

1926

Report of the Survey of the Schools of Tampa, Florida. Made By The Institute of Educational Research Division of Field Studies Teacher's College, Columbia University

George D. Strayer

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School Survey Series

REPORT
OF THE
SURVEY OF THE SCHOOLS
OF
TAMPA, FLORIDA

MADE BY

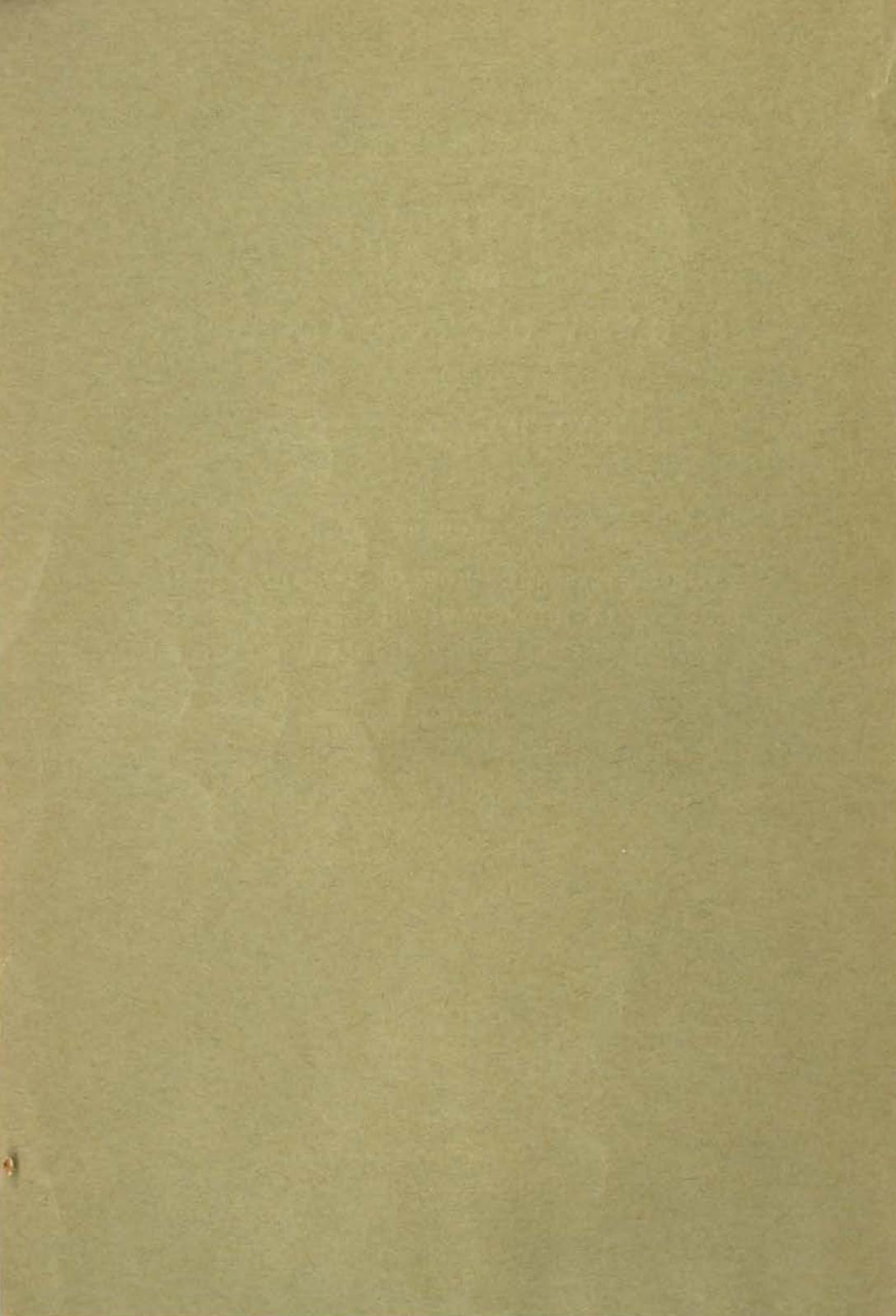
THE INSTITUTE OF EDUCATIONAL RESEARCH
DIVISION OF FIELD STUDIES
TEACHERS COLLEGE, COLUMBIA UNIVERSITY

GEORGE D. STRAYER, *Director*

BUREAU OF PUBLICATIONS
Teachers College, Columbia University

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REPORT OF THE SURVEY OF THE SCHOOLS OF TAMPA, FLORIDA

CHAPTER I

THE ADMINISTRATION OF THE SCHOOLS

The administration of schools in the cities of the United States is commonly vested in a city board of education. This board is in most cases given full responsibility for the determination of the program of education to be provided in the community, and in approximately half of the cities of the country this body determines the tax to be levied in support of public education. It is not uncommon for the state to fix a maximum tax rate within which the city board of education must operate.

As contrasted with this type of organization, which gives the board of education full authority, there are those cities in which the board is required to appeal to a general municipal body, usually a board of estimate and apportionment or the city council, for the funds necessary to support the schools. In these cities in which the board is dependent upon a general municipal authority there usually develops friction between the two bodies and a divided responsibility for the educational program.

The city of Tampa operates under laws¹ which distinguish clearly between the general municipal or other governmental authorities and the county and city boards of education. Tampa is peculiar in that it shares with other cities of the state of Florida in having a type of organization which subordinates the city board of trustees to a county board of education.² One of the most important problems arising from this type of organization is that of fixing the degree of responsibility which should be accepted by each of these bodies.

¹ Constitution, Sections 7, 8, 9, 10, 11, 13, 15, and 17, School Laws of the State of Florida, arranged by the State Superintendent of Public Instruction, 1923. Article XII, Section 42 (R.S. 447) and 186 (R.S. 576).

² School Laws of the State of Florida, 1923. Sections 178 (R.S. 568) and 179 (R.S. 569).

THE COÖPERATION OF COUNTY AND CITY BOARDS OF EDUCATION IN
THE ADMINISTRATION OF THE SCHOOLS OF TAMPA

The law is not always entirely clear. Indeed, it may be proposed that it contains conflicting provisions which could only be finally cleared up by decisions of the courts. In the absence of any such judicial determination it seems possible in the light of present practices and with a view to promoting efficient administration to propose for the acceptance of the county board of education and the city board of trustees a statement of the responsibilities imposed by law upon the city board.

The fact that the legislature has seen fit to set up district boards of trustees for the special tax school districts is evidence of the intention to provide for the local administration of schools in these several districts under the control of this local board. It is equally clear from the several provisions of the law that this local district board of trustees must operate particularly with respect to its financial transactions under the control of the county board of education. The state's contribution to the local school district, and the revenue accruing from the county tax are under the complete control of the county board of education. The law appears to give to the district board of trustees the right to control the expenditure of revenues derived from the tax voted by the people of the special tax district.³ But even in the case of this fund the apparent intent of the law is that while the money should be on deposit to the credit of the special tax district, the vouchers approved by the local board of trustees should be approved and paid by the county board of education.⁴

The law proposes that the actual supervision of schools in the special tax district be undertaken by the local board of trustees.⁵ The distinction is made between the supervision of schools and their control.⁶ This would seem to indicate that the initiation of educational policy and the actual working out of the program adopted by the local board is subject to approval by the county board. It would seem that the intent of the law is to place large responsibility upon the local board of trustees for initiating

³ School Laws of the State of Florida, 1923. Sections 180 to 185 (R.S. 570 to 575) and section 108 (R.S. 465).

⁴ School Laws of the State of Florida, 1923. Section 186 (R.S. 576).

⁵ Florida Constitution. Article XII, Sections 10 and 11.

⁶ School Laws of the State of Florida, 1923. Sections 178 (R.S. 568) and 179 (R.S. 569).

policies and for carrying them out, while requiring that they submit their program to the county board for such suggestion or amendment as may be developed in the discussions taking place between the two bodies.

The survey staff believes that the only way to get an efficient administration of schools of Tampa is to build, upon the foundation provided in the law, an administrative organization comparable to that found in other cities of the size of Tampa throughout the United States. It is believed that this can be accomplished without violation of the spirit or the letter of the Florida school law. Conferences held with the district board of trustees and with the county board of education have, as well, made it perfectly clear that both of these bodies are anxious to secure for Tampa the type of administrative organization and personnel which will be competent to handle the problems presented in a rapidly growing large city. In the light of these facts the following recommendations with respect to the relationship of the county board of education and the district board of trustees are made by the survey staff.

RECOMMENDATIONS

1. Recognizing the possible misunderstandings which may arise between the two bodies responsible for the development of an adequate program of education for the city of Tampa, and appreciating the rapidly increasing burden of obligation resting upon these two bodies due to the very rapid growth of the city of Tampa, it is necessary that a working agreement which defines, as adequately as may be, the responsibility of the county board of public instruction and the board of trustees of the special tax school district be adopted.

2. In accordance with the constitution which provides that the district board of trustees shall be responsible for the supervision of schools, it is proposed that the provisions of the constitution and of the law placing this responsibility upon the district board be interpreted to require of its administrative and executive staff the performance of the following functions:

- a. The supervision of instruction.
- b. The performance of those activities commonly centered in a bureau of census and attendance.

- c. The responsibility for the classification and progress of children throughout the school system.
- d. The development of programs of study or of curriculum, and of courses of study for all divisions of the school system.
- e. The organization of an adequate physical education and health service.
- f. The determination of the organization of schools as affecting the divisions into which the school system shall be divided, such as kindergarten, elementary schools, junior high schools, senior high schools, and vocational schools.
- g. The selection of all employees.
- h. The operation of a bureau of research.

3. In the light of the provisions of the law it is proposed that the following obligations be accepted by the trustees of the special tax district, and that the functions relating thereto be performed by the executive staff of this board.

- a. The preparation of the annual budget for the school system.
- b. The keeping of an adequate system of accounts.⁷
- c. The purchase and distribution of all textbooks and supplies used by the school system.⁸

4. In order that the board of trustees of the special tax school district shall fulfill their obligations with respect to the building of school buildings and the maintenance and operation of their plant, it is proposed that the following obligations be accepted by them and that appropriate action be taken by their executive staff:

- a. The selection of sites for new school buildings.
- b. The securing and approval of plans and specifications for buildings to be erected.

⁷ Such accounting will, in all probability, have to be in greater detail than that required by the state, but should be in such form as to permit of report to the county board and to the state as required by law. In the installation of the more adequate system of accounting the survey staff recommends that an expert be employed to install the system and that it be made applicable both to the county office and to the city office.

⁸ It is assumed that all vouchers after approval by the special tax school district board or their representatives will be presented to the county superintendent and to the county board for final approval and payment. It is also understood that the executive officers of the special tax school district will provide the county board of public instruction with all reports required to furnish an adequate record of their transactions.

