schools. The commission feels that this is not true in Baltimore.

In a number of schools, the commission was impressed with the fact that the schools are deficient in the supply of necessary reference books, which the present course of study demands. A good working library of historical books should be available in every large building.

Drawing.

The Baltimore course of study in drawing shows a definite plan. There can be no confusion on the part of teachers regarding the work desired by the art department. There seems to be little provision, however, for the study of art industries and little thought for interrelation with other subjects of the school curriculum. In these respects the course in drawing might be made stronger and more in line with the present tendency to relate art to industrial training.

Physiology and Hygiene.

The course of study provides that one period a week shall be given to the teaching of physiology and hygiene in all grades. An examination of the directions to teachers in this subject shows that the exercises suggested are in line with the present-day tendencies of teaching the subject. There is an increasing feeling that this subject should be closely allied to the demands of modern life; particularly is this true in courses of study for city children who live in congested districts.

In the following extract is found a statement of the tendencies in the treatment of the subject:

> When the pupil is old enough to make a formal study of any branch of hygiene, he should be taught with the same direct appeal to sense experience that we insist upon in other branches of science, and only those portions of the study should be selected which are capable of practical treatment, followed by some immediate personal application.

As an evidence that the Baltimore course is in line with this tendency, we quote from the directions in the course of study:

> In connection with physical culture attention is to be called to the value of a good erect carriage, well-developed chests and lungs, and an active blood circulation. Children's hands and other visible parts of the body are to be daily examined. If this is done in the first three grades the habit of cleanliness will generally have been effectively established by the time the children enter the grammar grades.
>
> Whenever an occasion is offered, reasons are to be given for temperance in eating and drinking, working and playing, sleeping and waking.
>
> Care of the eyes, teeth, nasal and vocal organs should be urged as frequently as possible, not at stated intervals, but in connection with other subjects.

As an example, the entire series of exercises given in the fifth grade is as follows:

TOPICS FOR FIFTH GRADE B.

1. Review fourth grade A topics.
2. The muscles of the body.
3. Exercise of the muscles.
4. The skin.
5. Hygiene of the skin.
6. The public health.
7. Hygiene of the home.
8. Self-government.

TOPICS FOR FIFTH GRADE A.

1. The brain.
2. The brain's messengers.
3. Care of the eyes.
4. Care of the voice.
5. Contagious diseases.
6. The public health.
7. The hygiene of the home.
8. Hints for help in emergencies.
9. Uses and abuses of household medicines.
10. Self-government.
11. Health rules.

The commission commends the provision that has already been made for physical education. This instruction, however, should be extended and improved. As a result of their school life, the health of children should not only be safeguarded but should be improved. This is particularly true when hundreds of children live in congested districts, as is the case in Baltimore.

Positive instruction in physiology and hygiene is not enough. Gymnastic exercises are necessary. Teaching young children to play is also important. Strange as it may seem, many children do not know how to play, such are their home conditions. The schools should alleviate, so far as possible, this misfortune. Play is not only connected with the health, but with educational progress in other directions. One gets the impression that there is not enough of this play element in the Baltimore schools. The teacher of 6-year-old children who said to a member of the commission, "These children do not need games; they need drill," reflects the attitude of too many teachers of primary children. To be sure, they need drill; but progress in reading, number work, and penmanship is often more rapid if a variety of physical exercises are found in the schools. This fact, stated here somewhat dogmatically, has been proved over and over again in many schools.

In the opinion of the commission an increased amount of sympathetic constructive supervision and leadership in the physical-training department would remedy whatever defects are found in the department.

The schoolhouse conditions under which children do their work is another important consideration bearing vitally upon their health. The ventilation, the lighting, the heating, the seating, the cleanliness, the toilet arrangements, the playground areas, all these can not be ignored in any discussion of the influences which affect the health of school children. As pointed out elsewhere in this report, these conditions in many schools in Baltimore are not altogether creditable.

Handwork and Industrial Subjects.

(1) The Baltimore course of study provides for manual training throughout the grades. In the first five years of the elementary school course boys and girls may be instructed together in the regular classrooms. This instruction continues through the sixth year also, unless the school is located in a building having a manual-training center. The materials used in this work consist of cardboard, raffia, etc., and the tools are scissors, rulers, etc.

Manual training in the grades above the sixth is carried on in manual-training centers in certain schools. In these centers rooms are equipped for this work and classes pass here for half of the forenoon or an entire afternoon once a week. In these centers models from wood are made and various forms of joints are taught. The sixth grade in the buildings in which these centers are located begin this work. Work of this same character, though not confined to woodwork, is conducted in the various classes for backward children.

(2) Girls in the third to the sixth grade, inclusive, and also in the eighth grade, are taught sewing. In many of the schools a special room is set aside for this work, and here the special teacher meets the classes. Fifty-five minutes a week are devoted to this work.

(3) Cooking centers are maintained at various school buildings in the same manner in which manual-training centers are maintained. Girls from the seventh grade are here taught for a whole afternoon or half of a forenoon during one day of the week. Sixth-grade girls in the buildings in which the cooking centers are located are also given this work.

(4) In one school for white children and in one for colored children special emphasis is being placed upon the industrial work. The amount of time devoted to this work is about 8 per cent of the total school time. It is the declared purpose of the board to increase the number of these schools as rapidly as accommodations can be supplied.

Approximately one hour a day is devoted to manual training from the first to the sixth grade, inclusive. In the seventh and eighth grades the suggested time allotment is 110 minutes per week; this is therefore 5.3 per cent of the total school time, exclusive of opening exercises and recesses.

The following table shows the percentage of time devoted to manual training in certain cities in 1910–11:

City.	Percentage.	City.	Percentage.
New York	4.7	Pittsburg	5
Chicago	9.9	Detroit	1.4
Philadelphia	3.5	Buffalo	[1]
St. Louis	2.4	San Francisco	1.8
Boston	6.2	Milwaukee	6.2
Cleveland	4.8	Cincinnati	2.2
Baltimore	5.3		

[1] No data at hand.

The commission is of the opinion that the extension of industrial training, particularly along vocational lines, is desirable. Baltimore is a large manufacturing city. It may be found practicable in the near future to relate the work of the schools to the numerous vocational opportunities the city affords for the employment of young people.

CONDUCT OF INSTRUCTION.

The commission believes that in many respects the teachers of Baltimore are granted unusual freedom in their work. They are certainly given more latitude than is found in some other important cities. As illustrative of this fact, the following instructions issued from the superintendent's office are offered as evidence:

RELATIVE TO COURSE OF STUDY.

The course of study is a guide to the selection and sequence of material rather than a prescription of the amount of work to be done. Some classes will do more than other classes working with the same course, and some individuals in each class will accomplish more than other individuals. When the teacher and principal are satisfied that work is too easy for any pupil, that pupil should be advanced by special promotion. The fitness of pupils for promotion should not be measured entirely by what they know, but largely by what they can do with new lessons.

From now to the end of the year teachers who find their classes weak in a particular subject should give more periods to such subjects than to those in which the pupils are strong—not longer periods, but more periods. In fact, this may be done at any time of year, always, of course, with your approval in each individual case. The arrangement of time and subjects on schedules sent out from this office is, as you know, suggestive only.

RELATIVE TO DAILY SCHEDULES AND LESSON PLANS.

