SCHOOL REPORTS

AND

SCHOOL EFFICIENCY

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INTRODUCTION

THE origin of this study of school reports dates back to 1904, when the board of education of New York City announced that for want of funds it must curtail its vacation and night schools, recreation centers and popular lectures.

Representatives of several civic organizations met to discuss what seemed to them a wrong to the children and parents of congested districts. Without exception they sided with the school authorities against the fiscal authorities who had demanded school retrenchment. They were about to vote a protest when one delegate asked how many people would be injured by cutting off the so-called social features of the schools. No one knew; nor did any one know whether there was any truth in the Comptroller's statement that the board of education had money enough to do its intended work without curtailment if it would use economically the funds already voted it. The protest was deferred and a Committee on Facts appointed.

An investigation was conducted by the Association for Improving the Condition of the Poor, which had supported the first vacation schools in 1894, six in 1895 and 1896, and ten in 1897. The attempt to show from official reports that due economy was being employed proved futile. In the absence of proof of economy and efficiency on the part of the schools that had spent the money, it was obviously impossible to charge with bad faith or error those who demanded retrenchment. Thus an inquiry, started (1904) for the purpose of increasing the school appropriation, ended in an

CONTENTS

CHAPTER I

The Purposes of Educational Statistics

The published school report has come to be a characteristic feature of school administration in American cities. In the larger cities this report has become a plump volume and, as a rule, is published annually. The major part of the report is usually prepared by or under the direction of the superintendent of schools. It often serves, therefore, as an index of his capacity and energy in directing the educational work of his city.

The typical city school report is made up largely of a discussion of the progress of educational interests, discussions and exhibits of educational needs, and a series of tables dealing statistically with the main facts of school finance, attendance, etc. Occasionally many pages are devoted to the names of teachers, the course of study, and the rules and regulations of the board of education. Sometimes a considerable part of the report is taken up with the reports made to the superintendent by heads of departments, supervisors, and other special officers.

On its face the city school report emanates from the board of education and is addressed to the public which the board serves. The larger the city and the more complex its educational interests, the greater the need for some regular channel of communication between members of the board and the patrons and supporters of the public schools. The published report may be said to have been evolved to meet the need for this communication. The democratic and local character of education in America explains why this report

has assumed its present size, form, and detail of development, so unlike the reports issued in foreign cities with equally elaborate systems of education.

The published city school report has taken its present form during the last fifty or sixty years. Originally it was little more than a running account, periodically published, outlining the organization of the schools and showing the amount of money spent on them. But in time there developed the custom of presenting rather elaborate showings of educational facts, and for compactness and intelligibility, these assumed the form of statistical tables which are now so characteristic a part of the report. Probably the most prominent condition affecting the form and extent of these tables has been the obligation of the city to report, at stated intervals, to the state educational department certain facts which had to be arranged in statistical form, such as expenditure, census, enrollment, attendance, graduations, etc. It naturally became customary to republish in the city report the tables prepared for the state. In a few instances it is found, also, that the form of report required by the Bureau of Education at Washington has determined the character of some of the tables in local reports.

A second cause of the present form of statistical presentation in many reports can be traced to the energy and initiative of various superintendents who have undertaken to give in most effective form the facts concerning those phases of administration which they most cared to affect. In some reports careful tables of teachers' salaries have been developed under the influence of a desire to improve the condition of the teaching force. Distributed tables of attendance or graphic presentations of these facts have been devised to show to the public the great and unwarranted falling off in school attendance. Tables showing the occupations of parents whose children attend the high schools have been prepared to counteract the belief that these schools were for

the prosperous only. Similar causes have evolved tables showing relationship between age and grade of pupils; the professional education of teachers; the percentages of all children of school age who are found in school.

Because the force of custom is strong it is not unusual to find that extensive tables are published year after year, even though the reason for their original publication no longer holds. Not infrequently, as a result, the city report contains extensive tables that are probably never examined by a member of the board of education or by a citizen. Worse than this, the tables presented are often simply masses of figures, put together in such a fashion, and so lacking in condensed interpretations, that the average reader is not able to extract from them the information that they are supposed to convey.

It is evident that in any city school system there is available for publication a far greater mass of statistical facts than it is practicable to print. Tables of indefinite extent might be compiled, even from records at present available, but it would be a useless expense to print these tables unless such publication served some distinct educational purpose. Not infrequently there arises a popular demand for information regarding some phase of education and in response elaborate tables of data are presented. But the failure of the authorities to marshal this information with reference to some specific end prevents the citizen who cares to study the schools of his city from obtaining any clear view, and the effect on school administration in general is the reverse of helpful. There are not a few departments of local and general government in which the assembling and printing of statistics have come to be ends in themselves, rather than means to distinctly conceived ends of publicity and administrative control.