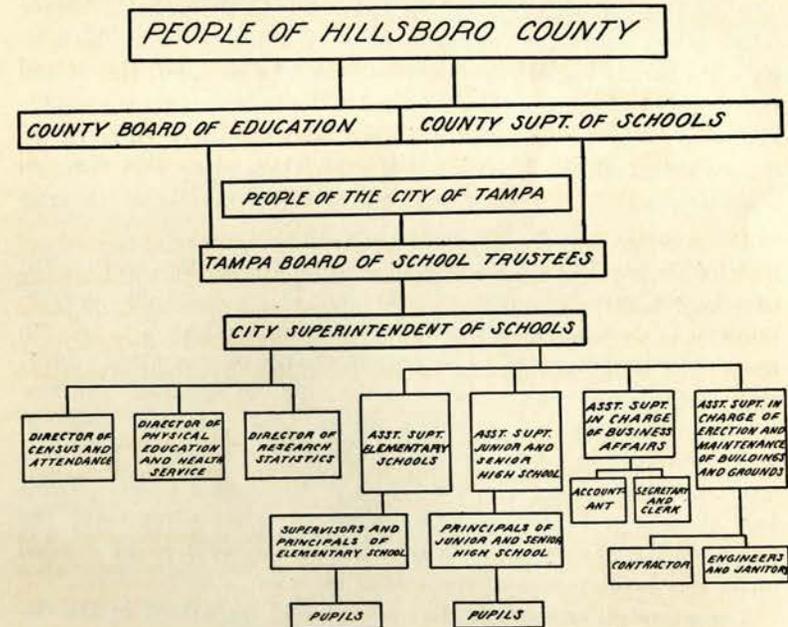
- c. The securing of bids for buildings and equipment.
- d. The supervision of construction.
- e. The maintenance and operation of school buildings.⁹

THE ORGANIZATION OF THE ADMINISTRATIVE STAFF FOR THE TAMPA SCHOOL SYSTEM

The efficiency of the schools in a city the size of Tampa is dependent in considerable measure upon the executives employed by the board of education and upon the organization of the executive staff. The prevailing practice in American cities places the superintendent of schools in the position of chief executive officer of the board of education. It has been the practice in certain Florida cities to call the executive officer of the local board of trustees "Supervising Principal." While the matter of title is

CHART I

THE PROPOSED EDUCATIONAL ORGANIZATION



⁹ It is understood that in the securing of bids for new buildings the district board of trustees will act as the agents of the county board of public instruction and that the actual opening of bids and the awarding of contracts will be under the control of the county board of education as required by law.

not one of surpassing importance, yet it does seem worthwhile to propose that the chief executive officer of the board of education be given in Tampa, as elsewhere, throughout the United States, the title commonly connected with his office.¹⁰ If a change in the law is necessary, the survey staff recommends that such amendment be secured and that the title of the chief executive be changed from "Supervising Principal" to "City Superintendent of Schools."

The success of the administration of the schools of Tampa will depend upon the competence and the size of the staff provided for the superintendent of schools. It is expecting the impossible to propose that in a city of more than one hundred thousand people that any individual can be thoroughly conversant with all of the details necessary for the efficient administration of the public school system.

A competent superintendent of schools is the directing head of the whole enterprise and holds his staff responsible for putting into form and placing before him, from time to time, that evidence which is necessary for the formulation of those policies which he presents to his board of education. In like manner, the actual carrying out of the program adopted is dependent upon the supervision of competent men and women whose work is directed by the superintendent of schools but who themselves and through those responsible to them carry out the many details which arise in the management of the school system.

A minimum staff for the city of Tampa would require, in addition to the superintendent of schools, (1) an assistant superintendent of schools in charge of elementary education, (2) an assistant superintendent of schools in charge of secondary education (junior and senior high schools), (3) an assistant superintendent in charge of business affairs, and (4) an assistant superintendent in charge of the erection of new school buildings and the maintenance and operation of the school plant. These four assistants to the superintendent of schools represent the heads of the several general divisions of activity to be carried on in the development of the school system.

There are other services that are equally important in the development of the schools of Tampa for which special direction

¹⁰ From this point on the chief executive officer of the local board of trustees of the special tax school district will be referred to as the superintendent of schools and the local board will be referred to as the board of education.

must be provided. The first of these has to do with that most fundamental activity, the regular attendance of all children of school age. The accomplishment of this purpose is dependent upon the organization of a bureau of census and attendance which should be headed by a competent director. In like manner, the efficiency of the school system will be determined in considerable degree by the health service which is provided. The limited physical examination of school children now undertaken by the city health department is acknowledged by the city health officer to be much less than adequate. He agrees with the members of the survey staff that this function should be performed together with the general direction of a program of physical education by a competent person who should be called a director of physical education and health service.

All departments of the school system should from time to time have inquiries instituted concerning the efficiency of their part of the work and reports should be made from within the school system and from other cities which will contribute to the efficiency of the work which they are undertaking. Most of the cities of the United States of the size of Tampa have already instituted a department of research and statistics which serves to contribute to an increased efficiency of a school system in the same manner that this service is used in private corporations. A director of research and statistics should be appointed.

Of the staff proposed the city of Tampa already has the three persons responsible, respectively, for the direction of the work of the elementary schools, of the secondary schools, and of the construction of new buildings. The additional staff proposed, assistant superintendent in charge of business affairs, director of census and attendance, director of physical education and health service, and director of research and statistics, if appointed, will give to Tampa a minimum staff as compared with other cities of her class throughout the United States. In the opinion of the survey staff the highest type of efficiency and economy in the administration of the schools of Tampa requires that each and every one of these executives be appointed at the earliest possible date.

ASSISTANT SUPERINTENDENTS

The reader will discover in the section of the report dealing with the administration of schools sufficient evidence of the need

for providing an assistant superintendent for business affairs. It is important in passing to emphasize the responsibility of this official to the superintendent of schools. Any suggestion of a dual administration which sets up a business manager as coordinate with the superintendent of instruction leads inevitably to divided responsibility and to maladjustment in the development of the school system.

All business transactions undertaken for the board of education are valid only as they contribute to the development of the program of education which the schools seek to provide. The assistant superintendent in charge of business affairs is under the obligation in each one of his activities to contribute as largely as he can from the standpoint of good business procedure to an increase in the efficiency of the system of education. Even though the superintendent of schools may not be familiar with all the details of accounting, of purchasing, and the like, it is reasonable to suppose that he has sufficient executive ability to direct the activities of that division of the school organization having to do with these affairs.

In like manner, it is important that the present arrangement in Tampa, whereby the supervisors of building construction and maintenance is directly responsible to the superintendent of schools, be continued. The schedule of accommodations to be provided in school buildings and the standards which must be met can be determined only by one who is charged with the responsibility of developing the program of education. The maintenance of school buildings and their operations may contribute to the welfare of children and teachers and through them to the efficiency of the school system or, through a lack of the appreciation of the needs of those working in the buildings, operate to handicap the schools. Dual control inevitably leads to maladjustment, even though the board of education may seek to reconcile differences in program or policy proposed by the superintendent of schools and the assistant in charge of buildings and grounds.

PHYSICAL EDUCATION AND HEALTH SERVICE

As will appear in those sections of the report dealing with elementary and with secondary schools the programs of physical education and health service in the city of Tampa are as yet little developed. The three services, first, physical examination

which seeks to discover the physical needs of school children; second, health service which attempts to carry forward a program of correction and elimination of defects in so far as this is possible, and third, a constructive program of physical education which seeks to provide that training which will result in sound bodies, are after all different aspects of the same general problem. As has been suggested above, the most satisfactory organization that has been developed in American cities places the direction of all of these activities under one executive. He is commonly called the director of physical education and health service. If this program is to be developed for the city of Tampa, he will have to be supported, first, by a chief medical examiner who will guide the work of physicians and nurses in the conduct of physical examinations, the development of remedial work through physicians employed by parents or by clinical facilities provided in the city; and second, by a supervisor of health and physical education who will have general supervision of the work undertaken in physical education and health teaching throughout the city. No single contribution to the welfare of the children of the city of Tampa promises more certain returns than those which will follow from the organization of this department of the school system under competent supervision.

THE BUREAU OF EDUCATIONAL RESEARCH

In the general discussion of the administrative staff and in its graphic representation there is included the director of research and statistics. This function of school administration has been developed particularly during the past fifteen years in those cities in which superintendents of schools and boards of education have sought to develop a scientific administration of the school system. Judgments with respect to practically every major issue of school organization and administration should be based upon facts which have been assembled and interpreted by one specially trained for this type of work.

In this survey the recommendations with respect to the classification and progress of children are based upon more than one hundred thousand tests given to children throughout the school system. The carrying out of the recommendations made is dependent upon further careful measurement of the achievements of children and of their progress through the school system. After

these data are assembled and interpreted they should be placed in the hands of the superintendent of schools and considered by him in coöperation with other members of his staff in the development of recommendations with respect to the size of classes, the promotional program of the school system, and the modification of courses of study. It is equally true that the problems that center around the provision of buildings and equipment continuing studies, with respect to the shifts of population within the city and the increased number of children to be provided for over the years which lie immediately ahead, should be under way at all times.

These illustrations are only two of the many activities in which the bureau of research should be engaged in order to provide the executive staff and the board of education with the knowledge necessary for intelligent action with respect to the many problems confronting them. Many other investigations may be undertaken during a period of years, dealing with the financing of the school system, with costs for various types of service and for varying units into which the school system is organized, with the selection, assignment, promotion, and payment of teachers. No efficient business enterprise of the size of the Tampa public school system could be conducted without the type of service proposed above. Much of the success of all of the other executives employed by the board of education is dependent upon the service which is provided for them by the bureau of educational research.

In concluding the general discussion with respect to the administration of the schools of Tampa, the survey staff wishes to emphasize the importance of providing at least the minimum staff recommended above. Every proposal of the survey for the improvement, or for those procedures which it is believed will add to the efficiency of the school system, is in the last analysis dependent upon the adequacy and efficiency of the administrative and supervisory corps. It is poor economy to seek to administer a school system by overloading the most competent executives that can be secured. It is necessary to provide the superintendent of schools with as adequate a staff as possible if the best returns are to be secured from the investment made in the public school system.

CENSUS AND ATTENDANCE

The need for a more adequate attendance service has been indicated over and over again in the study of the Tampa schools. By a conservative estimate, there are eight thousand boys and girls not enrolled in school. The discrepancy between the largest age group of pupils and other age groups in Tampa alone shows that the enrollment in other age groups would have to be increased by more than three thousand to make the percentage of enrollment of children of other ages equal to that of the ten-year-olds. This is shown by Table 1.

TABLE 1
ATTENDANCE AND ESTIMATED NON-ATTENDANCE IN THE SCHOOLS FOR WHITE CHILDREN, DISTRICT No. 4

Age	Enrollment	Difference from 10-Year-Olds	Estimated Enrollment if 10 Per Cent 10-Year-Olds Not in School	Difference from Estimated 10-Year-Olds
6	645	647	....	776
7	1,144	148	....	277
8	1,271	21	....	150
9	1,199	93	....	222
10	1,292	0	1,421	129
11	1,269	23	....	152
12	1,237	55	....	184
13	1,113	179	....	308
14	929	363	....	492
15	682	610	....	739
16	420	872	....	1,001
Total	3,011		Total Non-Attendance	4,430

Note: The estimate that 10 per cent of the ten-year-olds are not now in school may seem low when conditions in Tampa are considered.