The teachers into whose hands this pamphlet goes are to understand distinctly that with the exception of the section headed "General directions," it offers merely suggestions for making daily schedules and lesson plans. With regard to such plans it would be most undesirable for teachers to feel that they are receiving instructions which must be followed absolutely. The plans here given may be found serviceable as models upon which varying schedules and plans may be patterned.

It would be an exceedingly unfortunate thing if every teacher in the public schools felt obliged to use the schedule for his grade or the plan for his work to be found in

this book, excluding any of his own making. He should study his particular conditions, and if convinced that the suggestions here offered are the best for his class he should use them; otherwise these outlines should be freely modified.

RELATIVE TO SECTIONAL TEACHING.

Teachers not accustomed to divided-class management will, if they so request, be permitted at first to limit sectioning to two subjects. Later, however, they will be expected to extend the plan to other subjects. Any help needed, either in inaugurating or carrying out the section plan of teaching, is to be obtained from the group principal.

RELATIVE TO TIME ALLOTMENT OF RECITATIONS.

Except in the few instances noted in succeeding pages, or for extraordinary reasons, the following time limits are not to be exceeded: Grade one, 15 minutes; grades two, three, and four, 20 minutes; grades five and six, 25 minutes; and grades seven and eight, 30 minutes. Painting, drawing, or construction may require 30 minutes in grades one to six. In order to give the teacher needed help, the supervisor may at times have to prolong an illustrative exercise somewhat beyond the time limits.

TEACHING METHOD.

The children feel too little responsibility; the teacher and the text-book are too much in evidence, and the progressive activities of the children too little in evidence. In some primary schools there is not enough recognition of child life, either in methods of teaching or in variety of exercises. The teaching is not adapted to children, for the point of view is too often that of the teacher rather than that of the child. The children take little part in recitations other than answering formal questions. The initiative is that of the teacher rather than that of the pupil. For example, in some schools, pupils are required in their exercises in oral English to reproduce stories that have been told them in exactly the way that they were told, and therefore no chance given a variation in the telling. The judgment is too rarely exercised, because the ideal is to memorize the facts rather than to draw inferences from the facts.

Not enough use is made of the principle of apperception. Lessons are begun with very little attention at bringing up the lessons that have gone before, and are ended without leaving any very definite impression on the child's mind as to just the purpose the lesson was to serve. The impression is that of a disjointed type of work.

SECTIONAL TEACHING.

The commission has received many criticisms of sectional teaching. The following quotation from the Twelfth Annual Report of the City Superintendent of Schools to the Board of Education of the city of New York (pp. 260–262) states the arguments presented both for and against sectional teaching.

INDIVIDUAL INSTRUCTION AND GROUP TEACHING.

One of the most serious criticisms that is made of modern education, especially in cities where the attendance is large and the classes are closely graded, is the tendency to recognize large groups of pupils rather than individuals. Mass teaching is in the line of least resistance; and as a consequence many a teacher centers her attention but little on individuals; she measures her success by the progress of the class rather than of individual members.

The object of school classification is to place pupils in right relation to work and to each other and to facilitate progress through the grades. Differences are sure to exist in any class, in the ages and maturity of pupils, in their ability and progress, in their regularity of attendance and power of application, and in the assistance rendered at home; and these differences should be recognized. Any plan of grading pupils has a tendency to hold in check the bright pupils and thus to deaden rather than to quicken mental activity; and on the other hand, ordinary school classification may discourage the slow and backward pupils who fail to grasp clearly much of what is presented.

SINGLE DIVISION.

The main arguments advanced in favor of a single division in class work are: Fewer classes, and, therefore, more time for each exercise, and presumably more thorough work; accelerating effect of mass movement upon certain pupils; difficulty in keeping the division not reciting profitably employed; and less work for the teacher. These arguments, however, have small weight in the mind of a genuine teacher thoroughly interested in the progress and best work of her pupils.

TWO DIVISIONS.

The main arguments in favor of at least two divisions in the main subjects in a class are:

1. A small group of pupils can be kept interested, attentive, and mentally alert better than can a class of forty or fifty pupils. In other words, any teacher will hold the interest and enthusiastic attention of one-half or one-third of a large class better than she can of the entire class, and she can do more and better work in fifteen or twenty minutes with the individuals in a small group than she can in twice the time with the individuals in a large class.

2. A definite time for study and self-directed effort is afforded. In mass teaching there is a tendency to make the recitation too prominent, and to undervalue the worth of study. This fact is clearly apparent when pupils leave the elementary grades and are obliged to prepare their lessons without a teacher's assistance. Those pupils who were taught the art of individual and persistent application to study in the elementary grades have a great advantage in the secondary schools over those less favored.

3. The power of concentration and inhibition is strengthened by group teaching. Pupils who are in a recitation the greater part of the day are apt to grow intellectually weak; they absorb without effort whatever is given them; they find it difficult, if not impossible, to apply themselves with vigor to the preparation of their lessons without the constant oversight and assistance of teachers. The reason for their helplessness in the higher grades is due largely to the fact that pupils have not been taught in the elementary grades to apply themselves to the mastery of books, to work independently and energetically even while other exercises are being carried on in the room.

4. There is less opportunity for the teacher to talk and to explain in short periods when the class is in two divisions than in long periods with a single division. And a point well worth consideration in connection with group teaching is the fact that

the teacher's questions and explanations must be given in a quiet voice, lest she disturb the division which is preparing a lesson. This one point alone is ground enough for requiring group teaching in every elementary school.

5. There will be more attention to the individual child and more opportunity for wise assistance and for the promotion of deserving pupils in a small group than in a large one. Small groups encourage personal attention; large groups discourage it. The plea, therefore, for two divisions in the main subjects in any elementary class resolves itself into a plea for greater care and oversight of the individual pupil. The special plans for classifying and promoting pupils that have been exploited by superintendents in various cities during the past few years have as their basis the special needs of the individual child.

The statements made in the quotation above will, in the judgment of the commission, apply with equal force to the conditions in Baltimore. The commission approves the plan of sectional teaching set forth in the following quotation from "General directions" in the supplement to the outline of studies for the elementary schools of Baltimore (p. 5):

Arrange the program in every grade so that the children shall be engaged in independent work (such as study or constructive exercises) for one-fourth to one-half of each day. Since opportunity for self-direction is an essential toward cultivating self-reliance and resourcefulness, these exercises should not be under the immediate guidance of the teacher.

To provide for this highly important part of school education, divide the class according to working ability into two or more sections and teach them separately in a manner similar to that indicated in the accompanying schedules. Music, penmanship, written spelling, drawing, and physical culture are appropriate subjects for undivided-class exercises.

The ideal arrangement for divided-class teaching applicable especially to grammar grades would provide for new sections according to the daily or weekly progress of individual pupils in separate studies, and would involve no change of schedule. Before one can arrange a plan so flexible as this, the two or three section schedule must first become familiar.

(For further explanation of flexible sectional management, see Baltimore School Report for 1902, pp. 23-25, and Report of the Commissioner of Education, 1898-99, Vol. I, pp. 341-344.)

COEDUCATION OF THE SEXES.