It has been suggested that the most general aim in the publication of school reports has been publicity. An analysis of the several aims that may be subserved by school reports

will show that the following are typical as determining the character and standards, especially of the statistical matter.

a. The report may be simply a restatement of the facts and figures collected for state or national statistics. In such cases the classification and form will be vague and general from the standpoint of local conditions, and will lack all semblance of interpretation in terms of local conditions or demands. The statistics of education published in state and national reports are sufficiently lacking in interpretation and abridged statement; and when the tables which a given city has prepared for those reports are simply republished, very seldom indeed can the interested citizen or local legislator obtain answers to specific questions concerning local educational conditions.

b. Reports may present statistics of education or other social phenomena in such a way as to interest and appeal primarily to the student. While this is rarely the case at the present time, it is possible that with the introduction of a greater number of specialists into the school systems of our cities, there might develop a tendency to make statistical reports of so technical a character that only the special student could follow and interpret them.

c. The published report may be designed primarily for the use of the administrative staff of the school system. Here again the presentation would possibly be quite technical and would assume such an acquaintance with the organization and procedures of the school system as could hardly be expected from the layman. For the administrative officers it would be possible to omit much in the way of condensation and interpretation and explanation, owing to the character of the information naturally possessed by the administrative officers. Tables of statistics organized primarily for this purpose would prove of little use to the layman. It happens that in not a few fields of professional work, the end of administrative service rather than publicity

determines the character of published reports. But in most of these cases publicity in the ordinary sense is not a prominent factor, as the institutions concerned are not primarily supported and controlled as public, and hence are in a measure freed from the obligation of publicity.

d. The fourth practicable aim, therefore, in statistical presentations might be publicity, in the sense that the layman of average intelligence, but of more than average interest, might have the information he seeks. Back of all our public institutions are a number of individuals, laymen of only average intelligence, who constitute the true support of such institutions in that they mainly determine public opinion as it affects the support and control of such institutions. These are the men who compose the boards and committees and who stand between the taxpayers and the institutions; these are the people who should possess the largest possible command of the facts regarding the social cost and service of these institutions. Strong sentiment they usually have; but knowledge they frequently lack and, in the long run, such lack of knowledge greatly handicaps their effectiveness.

The school report may be designed primarily to appeal to this class of persons and to provide the facts and to facilitate the deductions that will affect their interest and action. It is entirely possible to study the capacity of these laymen to deal with statistical presentations. While, as before stated, it seems probable that many school reports are designed for this purpose, it is no less probable that few of them at all adequately serve such an end.

The ends of efficient publicity, so far as laymen are concerned, can be met only by the adoption of a special method designed for this purpose. What this method is we are but beginning to learn, for only seldom has the art of making and presenting statistics been turned in this direction. Not only must facts be presented statistically, but they must

be so presented as to disclose their significance, even to the hurried reader. Summaries, comparative statements of totals or percentages, so arranged that the eye may instantly perceive relationship, reductions to average, or other and more significant digested statements, graphical presentations — all these are among the devices that are slowly developing. Some of the recent reports of the bureaus or departments of the national government indicate an extended use of these devices making for efficient publicity; notably, those from the bureaus of immigration, census, and labor.

For the layman interpretation is certainly not an unimportant feature of all statistics. This interpretation is largely a matter of arrangement and presentation, and need involve no personal element on the part of the compiler. The approach to this sort of publicity must be largely from the side of questions asked, information desired on specific points, etc., and in light of these questions it becomes entirely feasible to marshal material so that the questions are answered with no intrusion of personal factors. This, of course, is not always the case, but under the best handling of statistical material by modern methods, it is more feasible than is commonly supposed. Of course, we do not ignore the fact that there is much in the way of the interpretation of statistics which can be accomplished by highly refined and technical methods. But this form of interpretation rarely applies to the type of question that may be asked by the citizen who is concerned with the ordinary concrete facts of administration. For him an abundance of information can be supplied without resort to technical means.

It will hardly be denied that the last two of the purposes above enumerated are those that ought primarily to be met by the published school report; and of the two, the last or publicity aim is the one that must mainly determine the form of presentation.