The failure to enroll pupils in school is equaled by the failure to obtain timely enrollment of those who do eventually enter, the failure to keep pupils in regular attendance, and the failure to prevent withdrawal during the year for inadequate reasons.

Table 29, on page 200, shows that in February, 1925, 177 pupils entered the 1 Junior grade eight years of age or older. Of the pupils who entered this grade in September, 1924, 272 were above eight years of age. Thus, about 26 per cent of those entering the first grade are one year or more beyond the first compulsory attendance year. One out of every seven enters the

first grade nine years of age or over. One out of every fourteen enters at ten years of age or older, and a number are twelve and one-half, thirteen, and some even thirteen and one-half years of age when they enter the 1 Junior grade. Late entrance decreases the number of years schooling which almost all of these boys receive. In addition, it makes the problem of proper classification of children in the school system exceedingly difficult.

A record of the age and residence of each boy and girl in Tampa would make it possible to get in touch with the homes when children reach the age of six. This is a service outside of compulsory attendance, but is the type of service much of which an effective attendance department well performs. These same records make it possible to follow up all pupils not in school by the age of seven, and, when necessary, to bring the compulsory attendance pressure to bear.

Much greater attention is needed for the problem of obtaining timely enrollment of pupils at the beginning of the term. Under present conditions, many pupils do not enter school until the term is well advanced. Evidence of this is given in Table 57, page 272. Out of 178 pupils in Grades 4 and 6 who entered late during the fall semester of 1924-1925, 42, or 3 per cent, of all of the pupils enrolled in these grades, had been in Tampa at the time school opened. A properly operating attendance service will not only prevent this condition, but will secure immediate enrollment of boys and girls moving into Tampa. The system of census-keeping must be such as to bring all such boys and girls to the attention of school authorities without delay.

The early withdrawal of large numbers of pupils shows the need for more attention to this phase of the attendance problem. Table 31, on page 204, shows that in the elementary schools for white children, a total of 830 pupils, or 8.6 per cent of the total number enrolled, withdrew before the end of the school year. It is the duty of the attendance department to investigate those cases where the reason for withdrawal is not otherwise established and secure a return to school whenever possible. This should apply to all pupils, to those below and above the compulsory age limit, as well as to those for whom attendance is compulsory.

The large place that non-attendance plays in retarding pupils in Tampa is indicated by the reasons for non-promotion given by

teachers in June, 1925. Of all the causes of failure given by the teachers, poor attendance stands next to the most frequent cause. According to the teachers, poor attendance is responsible for 12 per cent of the failures in the Lee School, 16 per cent in the Gorrie School, 18 per cent in the Ybor School, and 21 per cent in the Wilson Junior High School.

Tampa, at present, has the full-time services of two employees in the attendance department. The total annual cost of this department is less than three thousand dollars per year, or approximately fifteen cents per pupil enrolled. Table 2 shows the cost of attendance in several northern cities with an enrollment near that of Tampa.

TABLE 2
COMPARATIVE COST OF ATTENDANCE IN TAMPA AND OTHER CITIES *

City	Cost of Attendance Per Pupil Enrolled
Springfield, Massachusetts	\$0.46
Albany, New York .....	.44
Paterson, New Jersey .....	.35
Johnstown, Pennsylvania .....	.27
Allentown, Pennsylvania .....	.22
TAMPA (1925) .....	.15

* Figures are compiled from superintendents' reports for 1920-1921 and 1921-1922, except for Tampa.

Careful study has shown that a city, in order properly to enforce the compulsory attendance law and extend the principle of universal education, may properly spend up to one dollar per pupil of compulsory attendance age for the purpose of maintaining an adequate and effective attendance department. Tampa is therefore justified in materially increasing the amount now spent in order to build up a thoroughly efficient attendance department. It is, no doubt, true that the work of a census and attendance department in Tampa will be greater than in a city of the same size with a more stable population.

The development of a progressive educational program depends first of all upon the accuracy and continuity of the school census. The city of Tampa should institute at once an attendance department directly subject to the control and supervision of the local school executive to the end that data may be made available for educational and administrative purposes. A permanent continuing census of all children from one day old up to at least

eighteen years of age is imperative if the school system is to become an efficient agency for universal education. An efficient child accounting system must be based upon such a census. In no other way can the actual school enrollment be adequately and regularly checked with the actual school population of Tampa.

In organizing the attendance department in Tampa, there should be, first, a director of the census and attendance department who is directly responsible to the supervising principal and has charge of all census and attendance work. Such clerical help and assistants as the office of the director may require should be provided. In taking the initial census for the purpose of instituting a permanent continuing census, a well-trained staff of assistants will be necessary. Thereafter, one census field worker will be sufficient.

There should be a chief attendance officer with at least two assistants and clerical help necessary to keep an efficient system of records and check on attendance. When the department is well organized, it will probably be found desirable to add to the staff a visiting teacher well trained in social welfare and attendance work, and a probation officer to look after court cases and employment.

A recent investigation of attendance service of cities of the size of Tampa gives in detail the necessary forms and procedures for an effective attendance service. Since this will soon be available in printed form, the detailed treatment of these aspects of the problem is omitted here.¹¹

¹¹ Emmons, Frederick E. *City School Attendance Service*. Bureau of Publications, Teachers College, Columbia University. 1926.

CHAPTER II

THE BUSINESS ADMINISTRATION OF SCHOOLS IN TAMPA

DIVISION OF DUTIES IN BUSINESS ADMINISTRATION¹

The officers who are recommended to carry out the program of business administration are the assistant superintendent in charge of business affairs and the assistant superintendent in charge of buildings and grounds.

BUSINESS ADMINISTRATION

The activities of business administration which will fall primarily to the responsibility of the assistant superintendent in charge of business affairs will be the following:

Activities Primarily Secretarial, Pertaining to the Secretary of a Corporation.—Recording proceedings of the board of education and its committees; having custody of the records of the board,* including seal, contracts, securities, documents, title papers, books of record, insurance policies, receipts, bills, cancelled orders and warrants, cancelled bonds and coupons, and board correspondence; signing records of board, school warrants,* school board contracts; * making reports to the state; * keeping record of employees of the board,—past and present; keeping record of annuitants; publishing board reports and board notices; notifying members of meetings and supplying them with an outline of business to come up, together with resolutions covering same; mailing minutes of board meetings to members subsequent to meetings; handling of board correspondence including the notification of all interested parties of board action, and executing contracts * for the board.

Activities Primarily Financial.—Preparing, examining, and certifying to county board pay rolls; reporting regularly the

¹As indicated in the previous chapter, part of these duties must be performed by the office of the county board. It is recognized that the last action of the last transaction, in many cases, is an obligation of the county officers. The asterisk indicates the functions which are primarily those of the county officers.

condition of the various board funds; * collecting and disbursing school funds on proper authorization; * keeping financial records; * auditing claims against the board; preparing the annual budget; * insuring school property; * estimating building costs; recommending transfer of funds from one budget appropriation to another; preparing annual inventory of board property; and making annual financial report.*

Activities Pertaining to the Purchasing of Supplies.—Listing of needed supplies; advertising for bids on same; purchasing supplies; * issuing purchase orders for supplies on properly certified requisitions; storing and distributing supplies; keeping perpetual inventory; keeping accounts with various units of the school system for the determination of unit costs; reporting on supplies on hand; preparing annual budget for supplies; and superintending all printing for the board.

ADMINISTRATION OF BUILDINGS AND GROUNDS

The activities² in which the assistant superintendent in charge of buildings will participate are those pertaining to the operation and maintenance of the physical plant as well as those which are primarily the result of new building development. These activities are recorded in detail below:

Activities Pertaining to the Operation and Maintenance of the Physical Plant.—Inspecting of school plant and its equipment; supervising the maintenance staff; overseeing all repair work and alterations; certifying all bills for maintenance; supervising operation and maintenance employees; supervising operation of plant; preparing specifications for supplies used in operation and maintenance, including fuel; issuing permits for use of school property; and having general custody of the plant.

Activities Pertaining Primarily to Capital Outlay.—Acquiring title to property by purchase or condemnations; * supervising the voting and issuing of bonds; approving plans and specifications of architects; * furnishing data to architects; supervising the work of builders at every stage; approving contracts of board either with or without legal advice; approving "faithful performance" bonds; * certifying contractors' and architects' claims; appraising

²As indicated in the previous chapter, part of these duties must be performed by the office of the county board. It is recognized that the last action or the last transaction, in many cases, is an obligation of the county officers. The asterisk indicates the functions which are primarily those of the county officers.

grounds and buildings; advertising for bids and letting of contracts; * keeping construction records, plats of sites, and plans of buildings; checking on construction before making final payment; and supervising the manufacture of school furniture and the installation of equipment.

This survey cannot include all of the details of business management³ in each of the fields enumerated above. It is recommended that a policy be pursued by the officers of business administration which will produce for school administration in Tampa as economical and efficient a business management as has been developed by the most satisfactorily organized corporations engaged in private business. Some illustrations of the practices recommended are given in this report. Among the references in educational literature which will assist in the development of the program proposed are the following:

CASE, HIRAM C. *Handbook of Instruction for Recording Disbursements for School Purposes.* C. F. Williams and Son, Albany, N. Y. 1917.

FOWLKES, JOHN G. *School Bonds.* Bruce Publishing Co., Milwaukee, Wis. 1924.

HUTCHINSON, J. H. *School Costs and School Accounting.* Bureau of Publications, Teachers College, Columbia University. 1914.

MELCHIOR, WM. T. *Insuring Public School Property.* Bureau of Publications, Teachers College, Columbia University. 1924.

MOEHLMAN, ARTHUR B. *Uniform Accounting Plan for Michigan.* State Education Department, Lansing, Mich. 1925.

SMITH, HARRY P. *Business Administration of City School Systems.* Bureau of Publications, Teachers College, Columbia University. 1926.

STRAYER, G. D. and ENGELHARDT, N. L. *School Records and Reports.* Bureau of Publications, Teachers College, Columbia University. 1923.

TWENTE, JOHN W. *Budgetary Procedure for the Local School System.* Published by author. 1923.

HARRISBURG, PA. *Survey of the Organization and Administration of the Public Schools of Harrisburg, Pa.* Bureau of Municipal Research, N. Y. C. 1917.

ILLUSTRATIONS OF THE KINDS OF BUSINESS RECORDS WHICH SHOULD BE MAINTAINED

Records of the Acts of the Board of Education.—It is exceedingly important that all of the official acts of the city board of

³As indicated in the previous chapter, part of these duties must be performed by the office of the county board. It is recognized that the last action or the last transaction, in many cases, is an obligation of the county officers. The asterisk indicates the functions which are primarily those of the county officers.

education be recorded in such form that ready reference may be made at any time to any single action of the board. Thus the minute book becomes one of the most important records maintained within the school system, since on its pages are recorded the policies and programs to be pursued and the steps which are sanctioned for the development of public education within the city. The standards set up by Strayer and Engelhardt in their publication, *School Records and Reports*, should be followed in detail. From this should result accuracy of recording and ease in reference. A suggestion of one of the standards proposed by these authors is to be found in the kind of index which should be maintained to permit of easy reference to the actions of the board of education. The index given below should be cumulative to the degree that it will cover a period of years of the proceedings of the school boards of Tampa.