The subject of coeducation of boys and girls has not, so far as we can learn, aroused such serious question in other cities as has recently been raised in Baltimore. The preponderance of American opinion seems to be very markedly on the side of coeducation in both primary and grammar schools. In the absence of any well-ascertained information which would show plainly that coeducation in these grades presents fewer advantages and greater evils than separate education, we can not advise the transformation of the mixed schools into schools in which the sexes are separated. Public schools of both types exist in Baltimore to-day. Considerable expense would undoubtedly be involved in the attempt to reduce all of these to the one type of the school in which boys and girls are separated, and such expenditure

must inevitably delay improvement in other directions where the need of change is more manifest.

The following table shows the practice in regard to coeducation of the sexes in 15 of the larger cities:

Coeducation in 15 cities of 300,000 population and over.

[Based on information received from superintendents of schools.]

Cities.	Percentage of elementary classes containing both boys and girls.	Extent of opposition by public.
New York	Both attend grades below the fifth in most schools. In many buildings boys and girls are separated at the beginning of the fifth year.	Opinions vary with different sections of the city.
Philadelphia	About 93 per cent	No noticeable objection.
St. Louis, Mo	All	No opposition as far as known.
Boston, Mass	80 or 90 per cent	No serious objection.
Cleveland, Ohio	All	No opposition.
Pittsburg, Pa	do	
Detroit, Mich	do	No general opposition.
San Francisco, Cal	More than 90 per cent	No opposition.
Buffalo, N. Y	About 50 per cent	Do.
Milwaukee, Wis	All	Practically no opposition.
Cincinnati, Ohio	Nearly all	No opposition.
Newark, N. J	All	Do.
New Orleans, La	About 60 per cent	Little opposition for primary grades.
Washington, D. C	All	No objection.
Los Angeles, Cal	Practically all	Do.

HOME STUDY.

The commission has heard complaints about the amount of home study required. The directions concerning home study are as follows:

To aid in establishing habits of industry and self-reliance, home work, involving activities of construction, may be assigned to third and fourth grades (something to do with the hands rather than something to study). Home assignments in the fifth and sixth grades should be partly of this character. (School Hygiene, Shaw.) In general, home study should be supplementary to classroom work, and should deal with matters treated in a previous lesson.

These directions, which limit the home work in the third and fourth grades to hand work, are excellent. As to the higher grades, more definite directions might well be given. In the lower grades, the limitations of home study, as stated, should be enforced.

CHAPTER IV.

SUBSIDIARY TOPICS.

THE SCHOOL PLANT.

The commission deems it its duty to call attention to the condition of many of the schoolhouses.

While the commission was gratified to observe that new schoolhouses had recently been erected in Baltimore which are a credit to the city, yet it must record the fact that a large number of the present school buildings are not suitable for school purposes. In many of the older buildings the rooms are without any ventilation other than that which comes from windows, and the lighting is very poor. We believe the eyesight of children must be impaired by the inadequate lighting of many school buildings. We understand that upward of 200 rooms are still heated with stoves. The commission observed some rooms which are only 20 by 21 feet in size. In many schools there is no adequate provision for the outside wraps of the school children. Moreover, many of the schoolhouses are untidy and the janitor service inefficient. These are not pleasant facts to state, but the commission would be derelict in its duty if it failed to record its views on this subject.

The commission believes, too, that in some buildings of three stories in height, which have been erected in comparatively recent years and are not of fireproof construction, there is a danger, more real than imaginary, of fire and the possible sacrifice of the lives of children.

The commission is aware of the fact that the school board has called the attention of the municipal authorities to the condition of the school buildings and that it has asked for a large bond issue for new schoolhouses. The commission does not see how the municipal authorities can fail to take prompt action for the correction of these evils.

THE ATTENDANCE OF PUPILS.

The table on the following page shows for the years 1870, 1880, 1890, 1900, and for each year thereafter the principal items of attendance statistics. The figures are based on the reports of the board of school commissioners.

These figures indicate a normal increase in the enrollment from 1870 to 1900, unusual fluctuations in the two following years, and a gradual diminution from 1903 to the present. It is difficult to treat satisfactorily statistics relating to enrollment over a period of years because of the general lack in most cities of the observance of the rule requiring that no duplication be allowed. It seems that this rule was not put into effectual practice in Baltimore until 1905. It

is likely, therefore, that the exceptional figures for 1901 and 1902 can be accounted for on this basis.

Years.	Enrollment, all schools.	Average daily attendance, all schools.	Number of pupils belonging, all schools, Dec. 31.	Enrollment, elementary schools.
1870	34,769	19,277	23,898	33,615
1880	51,117	29,417	35,297	49,071
1890	65,758	41,603	50,899	63,499
1900	79,659	54,403	64,720	77,198
1901	[1] 83,415	52,640	64,918	80,376
1902	[1] 88,523	51,776	66,399	85,157
1903	82,297	55,353	67,368	78,465
1904	81,582	55,156	68,093	77,143
1905	81,205	55,067	67,964	77,830
1906	80,964	55,079	69,446	78,477
1907	81,402	54,572	68,723	77,816
1908	80,235	55,501	68,924	76,446
1909	80,303	55,011	68,120	76,045
1910	79,838	55,103	67,508	75,366

[1] The report for 1901 "after deductions for transfers have been made." The enrollment for 1902 probably contains duplications on account of transfers.

While an increased rigidity in the enforcement of the rule may have had some effect in causing a continued slight decrease in the enrollment after 1905, it seems more probable that there has been a slight falling off in the actual enrollment during the past five years. The average daily attendance statistics for the past six years shows very little variation from year to year, notwithstanding the probable decrease in enrollment. It is difficult for the same reason to speak satisfactorily concerning the enrollment in proportion to population from decade to decade. The following table, taken from the reports of the Commissioner of Education, shows the proportions:

Years.	Enrollment, all schools.	Population.	Ratio.
1880	48,066	332,190	14.5
1890	63,545	434,439	14.6
1900	79,684	508,957	15.6
1910	79,838	558,485	14.3

The following table, showing the ratio of enrollment to population in 1910 of all cities above 350,000, speaks very favorably for the total enrollment in Baltimore. Only Buffalo, New York, and Boston show a higher proportion of their population in the public schools.

Cities.	Population.	Enrollment.	Per cent.
New York	4,766,883	744,148	15.6
Chicago	2,185,283	301,172	13.8
Philadelphia	1,549,008	174,441	11.3
St. Louis	687,029	87,931	12.8
Boston	670,585	111,632	16.6
Cleveland	560,663	74,438	13.3
Baltimore	558,485	79,838	14.3
Pittsburg	533,905	57,215	10.7
Detroit	465,766	57,996	12.5
Buffalo	423,715	62,695	14.8
San Francisco	416,912	43,155	10.4
Milwaukee	373,857	42,372	11.3
Cincinnati	364,463	47,454	13.1

Baltimore ranks lowest as regards the average number of days attended by each child enrolled, its average being 10 days lower than that of the next city and 42 days lower than that of Milwaukee.