A difference must be noted between reports made to the

superintendent of schools by the supervisors and heads of departments, the reports of the superintendent, auditor, and committees to the board of education, all of which may be in writing, on the one hand; and the published report on the other. For administrative purposes the written report, except possibly in the largest cities, may largely serve all necessary ends. These written reports may and should be very extensive and should include the statistics of a variety of activities and investigations that need not necessarily have a place in the published report. For this reason it ought by no means to be assumed that the published report contains all the statistical presentations that should be employed in administration; rather it ought to be assumed that the published report presents mainly those showings to which it is important to give wide publicity, to the end that the patrons of the school and other interested citizens may be able to procure all information which concerns any considerable number of the public. This object is well stated in one of the earlier reports of the Boston School Committee (1857) when, after discussing the various special reports that shall be made to the board by the several committees, it quotes from the rules of the board:

"These reports shall be referred to a special committee of the board, who shall make from them such selections as they shall deem important for public information, and shall add thereto such suggestions and remarks as they shall deem expedient, and their report, when accepted by this board, shall be printed for distribution among the citizens.

"'Evidently from the foregoing rule,' reads the preliminary section of the published report, 'the object of the annual report of the school board is, not to discuss theories or general principles of education for the enlightenment or satisfaction of its own members, but to present facts, to give information to the citizens of Boston — their constituents, — on the condition, character, wants, claims of the public schools, — that great system of public instruction which these citizens sustain in conformity to the laws of the Commonwealth, and at an expense exceeding that of any other department of public interest or service in the

city, — and to discuss principles only incidentally and in connection with these facts.'"

There can be little doubt, then, that the published school report should be regarded essentially and primarily as a communication from the board of education and the superintendent of schools to the public. It is designed to inform the more intelligent and interested portion of the public as to the status of the schools, and to command hearing and support for the progressive policies of the system of public education. American education is essentially democratic. It relies on the public, not only for support, but for endorsement and encouragement. Without the intelligent coöperation of the public, no school system can long maintain high standards of efficiency, and must largely fail to realize its full usefulness. Especially in proportion as education grows complex and increasingly expensive, something more is needed than vague, though enthusiastic faith in it, if progress and effectiveness are to be attained.

In the main, the methods that will give the maximum of publicity regarding school facts will probably result also in providing the most effective basis for school administration. The effort to keep the system close to the people, and the exhibition of conditions, progress, and results which can and should be made in order to answer the needs of publicity, will in most cases produce the knowledge and feeling of responsibility that most fully contribute to administrative ends. Hence we may safely say that the primary standard for school reports should be effective publicity, remembering that such publicity will, in the long run, also very greatly contribute means and incentives to administrative success.

When tested by such standards, what can be said of the published reports of the American cities? The next chapter will show some stages in the evolution of such reports, from

which we can easily arrive at the conviction that, considering conditions as they once were in education, substantial progress has been made in the direction of publicity and administrative control through reports and especially through their statistical features. A subsequent chapter will show in detail what may now be found in the way of exhibits of facts by statistical means in the most effective examples found in contemporary reports. An examination of even the best reports, however, will show that only in certain respects do these attain to any full degree of genuine publicity. In other words, many of the questions that might, from the standpoint of civic interest or enlightenment, be asked, remain unanswered. Owing to the neglect of special fields of educational inquiry, or to cumbersome and faulty methods, sometimes to apparent unwillingness to inform the public fully, many of the reports give only incomplete and unsatisfactory answers to the questions and issues that require light. Taken in a composite way, however, the best contemporary reports present devices for answering a large number of such questions, and, thus taken, they suggest an arrangement of means and methods that might and probably would result in a form for a report far superior to any one of them.

In the light of the showing made through a collation of the best features of existing reports, it would seem possible to criticise any given report; and this has been attempted in Chapter VII. Let it be repeated that to present statistical answers to all the possible questions that could be raised regarding a city school system would require so much space and time as at once to negative any such proposal; but, as will be shown later, one of the primary aims in educational statistics should be to accomplish far more than is now accomplished in any given report, and yet with less expenditure of time and money. It must be insisted that the business world, owing to the pressure of competition, has evolved

means and measures which combine the ends of effective statistical presentation with economy, and that it is practicable for our city school systems to do likewise. The problem of doing so is not wholly a simple one; but that it is capable of solution no one can doubt.

CHAPTER II

The Beginnings of School Reports in American Cities

The main features of city school reports can be best understood if we make some note of the evolutionary steps in their development. It would seem that the custom of issuing formal printed reports developed during the second quarter of the nineteenth century. During this period also the office of city school superintendent began to assume something of its present proportions. Until very recent years it did not exist in European schools. It did not develop from the teaching or faculty side of the school system, but from the board of education, which required the services at first of a clerk and then of an officer who could combine with his knowledge of clerical duties the expert knowledge necessary to inspect and report on the work of the schools.