INDEX OF MINUTE BOOK FOR BOARD OF EDUCATION

Acceleration	Assignment of teachers, elementary evening high school special	Bonded debt, report of schedule for
Accounts, auditor of classification of system of	Assistant superintendent, appointment of duties of report of salary of	Bookkeeping
Adjoined meetings	Athletics	Boundaries
Adult instruction	Attendance, elementary evening high school kindergarten of teachers	Budget
Advertising of evening schools	Attendance department	Building fund
Agriculture	Attendance officers, report of	Buildings, new old
Algebra	Auditor, report of	Business agent, report of
American history	Balances	Business committee
Americanization	Balance sheet	Business, department new
Ancient history	Bath centers	Calendar
Annual appropriations	Bids	Capital outlay
Annual reports, See Reports	Bills	Car tickets
Annuitants, list of	Biology	Certificates
Apparatus	Blind schools	Chamber of commerce
Appendix, contents of	Board of assessors	Checks unclaimed
Appointments, assistant superintendent attendance officer clerks janitors principals supervisors teachers	Board of education	Chemistry
Appropriations for, auxiliary agencies capital outlay debt service general control instruction maintenance operation	Board of election, commissioners	Child labor
Architect	Board of examiners	Child Welfare Board
Art	Board of health	City Council
Assessed valuation, of school property by schools total	Board members	City districts
Assets and liabilities	Bonded indebtedness	Civil service
Assessors, report of	Bonds, according to issue authorized but not issued outstanding	Clerical assistants, appointment of salaries of
		Clerical department
		Clinical psychologist
		Clinic psychological
		Coal, contract prices
		College admissions
		Colored schools, elementary high school kindergarten special schools
		Commercial, department geography high school

Committees	Evening lectures	certification of
Communications	Examinations of, principals pupils teachers	classification of pay roll salaries of service supplies
Community civics	Executive heads of departments	Junior high school
Compulsory attendance	Exhibits	Junior Red Cross
Connections	Experimental, rooms schools	Juvenile court
Contagious diseases	Expenditures, auxiliary agencies capital outlay debt service fixed charges general control instruction maintenance operation	Kindergarten, attendance supervisors teachers total enrollment
Continuation schools	Extended use of buildings courses for teachers	Laboratories
Contractors, bonding of	Feeble minded	Labor certificates
Contracts awarded	Finance	Land appropriated
Cooking	Fire, drills escapes protection	Land purchased
Corporal punishment	Flres	Language
Corporation	Flag Day	Latin
Costs, per capita for elementary evening high school special schools total, elementary evening high school special schools	Foreign language	Leave of absence
County officers	Fraternalities	Lectures for teachers
County superintendent	Free textbooks	Legal department
Courses of study, elementary evening high school special schools	French	Legislature
Court cases	Funds, building sinking special	Liabilities
Cripple children, classes for transportation for	Furniture and equipment	Liberty bonds
Curriculum, See Course of Study	Garbage and ashes	Library, committee in schools report
	Geography	Lighting
	Geometry	Literary, contests societies
	German	Loans
	Gifted children, classes for examination of	Lunches
	Graduation exercises	Lunch rooms
	Growth of schools	Maintenance fund
	Handwriting	Manual and industrial arts,
	Health certificates	arts supervisor
	Health department	report of training, elementary school high school supervisor
	Health regulations	Marks
	Heating	Measurements
	Heating apparatus	Medical inspection, report of
	Home gardening	Merit system
	Home study	Military drill
	Household arts	Minimum essentials
	Hygiene	Museum
	Illiteracy	Music, concerts report of supervisor supervisor
	Incidental fund	Nature study
	Indebtedness, outstanding statement of	New buildings
	Industrial, arts classes schools teachers	New equipment
	Inspectors of schools	Non-English-speaking
	Insurance	Nurses, appointment reports salaries
	Interest	Obituary
	Intermediate, classes schools teachers	Observation, classes school
	Inventory	Officials
	Janitors, appointment of	Open-air school
		Oral English
		Outstanding indebtedness
		Over-age classes
		Pay roll, attendance officers

clerks	business agent	Social centers
janitors	custodian	Special,
supervisors	director of research	classes
teachers	superintendent	schools
Parent-Teachers' Associa-	treasurer	Standards for measure-
tions	Reports, special	ments
Parental school	Requisitions	State,
Parks	Resignations	aid for schools
Part-time classes	Resolutions	board of education
Parochial schools,	Retardation	department of educa-
attendance	Retirement,	tion
enrollment	board,	educational policy
Pensions,	fund	examinations
fund	Revenue	funds
rules governing	Rotary club	inspection of schools
Personal service	Rules and regulations	normal schools
Petitions	Salaries,	officers
Physical,	assistant superintend-	school funds
education	ent	school lands
training	attendance officers	Statistical data
Physics,	business agent	Stenography
laboratories	clerks	Storekeeper
teachers	director of research	Storeroom
Pianos	janitors	Sub-normal classes
Plans and specifications	principals	Substitute teachers
Playgrounds,	superintendent	Summer schools,
equipment	supervisors	for pupils
supervision of	teachers	for teachers
Plumbing	Salary schedule	Sundry
Population,	Sales	Superintendent of public
city	Salesmanship	instruction
school	Sanitation	Superintendent of schools
Prevocational classes	Savings banks	Superintendent's report
Primary classes	Scholarship	Supervisory organization
Principals,	School Board,	Supervisors,
appointment of	members of	elementary
day elementary school	officers of	kindergarten
day high school	organization of	primary
evening schools	regular meetings of	special
salaries of	report of	Supplementary classes
Printing	sub-committees of	Supplies
Promotion of teachers	School,	Supply room
Promotion rate	bonds	Surplus
Property,	calendar	Surveys
inventory of	census	Suspension and expulsion
valuation	centers	Swimming lessons
Psychological,	committees	Swimming pools
clinic	districts	Taxes,
laboratory	documents, printing of	local
report of director	elections	state
survey	enrollment	Teachers,
tests	for deaf and dumb	clubs
Public library board	gardening	elementary
Public school libraries	improvement	employment of
Public speaking in	laws	examinations
high school	location of	high school
Punishment	lunches	in service
Pupils,	population	institutes
age table	property	kindergarten
attendance	supplies	leave of absence of
by buildings	taxation	meetings
number in private	term	new
schools	Schools, colored,	primary
number of 6 to 16	elementary	professional training of
number per teacher	evening	resignations
Purchasing department	industrial	salaries
Purchase orders	secondary	special
Recommendations	special	substitute
Records	Sectarian instruction	tenure
Red Cross	Bible in schools	transfers
Reform schools	Secretary	unions
Registration of school	Separation of races	Teaching efficiency
children	Service	Technical education
Rents	Sewer assessments	Technical high school
Repairs	Sewing	Telephones
Report of committees	Short time loans	Temporary appointments
Reports, annual,	Sinking funds	Tests of school work
assistant superintend-	Sites for schools	Text books
ent	Smith-Hughes appropri-	Time schedule
attendance department	tions	

Total cost of maintaining	Typewriting	Vocational,
schools	Unfinished business	classes
Trade schools	Ungraded,	department
Training schools	classes	guidance
Transfer of funds	schools	schools
Transfers	Uniform financial ac-	teachers
Transportation	counts	Voters, registered by
Treasurer	Uniformity of textbooks	wards
Truancy	Unit cost	Warrants
Truant school	United States flag in	Water service
Tuberculous children,	schools	Writing,
classes for	Units of measurements	measurement of
Tuition,	Vacations	supervisor of
of pupils	Vaccination	Work permits
refunds	Ventilation	
Type of schools	Vitrolas in schools	

Procedures and Records Involved in Budget Making.—Due to the peculiar relationship existing between the district trustees and the county board of public instruction, it would seem to be particularly important that the district trustees or the ultimate city board of education should exercise the greatest possible care in making their budget. It is necessary that the county board of public instruction sometime approve the expenditures of the city board of education. This can be accomplished when the city board presents a budget which sets forth the needs of the city in the greatest possible detail accompanied by unit costs and such other facts as will give evidence to the county board that the moneys to be expended have been carefully distributed and allotted to the respective phases of the educational program.

The work in budget making will consist of two parts, the preparation of the budget itself by the superintendent of city schools and his staff under the direction of the city board of education, and the final review and approval of the budget by the county board of public instruction. When this budget has been approved in this form by the county board of public instruction, the implication should be that the city board of education will have definite guidance as to their program and assurance that they may proceed to carry out the policies and programs as laid down in the budget within the financial limitations set up by the budget itself. The steps to be taken in the preparation of the budget may be seen in Chart 2.

The summarized budget, as presented to the county board of public instruction, should appear at least in the detail presented on page 23. The monthly reports of the business management to the city board of education showing the relationship between budget appropriations, the amounts already expended, the unencumbered balances, and the amounts which must be paid during