TABLE 20.—*Average number of days attended by each child enrolled, 1910.*

Cities.	Aggregate attendance, in days.	Total enrollment.	Average number of days attended by each pupil enrolled.
New York	113,011,361	744,148	152
Chicago	46,746,372	301,172	155
Philadelphia	28,079,683	174,441	162
St. Louis	13,581,600	87,931	155
Boston	16,996,617	111,632	152
Cleveland	10,871,764	74,438	146
Baltimore	10,607,101	79,838	133
Pittsburg	8,930,000	57,215	156
Detroit	8,265,984	57,990	143
Buffalo	9,072,000	62,695	145
San Francisco	6,790,632	43,155	157
Milwaukee	7,401,641	42,372	175
Cincinnati	7,127,800	47,454	150

Baltimore has the least satisfactory distribution of pupils among the various grades, of all the 13 cities above 350,000 population. It is desirable that a city hold its pupils in school as long as possible, at least up to the end of the eight-year elementary course. The city, therefore, having the largest percentage of pupils in the upper grades and the smallest percentage in the lower grades stands highest in this respect, while the city in which the reverse condition is true stands lowest. In Baltimore the percentages of enrollment in each of the first four grades are the highest of all cities but one (a different city in each grade), while in the fifth grade Baltimore has the lowest but four, and in the sixth, seventh, and eighth the lowest of all. In the high schools the percentage of enrollment for the first and fourth years is the lowest but three, for the second the lowest but one, for the third the lowest but two, and for the entire high-school enrollment the lowest but three.

The following tables and accompanying diagram show by absolute figures and percentages the distribution of the enrollment in the various grades in 1910 for each of 17 cities:[1]

[1] These statistics were gathered by the United States Bureau of Education for 1910. In some cases the school census for some day during the school year 1909–10 is given; in others, the number belonging upon a certain day; in others, the total enrollment for the year. These figures are comparable, for the reason that practically the same distributions of enrollment would be shown for any city under all three items. The Baltimore statistics are the "number belonging, including temporary withdrawals," Dec. 31, 1909.

TABLE 21.—*Enrollment by grades in elementary schools and by years in secondary schools in cities of 300,000 population and over, 1910.*

	Cities.	Total elementary and secondary enrollment. (Cols. 3–14.)	Elementary school grades.								Secondary school years.			
			First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	First.	Second.	Third.	[1]Fourth and fifth.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	New York	599,622	64,947	86,346	83,814	80,787	76,105	68,514	57,693	41,217	19,983	11,071	6,115	3,030
2	Chicago	274,705	54,867	34,984	38,088	34,526	31,651	25,462	20,976	16,370	8,736	4,648	2,580	1,817
3	Philadelphia	165,514	31,536	27,528	26,236	22,541	18,712	14,137	9,434	6,222	3,885	2,760	1,750	773
4	St. Louis	65,176	10,810	10,097	9,330	9,500	7,287	5,725	4,465	3,608	1,931	1,071	747	605
5	Boston	87,681	13,650	10,437	9,247	9,867	9,790	9,239	8,255	7,635	3,587	2,627	1,659	[1]1,688
6	Cleveland	67,664	12,597	9,960	8,752	8,222	7,223	6,120	4,924	3,870	2,630	1,454	1,033	879
7	Baltimore	66,827	13,876	11,040	10,139	9,215	7,175	5,115	3,618	2,402	1,837	1,124	712	544
8	Detroit	50,446	9,588	6,582	6,398	6,334	4,995	4,434	3,656	2,828	2,590	1,147	950	944
9	Buffalo	53,372	9,180	6,183	6,014	5,834	5,921	5,004	4,480	[2]3,796	962	1,244	1,002	751
10	San Francisco	43,155	10,071	5,698	5,211	4,981	4,521	3,847	2,872	2,409	1,901	885	412	347
11	Milwaukee	35,765	5,301	4,376	4,315	4,281	4,253	4,035	3,416	2,508	1,436	820	549	455
12	Cincinnati	41,640	7,143	5,593	5,437	5,157	4,659	4,238	3,202	2,469	1,823	919	587	413

[1] Does not include 421 pupils in high school pursuing irregular course.
[2] Buffalo has 3,001 pupils enrolled in the ninth grade.

TABLE 22.—*The percentage of total enrollment found in each grade in elementary schools and for each year in secondary schools (based on Table 21).*

	Cities.	Elementary schools, percentage in—									Secondary schools, percentage in—				
		First grade.	Second grade.	Third grade.	Fourth grade.	Fifth grade.	Sixth grade.	Seventh grade.	Eighth grade.	Ninth grade.	First year.	Second year.	Third year.	Fourth and fifth years.	Total high school.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	New York	10.9	14.4	14.0	13.5	12.7	11.4	9.6	6.9	.....	3.3	1.8	1.0	.5	6.6
2	Chicago	19.9	12.8	13.9	12.6	11.5	9.3	7.6	6.0	.....	3.2	1.7	.9	.6	6.4
3	Philadelphia	19.1	16.7	15.8	13.6	11.3	8.5	5.7	3.8	.....	2.3	1.7	1.0	.5	5.5
4	St. Louis	16.6	15.5	14.3	14.6	11.2	8.8	6.9	5.5	.....	3.0	1.6	1.1	.9	6.6
5	Boston	15.6	11.9	10.5	11.3	11.2	10.5	9.4	8.7	.....	4.1	3.0	1.9	1.9	3.2
6	Cleveland	18.6	14.8	12.9	12.1	10.7	9.0	7.3	5.7	.....	3.9	2.2	1.5	1.3	8.9
7	Baltimore	20.8	16.6	15.2	13.8	10.8	7.7	5.4	3.6	.....	2.3	1.6	1.0	.8	6.1
9	Detroit	19.1	13.1	12.7	12.5	9.9	8.8	7.3	5.6	.....	5.2	2.2	1.8	1.8	11.0
10	Buffalo	17.3	11.7	11.4	10.4	11.1	9.3	8.4	7.1	5.6	1.8	2.3	1.8	1.3	7.2
11	San Francisco	23.3	13.2	12.1	11.6	10.5	8.9	6.7	5.6	.....	4.4	2.0	.9	.8	8.1
12	Milwaukee	14.9	12.3	12.1	12.0	11.9	11.3	9.5	7.0	.....	4.0	2.2	1.5	1.3	9.0
13	Cincinnati	17.2	13.4	13.1	12.4	11.2	10.2	7.7	5.9	.....	4.4	2.2	1.4	.9	8.9
	All cities	15.69	14.15	13.70	13.00	11.70	10.05	8.21	6.32	.....	3.32	1.92	1.15	.79	7.18