As executive officer and educational expert for the board, the superintendent was expected to report his observations and recommendations, and it was but a step farther to publish his report as part of the annual report of the board of education. If the superintendent was progressive, he made careful studies of the needs of the city system, and presented elaborate recommendations to his board.

Accompanying this movement was also one in the direction of centralizing the administration of city schools. Originally in many cities school administration had been divided among a number of districts or wards with local boards. As cities grew and educational systems were consolidated, it was but natural that statistical methods should develop of presenting some of the main facts with which administra-

tion was concerned. In many states it was necessary for a city board of education, through clerk or superintendent, to make an annual or biennial report to the state authorities regarding such matters as expenditure, census, attendance, graduates, certification of teachers, and kindred facts. Having the data thus available, the superintendent would include them in the published report of the city school system.

Few of the earliest city school reports are now available. It would appear, however, from the numbers assigned to subsequent issues that Philadelphia published its first report as early as 1818; Cleveland in 1834 or 1836; New York and Rochester in 1843; Syracuse in 1847; Chicago and San Francisco in 1853; and St. Louis and Brooklyn in 1854.

An examination of the earlier accessible reports shows that they were generally not unlike the reports now issued by many of the smaller cities. The work of the school system was described in a popular form. Considerable space was given to the discussion of new theories of education, and along with this the needs of the system were portrayed as fully as possible with a view to arousing more extended popular support. Often a directory of schools and teachers is given, together with salaries and grades of certificate held. To these were added examination questions, courses of study, programs for teachers' meetings, lists of graduates from the elementary schools, or of those who had succeeded in passing examinations for admission to the high schools, and addresses by members of the board of education. Any elaborate presentation of educational statistics was rare. Totals of receipt and expenditure are usually given, classified according to some half dozen divisions; also the totals of school attendance, sometimes distributed among the different schools; and occasionally some other facts are presented in tabular form. An examination of the statistical presentations made in a few of

the early city reports will show what was attempted in the best of them.

Philadelphia's 17th annual school report was published in 1835. It consists of twelve pages, giving detailed information, in form of running account, regarding the individual schools. The 26th report for the same city (1844) consists of 96 pages and shows, among other lines of information, the following facts presented statistically: occupation of fathers of graduates from the high school; average of marks made by the candidates from various elementary schools for admission to the high school, with number admitted and number rejected; detailed tables for each school, showing such facts as attendance divided as to sex, salaries, and names of teachers; and a table of expenses of education, classified by wards.

Cleveland's 21st annual report (1855) gives tables of attendance in the various schools classified by subjects studied (second reader, penmanship, etc.), and also a census enumeration of children distributed by wards, together with the usual brief classified statement of expenditures. There is detailed description in tabular form of school buildings. Space is given also to the school time-tables.

Chicago's 3d report (1856) contains 64 pages of matter, mostly general description. There is in addition a list of teachers, with salaries paid.

New Haven's 1st report (1857) presents to taxpayers the totals for ordinary expenses, with itemized account of extraordinary expenses. There is also a two-page table showing in detail the registration at each school, and in each grade, for each of four terms.

Boston's School Committee published in 1857 a well-printed and bound volume of 352 pages. A resolution notes that 12,500 copies were printed. Considerable space is given to long lists of pupils winning medals, and to the rules and regulations of the school committee. Of especial

interest is a detailed description of school buildings in tabular form showing such facts as date of erection, number of rooms, number of seats, cost, interest payments, character of heating, total number of pupils registered and average attendance, etc. Another elaborate table distributes by schools the number of children, teachers, salary totals, and cost per pupil in average attendance in terms both of salary charge and of additional expense charge.

San Francisco's earliest available report is the 14th, dated 1867. This is an elaborate affair, and includes tables on such matters as: occupations of parents of high school pupils; comparative salaries in several large cities; lists of teachers, including name, place of education, professional education, diploma, teaching experience, and length of service in California; cost of education of pupils per month and year; detailed salary list of teachers; and very suggestive detailed statements of the receipts and expenditures of the system for a series of years.

Syracuse had a striking statistical feature in its 20th school report (1867), *i.e.* a table showing the main facts regarding pupils, arranged comparatively for a series of years. Number of children registered in the system, average daily attendance, total cases of absence and tardiness, number of pupils per teacher, cost per pupil, amounts paid for salaries, number of volumes drawn from library, and some other facts are thus shown. This compact table would be creditable to-day.

TABLE 1. FROM REPORT OF SYRACUSE SCHOOLS, 1863–1867

Number of children between ages of 5 and 21.
Number of children registered, exclusive of those transferred.
Number of children belonging (approximate).
Number of children average daily attendance.
Number of days absence.