DETAILED STATEMENT OF EXPENDITURES OF THE BOARD OF EDUCATION

FORM #1

Report for the month ending _____ 19__

	BUDGET CLASSIFICATION	Budget Appropriations	Amount Expended Previous to this Month	Unexpended Balance at beginning of month	Expenditure during the Month	Unexpended Balance at end of Month	Estimated Unpaid Bills	Unencumbered Balance
GENERAL CONTROL	2-1 School elections							
	2-2 Board of ed. and supt's office--salaries							
	2-3 Board of ed. and supt's office--supplies							
	2-4							
	2-5 Other expense of business control							
	2-7 Superintendent's office--salaries							
	2-8 Superintendent's office--supplies							
	2-9 Superintendent's office--other expenses							
	2-10 Compulsory education--salaries							
	2-11 Compulsory education--other expenses							
2-12-1								
2-14 Other expense of education control								
2-15 Total for general control								
INSTRUCTIONAL SERVICE	3-1 Supervisors--salaries							
	3-2 Supervisors--other expenses							
	3-3 Principals' office--salary of principal							
	3-4 Principal's office--salary of clerk							
	3-5 Principal's office--supplies							
	3-6 Principal's office--other expenses							
	3-7							
	3-8 Other expense of supervision							
	3-9 Salaries of teachers							
	3-10 Text books							
3-11 Other supplies used in instruction								
3-12 Commencement exercises and exhibits								
3-13								
3-14 Other expense of instruction								
3-15 Total for instructional service								
OPERATION OF SCHOOL PLANT	4-1 Wages of janitor and other employees							
	4-2 Fuel							
	4-3 Water							
	4-4 Light and power							
	4-5 Janitor's supplies							
	4-6 General care of grounds							
	4-7 Services other than personal							
	4-8-10							
	4-11 Other expense of operation							
	4-12 Total for operation of plant							
MAINTENANCE OF PLANT	5-1 Upkeep of grounds (repairs)							
	5-2 Repairs of buildings							
	5-3 Rep. & replace. of heat, light and plumbing eq.							
	5-4 Rep. & replace. of apparatus used in instrac.							
	5-5 Repair and replacement of furniture							
	5-6 Repair and replacement of other equip.							
	5-7-8-10							
	5-11 Other expense of maintenance							
	5-12 Total expense of maintenance of plant							
	FIXED CHARGES	6-1 Pensions						
6-2 Rents								
6-3 Insurance								
6-4 Taxes								
6-5 Contributions and contingencies								
6-6 Total fixed charges								
DEBT SERVICE	7-1 Payment of bonds--direct							
	7-2 Payment of bonds--sinking fund							
	7-3 Redemption of short term loans							
	7-4 Payment of interest--on bonds							
	7-5 Payment of interest--on short term loans							
	7-6 Refunds of taxes and tuition							
	7-7							
	7-8 Total expense of debt service							
CAPITAL OUTLAY	8-1 Land							
	8-2 New buildings							
	8-3 Improvement of new grounds							
	8-4 Alteration of old buildings (not repairs)							
	8-5 Equip. new bldgs--heat, light, plbg. & elect							
	8-6 Equipment of new buildings--furniture							
	8-7 Equip. new bldgs--instructional apparatus							
	8-8 Equipment of new buildings--other equip.							
	8-9 Equip. old bldgs--heat, light, plbg. & elect							
	8-10 Equipment of old buildings--furniture							
8-11 Equip. old buildings--instructional appar.								
8-12 Equipment of old buildings--other equip.								
8-13								
8-14 Other capital outlay								
8-15 Total capital outlay								
AUXILIARY AGENCIES	9-1 Libraries--salaries							
	9-2 Libraries--books, repairs and replacements							
	9-3 Libraries--other expense							
	9-4 Health service--medical inspection							
	9-5 Health service--nurse service							
	9-6 Health service--dental service							
	9-7 Health service--other expense							
	9-8 Transportation of pupils							
	9-9 Care of children in institutions							
	9-10 Provision of lunches							
	9-11 Community lectures and social centers							
	9-12 Recreation							
	9-13 Other expenses							
	9-14 Pmts. to priv. & schools other civil div.							
9-15 Total exp. aux. agen. and other sundry actv.								
Totals								

Signed _____

G. F. WILLIAMS & SON, INC., CHARLOTTE, N. C.

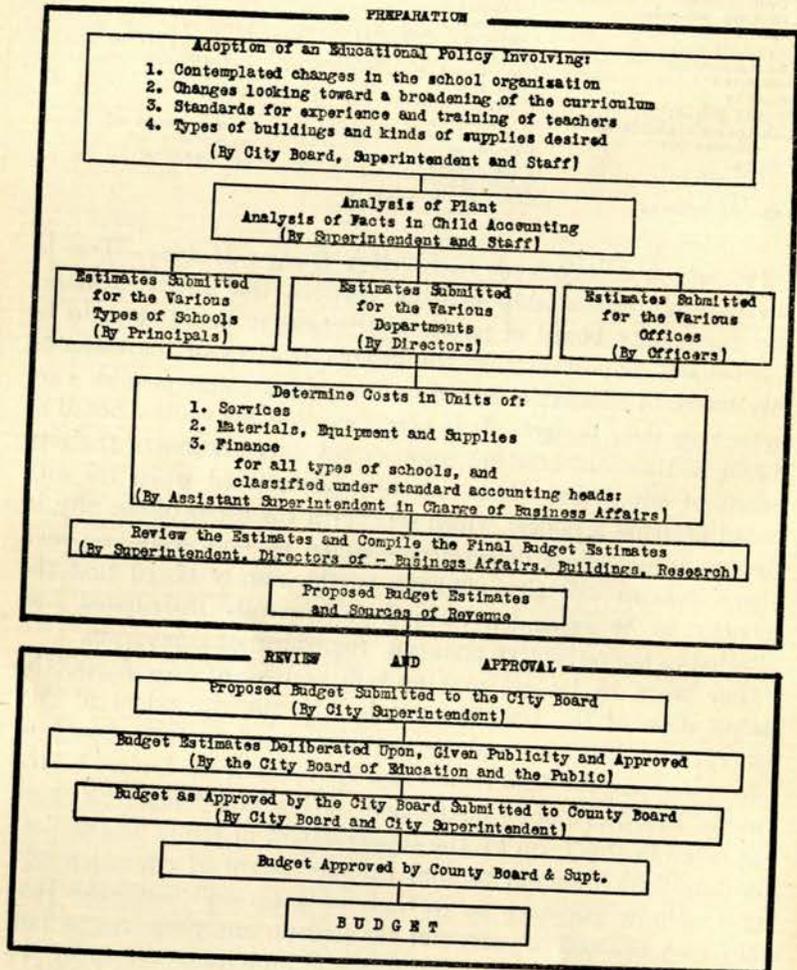


CHART 2

STEPS PROPOSED FOR THE DEVELOPMENT OF THE BUDGET FOR TAMPA, FLORIDA

the current month as a result of executive action can also be made in this same form.

The Cumulative Budget Record.—It should be the function of the business management to maintain a cumulative budget record which will make possible comparisons by years and schools on the basis of unit costs. Such a record is indispensable in presenting the public and the press with the real situation in respect to educational costs and in defending the school system against criticism which is based upon limited knowledge of the facts. Such a cumulative record should include facts concerning the relationship between school expenses and total city expenses, the increases in valuations, the changes in tax rates, the growth in population, the enrollment increments, the outstanding indebtedness and other similar facts which are utilized as the bases for comparisons. If such a record is not thoroughly planned in advance and not maintained accurately, information concerning school cost is secured only with difficulty.

THE PURCHASE, STORAGE, AND DISTRIBUTION OF SCHOOL SUPPLIES

All details for budgeting, purchasing, distributing, and accounting for school supplies should be centralized in the office of business management of the city school system. The machinery for purchasing and distributing should be as simple as possible and sufficiently adequate to meet the educational demands as they are made. The effort should be made to avoid unnecessary duplication of clerical service, but the procedures should be so developed as to eliminate the possibility of waste, oversupply, and loss of materials. It is recognized that school property in the form of cash is, as a rule, very carefully accounted for. As soon as cash is converted into materials or supplies, the appreciation of values seems to disappear. Accounting becomes less detailed and less active, and a loose and wasteful process creeps in. Stores accounting should be so developed that, at any time, the quantity of supplies on hand, the quantities used, and the point of consumption should be easily ascertainable. The records which should be maintained should give exact information concerning the supply budget appropriations at all sources of need, the amounts consumed, and bills outstanding.

The large percentage of supplies for a school system should be

purchased annually and in bulk. Competitive bids should be sought. The city superintendent of schools and the business management should have the privilege of purchasing emergency or special supplies within limitations in case of special need. A standard list of supplies in each field of activity should be adopted by the board of education and published with such definite specifications that all teachers and principals making requisitions will order in definite terms and without ambiguity.

Mr. R. B. Taylor, in his book, *Principles of School Supply Management*,⁴ has set up a plan for the management of supplies as a result of his intimate analysis of school supply management in a number of school systems. Mr. Taylor's plan, as reproduced in Chart 3, is recommended as the basis for the development of the supply program in Tampa.

TEXTBOOK MANAGEMENT

After July 1, 1926, Tampa will have a twofold problem of textbook management. The first problem is that of handling the textbooks supplied to grades 1 to 6 by the state textbook commission through the county superintendent of schools. Grades 7 to 12 will continue, as is being done at present, to purchase the books required for their work from the book agency which the district trustees have been compelled to establish due to the trade confusion resulting from past practices.

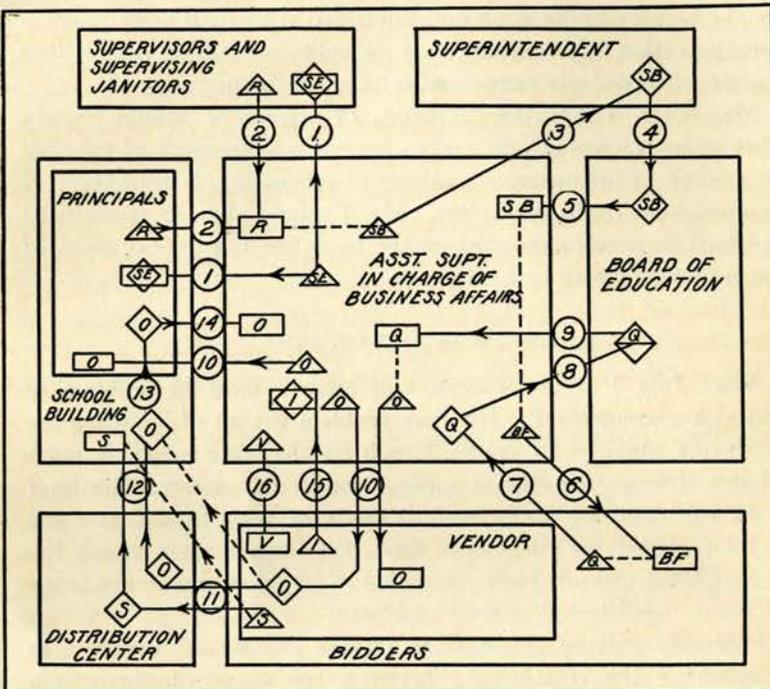
Difficulty will be encountered by the city school teachers in establishing the relationship between the proposed curriculum and the textbooks which have been adopted by the state book commission. This difficulty arises primarily from the fact that these adoptions are for a period of eight years, while during that same period of eight years very significant changes will no doubt take place in the curriculum development of the city schools.

Due to the fact that the state law requires that all textbooks furnished by the state must be collected at the end of the school year, the city of Tampa must provide storage space for these books at the direction of the county superintendent of schools. Every effort should be made to reduce to a minimum the detail work involved in issuing and collecting these free textbooks. The city authorities have already made splendid progress in devel-

⁴Taylor, R. B. *Principles of School Supply Management*. (To be published by Bureau of Publications, Teachers College, Columbia University.)

CHART 3

PLAN FOR MANAGEMENT OF SUPPLIES



LEGEND

← 5 - Direction and Order of Transaction

△ Source

◇ Approved or Checked

□ Destination

Plan developed by R. B. TAYLOR.

- SE Supply Estimate
- R Requisition
- SB Supply Budget
- BF Bid Form
- Q Quotation
- O Purchase Order
- S Supply Items
- I Invoice
- V Voucher

oping a method of textbook management. The work has been greatly handicapped by lack of adequate storage facilities. Textbook distribution in Tampa will soon involve more than one hundred thousand volumes. It can be readily seen that a superior system of management must be maintained to make possible the proper distribution of the books themselves, as well as to safeguard the health of the school children.

Textbook Agency.—The textbook agency which was created last year should be placed under the direction of the officer in charge of free textbook distribution. It is the recommendation of the survey staff that the Tampa school system rapidly develop a system of free textbooks for pupils of the junior high school and senior high school. No distinction can be made between the free textbook service rendered to elementary children and that which should be rendered to pupils of the upper schools. Until the financial program can be advanced to the point where this free textbook extension is made possible, every safeguard should be established about the funds which accrue from the sale of textbooks. This textbook fund is similar to many other funds which are handled in city school systems. They cannot be classified as legitimate receipts as they are nothing more nor less than a revolving fund to take care of a certain need which has not been duly authorized by the school authorities or by law as a legitimate school expense. In the section, "Internal Accounting," recommendations are made covering this textbook fund as well as other similar funds.