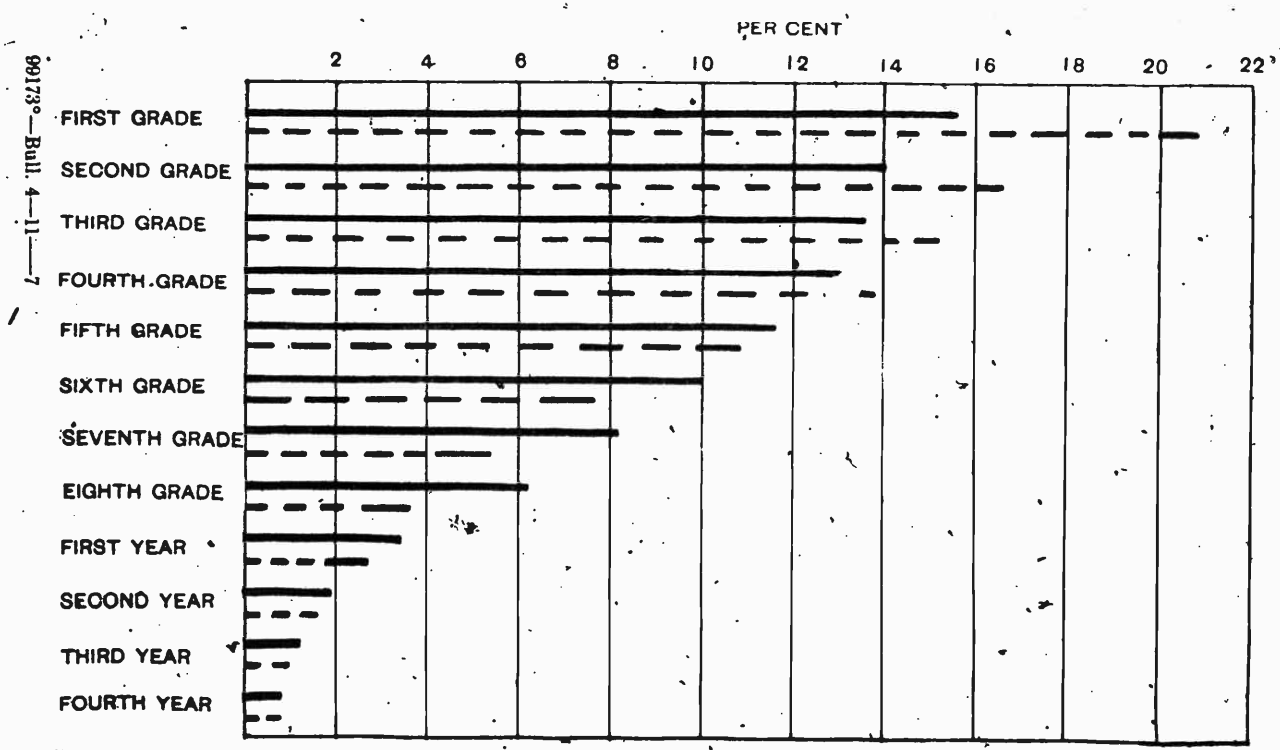

FIG. 12.—Percentages of pupils enrolled in each grade in Baltimore and in all cities, based on Table 22.—The broken line represents Baltimore; the solid, all cities.

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Notwithstanding these facts, conditions have improved in Baltimore since 1899. Table 23, furnished by the superintendent of public instruction, Baltimore, shows absolute decreases in the enrollment in the two lower grades, small increases in the third and fourth, and larger increases in the fifth and higher grades. Table 24 shows the percentages of the total enrollment in each grade each year and the change in those percentages from the percentages of 1899. Fig. 13 illustrates the changes.

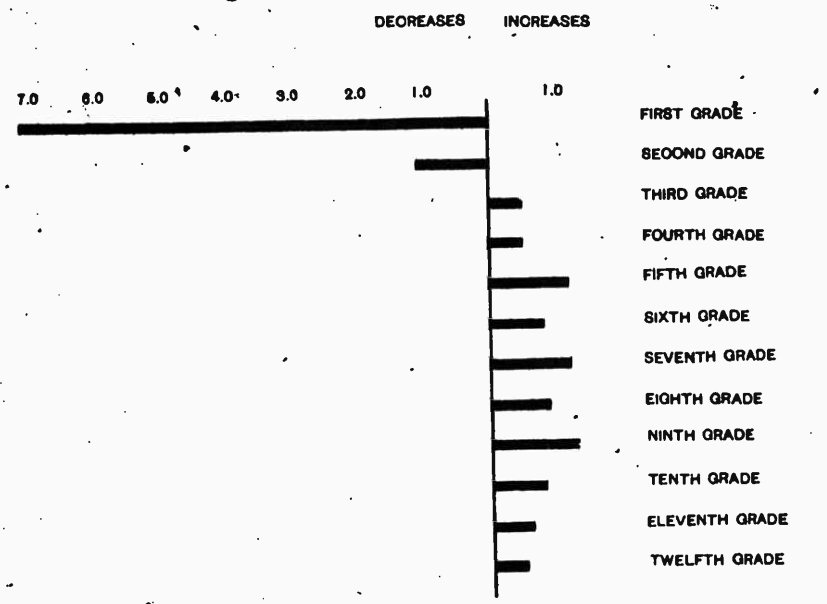

FIG. 13.—Changes in distribution of enrollments in Baltimore between 1899 and 1909, based on Table 24.

Statistics prepared by the principals of two groups for the past 10 years show a large decrease in the length of time required for pupils to complete a grade. This means that there is less retardation in these groups than formerly. What is true of these groups is probably true to a lesser extent in all the other groups.

It appears, then, that as regards the attendance of pupils there are some favorable indications and others that are unfavorable. The slight decrease in the enrollment during the past few years is of minor importance, in view of the fact that the proportion of enrollment to population in Baltimore is high as compared with other cities of the same group. The increase in the average daily attendance, despite the decrease in the enrollment, is encouraging. While the considerable increase in the enrollment in the upper grades during the past

TABLE 23.—*Enrollment by grades in the public schools of Baltimore for the years 1899–1909, inclusive.*

Years.	Total elementary and secondary enrollment.	Elementary school grades.								Secondary school years.			
		First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	First.	Second.	Third.	Fourth.
1899	65,289	19,059	11,360	9,391	8,568	6,182	4,392	2,703	1,693	899	572	289	221
1900	64,721	18,277	11,553	9,658	8,269	6,211	4,431	2,776	1,707	849	456	320	214
1901	64,856	15,816	12,842	10,240	8,535	6,231	4,495	2,884	1,784	948	516	308	287
1902	66,273	17,102	12,354	10,305	8,585	6,447	4,274	2,863	2,023	1,029	641	367	283
1903	67,232	17,120	12,257	10,259	8,885	6,494	4,487	3,005	2,011	1,189	699	471	355
1904	67,215	16,676	12,000	10,456	8,701	6,668	4,611	3,082	1,992	1,324	787	513	406
1905	67,763	16,203	12,511	10,673	8,655	6,717	4,543	3,291	1,967	1,279	893	555	456
1906	69,364	16,419	12,470	11,153	9,085	6,677	4,963	3,120	2,171	1,354	889	613	450
1907	68,550	15,443	12,002	11,106	9,184	6,679	4,956	3,455	2,220	1,432	940	644	489
1908	68,690	15,506	11,188	10,800	9,179	7,269	5,036	3,495	2,379	1,707	971	662	498
1909	67,877	14,926	11,040	10,139	9,215	7,175	5,145	3,618	2,402	1,837	1,124	712	544

TABLE 24.—*Percentages of total enrollment in each grade of the Baltimore public schools for the years 1899–1909, inclusive, together with amount of increase or decrease from percentages for 1899, based on Table 23.*