FINANCIAL ACCOUNTING

Accurate and adequate financial accounting is vital to the building up of an efficient and progressive school program. Records of all financial transactions should be as simple as possible, and yet they should hold a complete history of every transaction. A system of school accounts should provide for an original document that would contain such a history. An adequate system of accounts should further provide for a complete accounting of all funds appropriated and furnish such information as will enable the board, the superintendent, and his assistants to decide intelligently questions of policy and efficiency with knowledge of costs.

The work of accounting is closely linked up with what is termed "Business Research and Statistics." The latter may be thought of in terms of cost accounting, preparation of the budget, and specified investigations to aid in scientifically determining various phases of the educational program and business program.

Cost accounting for schools should result in a statement of three principal kinds of costs:

1. Costs for various kinds of service.
2. Costs for various kinds of schools [and for kinds of service in kinds of schools].
3. Costs against schools (buildings) for various particular activities.

Before a board and superintendent can effectively and efficiently develop an educational program, they must know the cost figures with reference to units of service rendered rather than merely total amounts. The latter are often misleading if given without some measure of unit cost.

Chart 4 illustrates the types of records which are recommended for financial accounting. This accounting system will include, among others, the following accounting books:

Order Book	Stores' Ledger
Appropriation Ledger	Property and Equipment Ledger
Record Accounts Payable	Ledger
Disbursement Ledger	Record of Receipts
Schedule of Stores' Invoices	Teacher Payment Accounts

Disbursement Ledger.—In the distribution of expenditures, the state plan in use in Florida varies in great degree from that utilized in many other states. The distinction is clearly shown in Table 3 where the Florida plan is compared with the Pennsylvania, Wisconsin, New York, and Michigan plans as well as with the plan recommended by the National Education Association. In this table, the main functions of accounting are shown. Each function is itemized in such great detail that the cost of education in any one particular field of endeavor is easily ascertainable.

It will be seen that the Florida plan does not have a consistent method of segregating functions as is true in the other cases. Since the plans followed in the other states are those which have

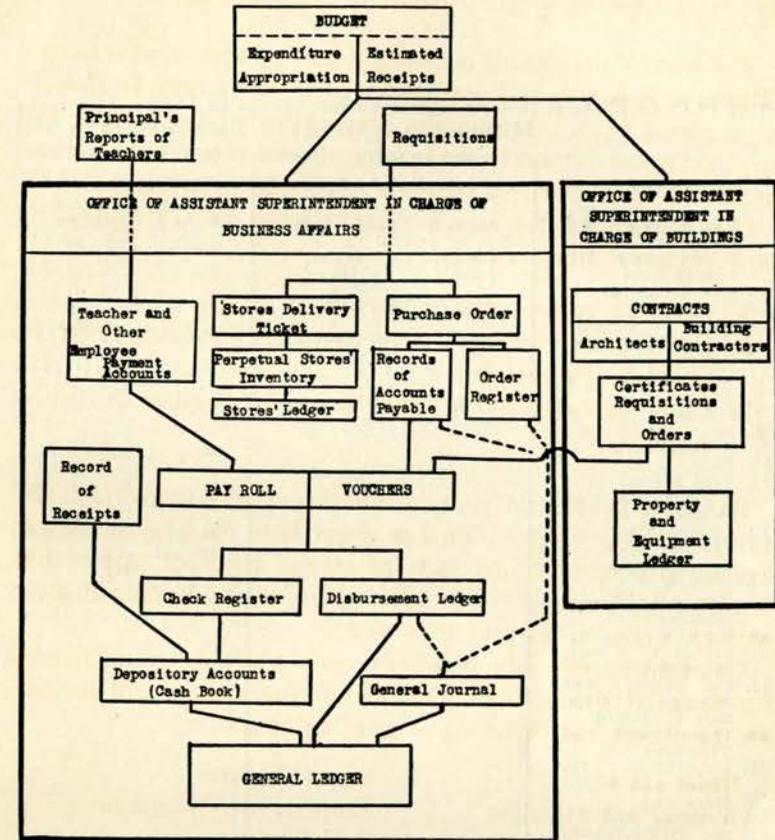


CHART 4

GENERAL SUGGESTIONS FOR THE FINANCIAL ACCOUNTING SYSTEM FOR THE TAMPA SCHOOLS

met with the approval of accounting officers of recognized ability and experience in the field of educational accounting, and as the main outlines of these plans have been approved by national educational bodies, it is recommended that Tampa follow in general the form of distribution which is approved by the National Education Association.

The forms of accounts which are recommended are shown on pages 32, 33, 34, and 35. A handbook⁵ giving instructions in the

⁵ Case, Hiram C. *Handbook of Instruction for Recording Disbursements for School Purposes*. C. F. Williams and Son, Albany, N. Y. 1917.

TABLE

STATE PLAN OF DISTRIBUTION OF SCHOOL EXPENDITURES IN FLORIDA COMPARED MICHIGAN, AND THE PLAN RECOMMENDED BY THE

FLORIDA	PENNSYLVANIA	WISCONSIN
1. Salaries of Teachers	Dept. A. General Control	Form A. Receipts
2. Purchase of School Lots	Dept. B. Instruction	Form B. Advancements
3. New Buildings	Dept. C. Auxiliary Agencies	Form C. General Control
<i>Expended for Schools</i>	Dept. D. Operation of School Plant	Form D. Expenses of Instruction
4. Repairs to Buildings	Dept. E. Maintenance of Plant	Form E. Coordinate Activities
5. Furniture	Dept. F. Fixed Charges	Form F. Auxiliary Agencies
6. Apparatus	Dept. G. Debt Service	Form G. Expenses of Operation of Plant
7. Insurance	Dept. H. Capital Outlay	Form H. Maintenance or Upkeep of School Plant
8. Rent		Form J. Fixed Charges
9. Janitors		Form K. Debt Service
10. Fuel		Form L. Capital Outlay
11. Free Books		
12. Transportation of Pupils		
13. Incidentals		
14. (Blank)		
<i>Expenses of</i>		
15. Salary of Superintendent		
16. Traveling expenses of Superintendent		
17. Per Diem and Mileage of Members of Board		
18. Commissions of Treasurer		
19. Incidentals for Board and Superintendent		
20. Printing and Financial Statement		
21. Printing		
<i>Administration, etc.</i>		
22. Expenses of Examinations		
23. Tuition Paid for County Line Pupils		
24. Institute or Summer School		
25. Books, Furniture, etc., Not Distributed		
26. Interest		
27-54, Inclusive (Blanks)		

3

WITH PLANS IN USE IN PENNSYLVANIA, WISCONSIN, NEW YORK, AND NATIONAL EDUCATION ASSOCIATION, WASHINGTON, D. C.

NEW YORK	MICHIGAN	NATIONAL EDUCATION ASSOCIATION
I. General Control	I. Administration (General Control)	I. Expenses of General Control (Overhead Charges)
II. Instructional Service	II. Instruction	II. Expenses of Instruction (Day Schools)
III. Operation of School Plant	III. Coordinate Activities	III. Expenses of Instruction (Night Schools)
IV. Maintenance of Plant	IV. Auxiliary Agencies	IV. Expenses of Operation of School Plant
V. Fixed Charges	V. Operation of School Plant	V. Expenses of Maintenance of School Plant
VI. Auxiliary Agencies	VI. Fixed Charges	VI. Expenses of Auxiliary Agencies and Sunday Activities
VII. Capital Outlay	VII. Maintenance of School Plant	VII. Expenses of Fixed Charges
VIII. Debt Service	VIII. Capital Outlay	VIII. Expenses of Debt Service
	IX. Debt Service	IX. Expenditures in Capital Outlay

use of these forms is available. If the city of Tampa utilizes these forms, it will be possible to get accurate cost accounting data. It will also make it a simple matter for the accounting officers to give correct reports to the United States Bureau of Education and other governmental bodies which seek information concerning the expenditures of municipalities. The use of this plan by the city of Tampa will not prevent the school officials from making state reports according to any method which the state has adopted or will hereafter devise.

PAY ROLL ACCOUNTING

The law provides that the district trustees shall recommend to the county board of public instruction the teachers for the schools of the district. If such recommendations are approved by the county board, the county superintendent is authorized to enter into a contract with the teachers recommended by the trustees. If the nomination of any teacher is not approved by the county board, the trustees recommend a second time. In case the same teacher is recommended by the trustees a second time and the county board disapproves of her the second time, the county board then proceeds to fill such place on its own motion.

The law further provides that the county board shall add the amount set apart for the salaries of teachers in each school by the district trustees to the county appropriation made for that school and upon this determine the salaries to be paid the teachers and the length of the school term. In Hillsboro County, the county superintendent is authorized by the county board to contract with the teachers. Some attempt has been made to establish a salary schedule based upon training and experience.

It is also provided by the state statutes that the part of the school fund arising from the district shall be paid to the teachers upon the order of the county board, based upon reports approved by the district trustees the same as other funds are paid upon the endorsement of school supervisors. Each month the teacher gets two salary checks. These checks are signed by the county superintendent and countersigned by the president of the county board. One of these checks is drawn upon the county fund and one on the district fund.

It is the recommendation of the survey staff that the city board of education be given complete responsibility in the selec-

tion and retention of teachers and all other employees and that they also have the responsibility of determining the salary schedule according to which teachers are to be paid. It is recognized that the salary checks must, according to law, be signed by the legal representatives of the county board of public instruction. All other steps in the payment of teachers up to the point of signing the checks can apparently be delegated to the city school authorities. There will then be in the office of the city school board a complete record of all the transactions involved in the management of the personnel of the teaching staff.

REFUNDING PAY FOR UNALLOWED ABSENCES OF TEACHERS

It is the practice to pay each teacher the full monthly salary. If the teacher has been absent for a cause not approved by the county superintendent, she is required to refund the payment, already made to her, for such absence. This practice is a very unsatisfactory one. It results in confusion of accounts and can be the cause of considerable friction.

It is recommended that the principal's report on teacher absences follow the general plan indicated in Chart 13. Before payments are made to teachers, the reasons for absence will have been recorded and will have been passed upon by the city superintendent of schools. If a rule for deduction from pay because of absence is established, it will be wise for the city board of education to study the methods employed by cities elsewhere throughout the United States.*

Dr. George E. Carrothers in his study, *The Physical Efficiency of Teachers*,[†] discusses all of the problems involved in teacher absences and indicates the exacting nature of the work done by teachers. He suggests that boards of education consider a cumulative plan for allowed absences if a definite number of days of paid sick leave must be written into the board rules. There is a growing tendency on the part of boards of education toward liberal adjustment with teachers in case of absence, thus recognizing the fact that teaching service cannot be put upon a day

* *Problems in Educational Administration*. By G. D. Strayer, N. L. Engelhardt and Others. Bureau of Publications, Teachers College, Columbia University. 1925. See page 710.
[†] Carrothers, George E. *The Physical Efficiency of Teachers*. Bureau of Publications, Teachers College, Columbia University. 1925.

basis. If deductions are to be made from the salary of teachers, it is recommended that they be made on the basis of one three hundred and sixty-fifth of the yearly salary, thus recognizing the fact that the salary paid to teachers is paid upon the assumption that teachers have only one vocation and that while they are not teaching they are engaged in improving their own training through attendance at professional schools or through such other agencies as travel, visitation of school systems, attendance at professional conferences and the like.

PAY ROLL PRACTICE

In pay roll practice, the following principles should be used as a guide:

1. The work of pay roll making should be done in the central office of the city school board. The principal should not be unduly burdened with the clerical work involved in this field. It should be recognized that the principal of a school is an educational officer and not a financial officer and that the principal does not participate in any of the financial work.
2. Pay rolls should be cumulative, thus reducing the duplication of names and the pay roll data to a minimum.
3. The accounting service should be rigid. In developing this service, the object should be to make substitute service as efficient as regular teaching service. The difficulties in securing this result in Tampa are recognized, but the policy of securing an efficient regular or substitute teacher for every hour that the child is in school should be pursued.
4. The time report which principals submit concerning teachers' absence should carry all data required for action on pay allowances for absence. Such pay allowances should be regulated by the central office and not by the principals' schools.
5. Pay roll procedure should be so planned that all payments to employees are promptly executed but without undue haste in any step of the procedure.

SCHOOL BONDS

In a city the size of Tampa, the school bond procedure and accounting problems assume rather large proportions. There are now ten different bond issues outstanding against District No. 4 and two against District No. 45. Interest and bonds fall due on six different days in the year. These districts are now in another bond issue program. The bond records of all districts in the county are now, and by law must be, kept in the office of the county board of education. For effective administration, the city school trustees must have available a better record system than the one now in use.

Defects in the Record System.—The defects in the bond practices of Tampa are primarily those connected with the record system. The most outstanding of these are the following:

1. There is no summary record of all bond issues for school purposes.
2. There is no record of bond issues for each individual school.
3. There is no summary record showing the amount of principal and interest due at each interest paying date.
4. Tampa's bond records are in the same bond book with those of all other districts of Hillsboro County.
5. There is no index to the bond book.
6. The bond book and the cancelled bonds and interest coupons filed away are not in a fireproof inclosure.
7. These bonds and coupons are not arranged in systematic order.
8. The city school authorities must go to the county office when they study their own bond situation.
9. The record showing that the bonds have been paid consists of a statement to that effect in the minute book, the cancelled bonds in the county office, and the date written under the caption "Paid" in a column opposite the amount of the bond paid. This is in the one bond book.
10. The record showing that interest has been paid consists of a similar record.

Record Forms Recommended.—Improvement may be secured in the record system for bonds by adopting the four suggestions which are given here:

1. Developing a summarization of all school bond issues for school purposes to be recorded in such form as to be available at any time.
2. Maintaining a record of bond issues so that the indebtedness for any individual school can be secured readily.
3. Maintaining a bond record so that total amounts of interest and principal due on all outstanding amounts of indebtedness can be ascertained for every year during the life of the incurred bonded indebtedness.
4. Recording each issue of bonds so that all essential facts are made available at the time of issue and maintained in that form during the life of issue.

Forms for carrying out these suggestions are available in the Strayer-Engelhardt School Record Series.⁹ A policy of preserving all coupons and bonds when paid in such a manner that the records are intact and readily accessible should be followed. It, of course, will be wise to provide adequate fireproof vault space for such materials. Such provision is almost entirely lacking in the school offices to-day.

INSURING THE SCHOOL PROPERTY

Although much attention has been given by the board of education to the problem of insuring school property, it is possible to bring about certain changes which will result in economies and in better administrative practices.

1. The record system is incomplete. All data used in the survey study of insurance were secured from the policies themselves rather than from any other summarization which the office force had found it possible to make.
2. No adequate fireproof storage space has been provided for the insurance policies, nor is the space which has been provided of such a nature that any systematic arrangement of the policies is possible.
3. There is no equalization of the amounts of premium due each year, thus failing to distribute the insurance cost equally among the annual budgets. In 1926 more than \$4,600 is due for premium, while in 1927 less than \$2,100 is due.

⁹ Strayer, G. D. and Engelhardt, N. L. School Record Series. C. F. Williams and Son, Albany, N. Y. 1920.

4. No uniform time has been set for the expiration of policies in order to insure action at one fixed period without requiring a constant reference to the insurance problem during the year. At present, policies expire every month in the year and at no uniform date within each month.
5. A standardized insurance plan will bring about a reduction in rates and subsequent economy for the school system.

It is recommended that an adequate system of insurance records be developed, that a satisfactory plan of caring for policies be inaugurated and that the board of education give further consideration to the plan of insurance for the purpose of securing lower rates. It is clear that rates are influenced by the fire hazards which exist within the school plant as well as by other factors. It is recommended that the program of maintenance and operation of buildings include due consideration to the elimination of fire hazards to the end that insurance rates may be secured at the lowest possible figure.

SOME PROBLEMS CONFRONTING THE ASSISTANT SUPERINTENDENT IN CHARGE OF BUILDINGS AND GROUNDS

Equipment Management.—Equipment includes such articles of furniture as are not consumed in the process of use supplied an organization to carry on an enterprise most effectively, efficiently, and economically. In a school organization, equipment may be grouped into two classes:

1. Building equipment; i.e., equipment essential in proper housing of the enterprise (plumbing, heating, lighting, etc.)
2. Educational equipment; i.e., equipment essential in performing the enterprise (desks, maps, chairs, instruments, etc.)

As the Tampa school system grows, the problem of equipping the schools and maintaining the equipment in a good state of repair will become increasingly burdensome. At present, much of the necessary equipment for carrying on the work of a satisfactory curriculum is lacking. The problems of purchase, replacement, and renovation of equipment are being only partially solved. The equipment program may be divided into five parts:

1. The assistant superintendent in charge of buildings and grounds should be given the responsibility for developing
 - a. The budgeting of new equipment and the replacement of old equipment.
 - b. The purchase of new equipment; the repair or disposition of old unserviceable equipment.
 - c. The receipt, delivery, and storage of new equipment, old equipment awaiting repairs, and repaired equipment.
 - d. The accounting of equipment, as to
 - (1) Original costs by schools, department or kind of service rendered, and unit costs in type of equipment.
 - (2) Insurance and depreciation.
 - (3) Desirability, utility, and ultimate cost.
 - (4) Its contribution in determining new standards.
 - (5) Fixing responsibility and accountability as to defacement, destruction, and loss.
 - (6) Labor and material costs in repair.
 - (7) A permanent inventory of all equipment, so organized as to be most convenient for periodical checking and budget making.
 - e. A systematic inspection of all equipment.
 - (1) A properly trained and organized staff for repair of equipment.
2. Capital in the form of equipment should be as accurately and thoroughly accounted for as cash itself.
3. All equipment should be properly marked with a permanent and fixed label for ready inventory and convenience in record.
4. Such equipment record forms should be prepared so that in their use the standard practices and procedures can be carried out with the greatest economy of time, labor, and costs.
5. Standard specifications should be established and should be continually in the process of further development. The records involved in the accounting of the equipment should be the basis for an intelligent analysis of the facts and for determining standards and specifications.

Problems in Personnel Management.—In cities of one hundred thousand and more, the personnel problems arising out of plant

management are of such a nature as to require intimate study and standardized procedures. Among these problems are those involved in the selection of the janitor-engineer personnel, the training and supervision of these men, the standardization of the amount of work required, the measurement of the effectiveness of the work done, the purchase and use of time-saving and labor-saving equipment, the establishment of methods of work which will insure economy of time and effectiveness of results, and the development of a program of supply management which will insure the availability of the essential materials as needed.

The most recent noteworthy contributions to the literature in this field are those made by Business Superintendent Womrath¹⁰ of Minneapolis and Dr. Reeves.¹¹ Such principles as the following should guide in this field:

1. The care and control of buildings and grounds and the responsibility for repairs should be centered in a superintendent of buildings and grounds working under and responsible to the superintendent of schools.
2. Efficient plant management demands a systematic scheme of records and reports dealing with operation and maintenance from which are computed comparative unit costs of buildings, equipment, and service through a period of years.
3. Principals should be given local control over janitors and matrons in respect to all those phases of janitorial service which affect the educational efficiency of school buildings.
4. Efficient operation of plant requires careful selection of janitors, training of janitors in service, standardization of janitorial practice, and frequent inspection of buildings.

THE ANNUAL REPAIR BUDGET

When the survey staff began its work, it was apparent that no fixed program of annual repairs had been instituted, nor had any significant financial appropriations been made to maintain the school plant at high standard. This has been rapidly undergoing a change during the past six months. The program of repairs which has been inaugurated recently should be maintained at its

¹⁰ Womrath, Geo. F. *The Janitor-Engineer Problem*. Board of Education, Minneapolis, Minn. 1922.

¹¹ Reeves, Chas. E. *An Analysis of Janitor Service in the Elementary Schools*, Score Card and Standards for Janitor Service in Elementary Schools. (Mimeographed copies.) Bureau of Publications, Teachers College, Columbia University. 1924.

present high level. The cost of these repairs should be included in the annual budget after approval by the city superintendent of schools and the board of education. In no other way can the property values of the existing plant be adequately served. This annual repair program requires the establishment of a fixed procedure involving the reports from principals and other directors, the standardization of those parts of the equipment which are most frequently out of order or most frequently require replacement, the estimating of costs, and the approval of a program early enough in the year to be included in the budget for the ensuing year.

Where more than twenty thousand children are involved, the repair program becomes of such importance that it cannot be maintained adequately except through a competent staff of workers who are specialized in particular fields and engaged by the year to render service. Expert representatives of mechanical trades should be included in this staff. The repair program should be so organized that costs can be charged to the specific job done and the school in which the service has been rendered. The system of establishing cost records should be worked out by the assistant superintendents in charge of business and buildings and grounds so that the work of the two offices is properly correlated.

THE ERECTION OF NEW SCHOOL BUILDINGS

Tampa's prospects for rapid growth give indication that the erecting of new buildings will be a constant problem for the city board of education for a considerable period of time to come. With these prospects before the board, it becomes necessary for the assistant superintendent in charge of buildings and grounds to standardize all the steps and procedures essential for the successful completion of new school buildings. Standardization of bid and estimate forms, architects' contracts, the kinds of bonds accepted, the forms of advertising, and construction records should result in many economies and efficient practices. The records of the superintendent's office should be planned so that there is a permanent file of specifications, working drawings, plot plans and other data which are used as a basis for present and future building. Reference to such material is very frequently necessary. The interests of the board of education are best conserved when these materials are readily available at any time.

In the planning of new buildings, it should be the effort of the building superintendent to secure standardization in all fields where experience shows that repairs frequently become necessary. Such standardization can include the character and size of glazing, the types of doors utilized, the character of hardware installed, the kind of plumbing fixtures utilized, and other materials of a like nature. Standardization in these fields will bring about subsequent significant economies in maintenance.