Years.	Elementary school grades.																Secondary school years.							
	First.	Change.	Second.	Change.	Third.	Change.	Fourth.	Change.	Fifth.	Change.	Sixth.	Change.	Seventh.	Change.	Eighth.	Change.	First.	Change.	Second.	Change.	Third.	Change.	Fourth.	Change.
1899	29.2	.....	17.4	.....	14.4	.....	13.1	.....	9.4	.....	6.7	.....	4.1	.....	2.6	.....	1.4	.....	0.9	.....	0.4	.....	0.3	.....
1900	28.2	−1.0	17.8	+0.4	14.9	+0.5	12.8	−0.3	9.6	+0.2	6.8	+0.1	4.3	+0.2	2.6	+0.0	1.3	−0.1	.7	−0.2	.4	+0.0	.3	−0.0
1901	24.4	−4.8	19.8	+2.4	15.8	+1.4	13.2	+ .1	9.6	+ .2	6.9	+ .2	4.4	+ .3	2.7	+ .1	1.1	+ .1	.8	− .1	.4	+ .0	.3	+ .0
1902	25.8	−3.4	18.7	+1.3	15.6	+1.2	12.7	− .4	9.7	+ .3	6.5	− .2	4.3	+ .2	3.1	+ .5	1.6	+ .2	1.0	+ .1	.5	+ .1	.4	+ .1
1903	25.4	−3.8	18.2	+ .8	15.3	+ .9	13.3	+ .2	9.7	+ .3	6.7	− .0	4.5	+ .4	3.0	+ .4	1.8	+ .4	1.1	+ .2	.7	+ .3	.5	+ .2
1904	24.8	−4.4	17.9	+ .5	15.6	+1.2	13.0	− .1	9.9	+ .5	6.9	+ .2	4.6	+ .5	3.0	+ .4	2.0	+ .6	1.2	+ .3	.7	+ .3	.6	+ .3
1905	23.9	−5.3	18.4	+1.0	15.7	+1.3	12.8	− .3	9.9	+ .5	6.7	− .0	4.8	+ .7	2.9	+ .3	1.9	+ .5	1.3	+ .4	.8	+ .4	.6	+ .3
1906	23.7	−5.5	18.0	+ .6	16.1	+1.7	13.1	+ .0	9.6	+ .2	7.2	+ .5	4.5	+ .4	3.1	+ .5	2.0	+ .6	1.3	+ .4	.8	+ .4	.6	+ .3
1907	22.5	−6.7	17.5	+ .1	16.1	+1.8	13.4	+ .3	9.7	+ .3	7.2	+ .5	5.0	+ .9	3.2	+ .6	2.0	+ .7	1.4	+ .5	.9	+ .5	.7	+ .4
1908	22.6	−6.6	16.3	−1.1	15.7	+1.3	13.4	+ .3	10.6	+1.2	7.3	+ .6	5.0	+ .9	3.5	+ .9	2.5	+1.1	1.4	+ .5	.9	+ .5	.7	+ .4
1909	22.0	−7.2	16.3	−1.1	14.9	+ .5	13.6	+ .5	10.6	+1.2	7.5	+ .8	5.3	+1.2	3.5	+ .9	2.7	+1.3	1.7	+ .8	1.0	+ .6	.8	+ .5

10 years is likewise encouraging, the unusually large proportion of the enrollment still found in the lower grades, the large percentage of retardation, and the low average number of days attended by each child, are facts to be deplored.

THE HEALTH OF PUPILS.

Responsibility for the health of pupils rests primarily with the health department of Baltimore. As early as possible in the school year, the schools are visited by a medical inspector accompanied by a school nurse. Each child is examined and results of the examination are noted on a convenient form, which is retained by the school nurse. In case it is found necessary to advise medical treatment the parents are notified and wherever possible the nurse visits the homes and learns how the instructions are being obeyed. Later in the year the children are reinspected, and the results of the examination are indicated on the form used for the first examination.

So much of the medical examination as has come under the personal observation of the commission has made a decidedly favorable impression.

The condition of medical inspection in the 13 largest city public-school systems is given in the following table, which is derived from a report covering conditions in 1,038 cities, entitled "What American cities are doing for the health of school children," recently published by the department of child hygiene of the Russell Sage Foundation.

TABLE 25.—*Medical inspection in certain city public-school systems, 1911.*

Cities.	Year work was begun.	Inspection for contagious diseases.	Vision and hearing tests by teachers.	Vision and hearing tests by physicians.	Physical examination by physicians.	System under board of education or board of health.	Number of school physicians.	Number of school nurses.	Inspection by dentists.
New York	1897	X	X	X	X	H.	142	142	.....
Chicago	1907	X	.....	X	X	H.	100	40	.....
Philadelphia	1904	X	.....	X	X	H.	20	9	X
St. Louis	1909	X	.....	X	X	E.	6	5	.....
Boston	1894	X	X	.....	.....	H.	80	34	.....
Cleveland	1910	X	.....	X	.....	E.	15	15	X
Baltimore	1905	X	.....	X	X	H.	5	5	.....
Pittsburg	1910	.....	.....	.....	.....	H.	20	.....	.....
Detroit	1902	X	X	X	.....	H.	27	6	.....
Buffalo	1907	X	.....	X	X	H.	.....	3	X
San Francisco	1907	X	.....	X	X	H.	1	4	.....
Milwaukee	1909	X	.....	X	X	E.	10	4	.....
Cincinnati	1905	X	X	X	.....	H.	25	3	X

THE CONTROL AND DISCIPLINE OF PUPILS.

The commission found little to criticize in the behavior or conduct of pupils as they were observed in the schools. In the main they were seen to be industrious, studious, attentive, orderly, punctual, obedient, and polite. It feels, therefore, that the children are, as a result of their school life, acquiring habits of behavior which will be of inestimable value to those children all their lives and to the community in which they will live. The schools in Baltimore or elsewhere are worth all they cost in giving multitudes of children these habits of self-control.

In a few schools, however, the children are not in good order, as stated elsewhere in this report, and the general relationship existing between teachers and pupils in those schools is unsympathetic; but the exception only proves the rule.

The commission is not in accord with the agitation for the restoration of corporal punishment in elementary schools. Such restoration would be a step backward. Under proper restrictions, however, the use of corporal punishment might be allowed in the special schools for boys.

Various agencies may be used, and in fact are in use in Baltimore, which afford effective means of control of troublesome pupils. Special schools, already established, of various sorts, afford one means of control, and the extension of industrial training, particularly for boys, is another means. Many boys 12 to 14 years of age in Baltimore and elsewhere, are in a state of unconscious protest against the traditional, bookish, or conventional course of study. They are in the minority, it is true; they are not bad boys. They need a different kind of school from the one afforded by a mere academic course of study. They may in most cases be saved to themselves and to the State if their peculiarities are recognized. Whipping them into submission is not the best way to reform them. Industrial training is the way advocated by those who have had first-hand and prolonged experience with such boys. The experience, too, of many cities amply demonstrates the truth of this.

CHAPTER V.

ADDITIONAL VIEWS AND SUGGESTIONS.

GENERAL CONSIDERATIONS.

More and more society is coming to lean hard upon public education. Every new public interest, whatever it may be, becomes another argument in favor of good schools. A city board of education is charged with providing, for the community as a whole, the best educational opportunity that can be made generally available. We regard the schools as a main reliance of modern society for the promotion of both private righteousness and devotion to the public good, as well as for the diffusion of that intelligence and discipline which will make these high aims and sentiments effective.

To accomplish these results, in the largest progressive communities whose public institutions are generously maintained, already calls for from 25 to 35 per cent of all revenues for municipal purposes, and will in all probability, within the near future, absorb normally from one-third to two-fifths of those revenues.

It is accordingly a matter of the utmost consequence in all of our cities that the public schools be conducted in ways that will bear the closest scrutiny as regards economy of expenditure and efficiency in all of their operations; as regards the municipal pride and self-respect which they exemplify and foster; and as regards their democratic fairness in providing equal opportunity for all and in discountenancing faction and favoritism. A general inquiry into the condition of the schools, at stated intervals of not more than 10 or 12 years, would serve a useful purpose.

Attention is invited to the following general considerations regarding ways in which these high ends may be attained:

THE BOARD OF EDUCATION.

City school boards should not be too large; they should be representative of the city as a whole, and not of districts or wards; they should be composed of citizens who are deeply interested in the public welfare; their members should not represent political parties or factions within the city, should go out of office a few at a time, and should not be paid for their services.

A board of education should be primarily a legislative body. Its chief functions should be to decide questions of policy, both immediate and future; to arbitrate disputed questions, of large impor-

tance; to oversee the expenditures of the school funds; to decide what enlargements and additions shall be made, and to secure funds to carry out such objects; to adopt rules and regulations for the management of the school system; and to appoint all necessary executive officers, clothe them with proper authority, and uphold them in the discharge of their duties.

Such a board should represent the whole people in their desire to provide good schools for their children. They should be made sufficiently free from other branches or departments of the city government to enable them to make all necessary arrangements, appointments, and expenditures for public education apart from any personal or political considerations which may affect other branches or departments. Their functions fall into the two divisions of educational and business management. The first is highly professional work, the object of which is to get as large educational results out of the money available as is possible. The second partakes of the character of all sound business.

(*a*) *Educational management.*—The head of this department is the superintendent of schools, together with his corps of assistants. He should be selected with great care, and from the Nation as a whole rather than from a single city, or State. Once selected, he should be clothed with authority commensurate with his responsibility, and then expected to get the desired results.

The independence of the superintendent as the chief executive officer in educational affairs should be recognized by the members of the legislative branch, and no member of a school board should seek to interfere with him in any way in the exercise of his duties as defined by law and regulation. The rule of mutual respect and helpfulness should prevail between the two branches of the school department. A superintendent should not attempt to carry out any policy that has not been previously approved by the board, nor to dictate policies, for his function in the framing of new policies ends with recommendation. Board members, on the other hand, should not have any direct participation in affairs which are within the field of executive action and discretion. The superintendent and his assistants, after being given a fair opportunity to discharge their proper functions, stand or fall according to the value of the results which they obtain.

(*b*) *Business management.*—To a limited extent, the same principles apply as well to the control of the business side. After hearing the reports and recommendations of the business manager, superintendent of buildings, and other business officers, the board should decide what is advisable and financially possible, but the execution of the details should be left to these executive officers. If they are not competent to attend to such details, they should be replaced by those who are competent.

QUESTIONS OF FINANCE.

Nowhere does a board of school commissioners better represent the interests of the people than in the matter of school expenditures. The broad principles set forth above apply here also. It is not the interests of individuals that are to be chiefly considered, but the interests of the city as a whole. The board, in a way, must represent and be the spokesmen for the future citizens of the city as well as for the present citizens. A board which properly fulfills its function and justifies its existence must consciously work in the light of an educational policy that looks a generation ahead.

THE ORGANIZATION OF THE SCHOOLS.

As regards the organization of the schools, the board must be guided largely by the advice of its educational officers, but should plan an educational system which will meet the needs of a growing city and of all of the people of the city. Our schools to-day render but a portion of their possible service, but in the more progressive communities their scope is rapidly expanding. A great extension of our public school systems, to meet the many educational needs of many different classes of our population, is to be expected and is indeed already under way.

THE SYSTEM OF SUPERVISION.

The central figure in a system of city school administration is the superintendent. The problems he is required to study are so many and so large as to render it impossible for him to spend much time in actual school visitation or in working out the finer details of school instruction. His chief reliance for such work must be placed in assistant superintendents and supervisors. Unless these are efficient, adequate in number, and thoroughly trustworthy, he can do little to advance the efficiency of the schools.

Next to the superintendent and his immediate assistants are the school principals. Upon their efficient and hearty cooperation in all efforts deemed to be for the good of the school system, the success of the efforts of the superintendent must depend, and no board should attempt to hold a superintendent accountable for educational results unless, at the same time, it holds every principal accountable in turn to the superintendent. Differences should be frankly threshed out in conferences; for the relation of a superintendent to his subordinates is partly that of a leader in a democracy as well as partly that of a manager in an industrial enterprise. But when a policy has once been decided upon, it should be loyally carried out by the principals. Principals who can not or will not render effective cooperation in the carrying out of such a policy should be relieved from their positions, in the interests of the schools. Other things being

equal, those persons will make the best principals and supervisor who have known some other school system in addition to the one they are to supervise.

THE TEACHERS.

The same principles apply, though with somewhat less force, to the teaching corps of a city. What is wanted is the best company of teachers obtainable for the money which can be provided; and the interests of the children for whom the schools exist, and not the interests of individuals, should be the ruling principle.

The best results within a school system may be expected under some form of indefinite tenure of position for all teachers, principals, and supervisors. By this is meant neither life tenure nor unstable tenure, but rather some form of appointment under which a teacher may be dismissed for serious offenses at any time and for general inefficiency at the end of any year. This is nominally the case where teachers may legally be dismissed for cause shown in a formal hearing or trial; in practice, however, such a system guards the teacher's tenure of office more perfectly than it guards the educational rights of the children. It is the middle ground of fairness to both pupils and teachers which is here advocated.

The training provided for prospective teachers should be as good as money can secure. The training-school teachers should be drawn freely from those cities and professional schools which are well known for their efficiency, and at liberal salaries. The training schools should be made a social center for the girls while in training, and a professional center for the teachers of the whole city as well.

It is always wisdom on the part of a city to pay its teachers adequate salaries. There is no reason that will justify paying a teacher less than a fireman, a policeman, or an employee at the city hall, and many reasons for paying them more. Teachers should be able to earn interest on the investment made in years of study and special training, and have money for travel and study besides.

Our city school systems are moving forward at a reasonably rapid rate toward a condition in which their teaching force will be made up of teachers having a good general education, together with an adequate course of special training for the vocation of teaching. When they are fairly placed on this professional basis, it is desirable that a large measure of responsibility for the general interests of the schools shall be laid directly on this professional body.

At the present time the professionalizing of teaching is accomplished only in part. We are at an intermediate stage of our scholastic development. Such a stage requires readjustments, which must extend over some years and will accordingly call for much patience on the part of all concerned. There should, however, be a steady

advance toward the end in view, which is that of a thoroughly trained teaching body permeated with the highest professional spirit. Such a teaching force will manifest their professional spirit in making it their first concern to promote the good and the general usefulness of the schools with a fair understanding of what is best for the schools. As their ability to interpret the needs of the community on the side of public education develops, and their power to formulate plans for meeting these needs increases, in just such proportion should their views be increasingly recognized in the shaping of educational policies and practices that affect directly their professional status and professional activities.

THE INTEREST OF THE COMMUNITY.

It is desirable that there should be channels through which the opinion of the public, and particularly of that public which is most directly interested in the schools, may regularly reach the superintendent of schools and the board of education. Associations of the parents of school children and other nonprofessional education societies may be made of the greatest usefulness, if they shall keep alive the discussion of educational questions and act as unofficial advisers of the board of education. Such free and sustained discussion is better than spasmodic discussion in time of controversy followed by inattention to educational questions till another controversy shall arise. The rapid enlargement of school activities at this time renders it doubly desirable that every effort shall be made to cultivate a general, discriminating, and progressive interest in the problems of public education.

SUPPLEMENTARY SUGGESTIONS.

As the conditions and needs of the educational system have been considered, it has become increasingly evident that many of the deficiencies in the Baltimore school system have their roots in the legal basis of that system. For that reason it has seemed to the commission that it would not perform its full duty in the premises if it failed to point out certain ways in which the legal organization and features closely related thereto could be improved to the advantage of the entire school system. Accordingly the commission makes the following suggestions in addition to its recommendations relating to the system of education:

1. The commission suggests that the board of school commissioners, the board of estimates, and the council give careful consideration to the question of providing ways and means whereby sufficient funds may be made available to afford support for the schools of Baltimore equal in amount per pupil to the prevalent standard for cities having a population of 300,000 and over. The object requiring the

greatest amount of funds is that of salaries of teachers in elementary schools. Increases of appropriation for normal, evening, vacation, and special schools are also demanded in order to give the school system the scope that generally prevails. Expenses for rent should be reduced as quickly as possible by the erection of suitable schoolhouses owned by the city.

2. In comparing the department of education as it exists in Baltimore with the forms of local government for the conduct of schools in other large cities, we at once meet a fundamental distinction. Schools in certain large cities are established and regulated not by the municipal government, but by a corporation usually called an independent school district, which has no connection with the municipal government, save that as a matter of convenience the municipality collects the taxes levied by the district. The cities of St. Louis, Boston, Cleveland, Cincinnati, Indianapolis, and Denver constitute such independent school districts. On the other hand, schools are administered under departments of the municipal government in New York, Philadelphia, Chicago, Baltimore, San Francisco, and New Orleans. There seems to be no general tendency toward either one of these forms of organization and away from the other, each city continuing on in the same way as formerly, modifying certain features of the organization from time to time, but not changing the form as a whole. However, it is believed that the advantages of independent districts as a class are worthy of careful consideration. The comparative advantages of the two forms of organization can not be fully presented here. It is evident, however, that some of the most important hindrances to the development of the Baltimore schools lie in the limitations that are now imposed upon the board of school commissioners by its subordinate relationship to the municipal government.

An independent district should not be substituted for the department unless the election by popular vote from the city as a whole, and not by wards, of a small nonpartisan board composed of honest men of superior intelligence and efficiency is practically assured. Some of the present hindrances can be removed without abolishing the department, and no doubt further modification of an institution so long established would be more easy, though probably not so effectual, as the more radical step of putting another form of organization in its stead.

3. It is the belief of the commission that the city charter might with advantage be so modified as to place all matters pertaining to the purchase of sites, the erection and repair of buildings, and the purchase of equipment and supplies in the board of school commissioners. In this connection, it is also suggested that the making of lump-sum rather than specific appropriations by the council for the

extension of the school plant would probably lead to greater economy and efficiency in this feature of public-school administration.

It is practically a universal experience that there is frequent friction wherever a department of a city government other than the education department has charge of the purchase of sites or the erection and repair of school buildings.

The following table will show the practice in all of the 18 cities above 300,000 population as regards the purchase of sites, the erection and repair of buildings, and the purchase of supplies and equipment. It will be observed that in only 4 of these cities are the sites purchased and buildings erected by another department of the municipal government:

Names of cities.	Sites purchased by—	Buildings erected by—	Buildings repaired by—	Supplies purchased by—
New York	Board of education.	Board of education.	Board of education.	Board of education.
Chicago	...do	...do	...do	Do.
Philadelphia	Board of public education.	Board of public education.	Board of public education.	Board of public education.
St. Louis	Board of education.	Board of education.	Board of education.	Board of education.
Boston	School board	School board	School board	School board.
Cleveland	Board of education.	Board of education.	Board of education.	Board of education.
Baltimore	Other departments.	Other departments.	Other departments.	Board of school commissioners.
Pittsburg	Subdistrict school board.[1]	Subdistrict school board.	Subdistrict school board.	Central board of education.
Detroit	Board of education.	Board of education.	Board of education.	Board of education.
Buffalo	Common council	Department of public works.	Department of public works.	Department of public instruction.
San Francisco	Board of supervisors.	Board of public works.	Board of public works.	Board of education.
Milwaukee	Board of school directors.	Board of school directors.	Board of school directors.	Board of school directors.
Cincinnati	Board of education.	Board of education.	Board of education.	Board of education.
Newark	...do	...do	...do	Do.
New Orleans	City council	City council	Board of directors.	Board of directors.
Washington	Commissioners of the District of Columbia.	Commissioners of the District of Columbia.	Commissioners of the District of Columbia.	Commissioners of the District of Columbia.
Los Angeles	Board of education.	Board of education.	Board of education.	Board of education.
Minneapolis	...do	...do	...do	Do.

[1] High school sites are purchased and buildings are erected by the central board of education.

4. In our judgment, careful consideration should be given to the question whether the charter requirement that the mayor's appointments to the board of school commissioners shall be confirmed by the second branch of the city council is a desirable provision. The present tendency in municipal affairs is toward a more definite placing of responsibility.

Turning to other cities, we find that in no large city is the appointment of members of school boards either by the mayor or by judges of the court confirmed by another body. The tendency in municipal government is to make administration simple and direct, so that

each officer may be held accountable and receive his proper proportion of praise or censure. The following table shows the facts concerning method of appointment and composition of school boards in all cities in the United States having over 300,000 population:

School board of—	Number of members.	Term in years.	Selected by—	Chosen from—
New York	46	5	Mayor	Boroughs.
Chicago	21	3	...do	City.
Philadelphia	21	3	Court of common pleas	Wards.
St. Louis	12	6	Popular vote	City.
Boston	5	3	...do	Do.
Cleveland	7	4	...do	Do.
Baltimore	9	6	Mayor and confirmed by second branch of city council.	Do.
Pittsburg	45	3	By local boards	Districts.
Detroit	18	4	Popular vote	Wards.
Buffalo [1]				
San Francisco	4	4	Mayor	City.
Milwaukee	15	6	Popular vote	Do.
Cincinnati	27	4	...do	3 at large, 24 by wards.
Newark	9	3	Mayor	City.
New Orleans	20	4	17 by popular vote, 3 ex officio	Ward.
Washington, D. C	9	3	Supreme court judges of District of Columbia.	District of Columbia.
Los Angeles	7	4	Popular vote	City.
Minneapolis	7	6	...do	Do.

[1] Has no school board proper. The council performs many of the duties usually performed by the board of education.

Every living system of schools will be found to be full of imperfections, full of things half done, full of plans and purposes which are only by slow degrees finding their way into effective practice. We have looked into the Baltimore schools in the spirit of practical men who discriminate between the jagged incompleteness of a growing concern and the finish and perfection of a completed machine which has no life in it. Our suggestions are offered, with all deference, in the hope that they may help a little in the effort the city of Baltimore has long been making to render its schools as effective an agency as possible for the purposes of public education.

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