The school system in Tampa should gradually develop for itself a code of building including those factors which, out of experience, have proven to be the most satisfactory in the building of new buildings. In the development of this code, such documents as *Standards for Elementary and High Schools*¹² and *School House Planning*¹³ should be followed. For standardized forms of contracts which form part of the building program, practices followed in cities¹⁴ similar in size to that of Tampa should be utilized as guides.

THE MAINTENANCE OF PLAYGROUNDS

The department of buildings and grounds has an especial obligation in Tampa in the preparation of playgrounds about the school buildings so that they may be used at all times of the year. Standardization of playground apparatus, with due reference to the prevention of accidents to children, the permanency of the equipment, and the gradation of equipment so that all ages of children may have the opportunity of play, must be undertaken at an early date. The preparation of the ground itself requires special consideration. In practically all cases of the present schools in Tampa, almost no attention has been given to the care and upkeep of grounds. The sand is too deep, or the brick pavements which have been installed in instances are too hard for satisfactory play. Due attention should also be given to landscape and grounds. Trees, shrubs and flowers should be planted to add beauty to the city and also to furnish shade for children during hot school days. A slight beginning has been made in this

¹² Strayer, G. D., and Engelhardt, N. L. *Standards for Elementary School Buildings*. 1923. *Standards for High School Buildings*. 1924. Bureau of Publications, Teachers College, Columbia University.

¹³ National Education Association. *School House Planning*. Washington, D. C.

¹⁴ See documents published by Boards of Education of Pittsburgh, Pa., Baltimore, Md., and Oakland, Calif.

direction. It is felt that progress made in the development of playgrounds will bring commensurate educational returns. The opportunity for linking the use of the playgrounds with the use of school buildings and thus permitting the children to profit during school hours from the climatic advantages should not be neglected.

CHAPTER III

THE PRESENT SCHOOL BUILDING SITUATION

TAMPA'S SCHOOL ENROLLMENT

In October, 1925, the white children of the Tampa and West Tampa Schools were being housed as shown in Table 4.

TABLE 4
ENROLLMENT IN TAMPA SCHOOLS FOR WHITE CHILDREN
OCTOBER 20, 1925

HIGH SCHOOLS	
Hillsboro	1,305
Washington (Junior)	1,353
Wilson (Junior)	914
Memorial (Junior)*	654
ELEMENTARY SCHOOLS	
Bryan	267
Buffalo} **	960
Edison }	
East Tampa	496
Gary	604
Gorrie	883
Graham	536
Henderson ***	844
Jackson	457
Lee	1,116
Madison	383
Mitchell	420
Roosevelt	201
Seminole	1,104
Shore	744
Ybor	1,621
WEST TAMPA	
Cuesta	882
Drew	144
Gordon	39
MacFarlane	414
Total Number of White Enrollment—Tampa.....	14,862
Total Number of White Enrollment—West Tampa.....	1,479
Total Tampa and West Tampa Enrollment.....	16,341

* The Memorial Junior High School had not as yet been completed and these children were being cared for temporarily in afternoon sessions at the Washington Junior High School.

** Edison School building not completed at this date.

*** Including those housed in the old wooden structure formerly used as the County High School.

INCREASES IN ENROLLMENT

The enrollment of white children of October 20, 1925 showed an increase of 222 over the enrollment of September 28, 1925. The October 20, 1925, enrollment was also 1,797 in excess of the final enrollment in June, 1925. The increases in enrollment correspond with the heavy increases in total population which have been occurring in Tampa during the past two years. Each succeeding week of the present fall has brought large numbers of new pupils. It is almost impossible to anticipate just how great the increases will be during this present school year.

INCREASES IN ENROLLMENT DURING THE MONTH OF
NOVEMBER, 1925

During the month of November, the increases in school registration were at the rate of forty pupils per day. Interpreted in classroom facilities, this means that in order to provide adequately for these children, it will be necessary for Tampa to build at the rate of one classroom per day, or one large school building per month. If this increase continues over an extended period, all estimates of population growth which the survey staff has attempted to make will be greatly exceeded.

TAMPA NEEDS A PERMANENT CONTINUING CENSUS FOR SCHOOL
CHILDREN

In another part of this report, a recommendation is made that Districts No. 4 and No. 45 develop a permanent continuing census. It was the observation of the survey staff that large numbers of children were not attending school or were registered in home and mission schools which were not providing the educational opportunities which should be made available for all children. Large numbers of colored children and children in the Ybor and West Tampa sections are not attending any school. Because of the lack of junior high schools in various parts of the city, many children drop out of school upon completing the elementary school work or earlier. The senior high school facilities have not been such as to attract all of the boys and girls who would otherwise have accepted the opportunity of attending such a school. In the junior high schools, the types of courses which tend to keep children in school during that period have not been developed. All of

these factors combined have assisted the survey staff in arriving at an estimate of the number of children of school age who live within these two districts and are not attending school, but for whom school facilities should be provided. This estimate has been placed at 7,900 children. In arriving at this estimate, the percentages of total population actually found in school in other comparable cities have been used as factors.

The difference between the enrollment of the first six years of school and of the second six years indicates that Tampa is not holding its pupils in school to the extent that other cities do.

INCREASES IN SCHOOL POPULATION

A very conservative estimate of increase in number of children due to increase in population indicates a need for additional accommodations for at least 4,950 children by September, 1927. This increase in the number of children to be provided for is based upon an estimated increase in population during this period of from twenty-five to thirty thousand people. This is a most conservative estimate.

CHILDREN IMPROPERLY HOUSED

On October 20, 1925, 4,276 children were improperly housed. This number includes children attending school in basement rooms, in undesirable buildings like the Henderson Annex, and those attending for part time. The large numbers of children enrolled in the Tampa schools since this period should be counted among those children improperly housed, with the exception of those who have been enrolled in the senior high school.

SHORTENED SCHOOL DAY

Because of the overcrowded conditions in the elementary schools of Tampa, many children are having a shortened day. This number is increasing rapidly. A shortened school day is unsatisfactory to teachers, to parents, and to pupils. It places an additional burden upon the teacher, resulting in less efficient work. It discommodes the parent, disarranges the family schedule, and frequently results in unsatisfactory school work on the part of the pupil. Tampa's effort should be to maintain its schoolhousing facilities to the point where every child would be assured of a seat in school for the regular school day.

BASEMENT ROOMS, PORTABLES, AND AUDITORIUM CLASSROOMS

It is pleasing to note that in the new buildings contracted for in the spring of 1925, the school authorities were successful in eliminating all rooms used for educational purposes from basements. This, most emphatically, is a step in the right direction. In the older buildings, many basement rooms and makeshift rooms are still in use. It is the express purpose of the board of education to abandon these for class work.

In October, 1925, 26 such rooms were in use. There were 15 other rooms which were unsatisfactory from the educational point of view. These rooms were in portables or some other form of temporary housing. The building program outlined in this report involves the abandonment of these temporary rooms.

ANALYSIS OF THE PRESENT SCHOOL BUILDINGS AND SITES

A thorough study was made by the survey staff of all of the buildings which are now part of the school plant of Tampa and West Tampa. This study brought to light certain suggestions which should be considered by the school trustees when planning future buildings. In the majority of cases, the school sites are not large enough for the school enrollments which are being housed upon them. Larger sites and larger school buildings are recommended for the future. This may mean that the school trustees must select their sites in advance of residential growth, or as soon as the evidence presents itself that a section of the city is being built up. As the boundaries of Tampa are extended, it is exceedingly important that this policy of selecting sites in advance of needs be pursued.

It is extremely gratifying to find that the school trustees were able to secure the large acreage for the Memorial Junior High School site. It is hoped that the same broad vision will guide in the selection of all future sites, whether for elementary, junior high, or senior high school purposes.

SCHOOL BUILDING ARCHITECTURE

It seems unnecessary to import into Tampa architecture for schoolhousing which is apparently fitted for northern climates rather than for the Florida situation. In the new Roosevelt and Bryan Schools, the school trustees have indicated that they are

aware of the possibility of adapting school architecture to the climate and history of Tampa and Florida. These buildings are a far greater adornment to the city than the many other school structures which have an architecture not so appropriate to the city and which, in the minds of the survey staff, have little of beauty about them.

THE SERVICE SYSTEMS

In the appointment of a supervisor of buildings who will be responsible for the maintenance and operation of school plant, as well as for the supervision of new construction, the Tampa school trustees have taken a very important forward step. The analysis of the school buildings in May, 1925, indicated great laxity in the maintenance and operation programs. There was evidence that buildings had lacked adequate supervision at the time of construction. It was also clear to the survey staff that very little attention had been given to the nationally known standards for schoolhouse construction at the time these buildings were being erected. As the new program of maintenance and operation advances, effort should be made by the school trustees to replace unsatisfactory service systems, including toilets, water supply, lighting and heating systems. In the opinion of the survey staff, it is just as necessary to put the existing school plant in the best possible condition as it is to build any new buildings. The school trustees, the supervising principal and the building superintendent took many advanced steps in this direction during the summer of 1925. The cleaning, repairing, and painting of classrooms and corridors, the elimination of unsatisfactory basement and storage conditions, the cleansing and painting of toilet rooms and other phases of renovation during this period added considerably to the attractiveness and to the possibility of continued utilization of the older buildings.

OTHER CRITICISMS OF THE OLDER SCHOOL BUILDINGS

Factors in the older school buildings which emphasize the need for care in the planning of new buildings are as follows:

1. The lack of adequate provision for lunch rooms.
2. The failure to provide satisfactory natural and artificial lighting.

3. The poor location of stairways.
4. The inadequacy and poor location of toilet facilities.
5. The lack of standardization of classroom spaces.
6. The failure to provide a sufficient number of the special rooms needed in school buildings.
7. The limited amount of space devoted to the administrative offices.
8. The failure to provide adequately against loss by fire.
9. The need for making complete provision for drinking water.
10. The installation of more and better equipment of playgrounds.
11. The care of the playgrounds so that a program of play may be made an actual part of the school work.

HILLSBORO HIGH SCHOOL

At present, the Hillsboro High School is a county high school serving Tampa, West Tampa, and the other districts of the county. Although the county board has recently invested one hundred and seventy-five thousand dollars in an addition to this high school, the increases in enrollment have been so great as to make further high school expansion necessary in a relatively short time. As these increases promise to continue, it is evident that Tampa will soon be facing a very serious high school building problem. Other factors which will cause growth in the Hillsboro High School are:

1. The proposed expansion of high school curriculum offerings.
2. The better coördination which is being developed between the junior high school and the senior high school.
3. The general increase in high school population, following the tendency throughout the United States.
4. The tendency in the South for greater utilization of public education facilities.
5. The general growth of Tampa.

JUNIOR HIGH SCHOOLS

The three junior high schools, the Washington, the Wilson, and the Memorial, in October, 1925, were all being housed in the two buildings, the Washington and the Wilson. The children of West Tampa were being offered no junior high school oppor-

tunities except as they were permitted to attend the Tampa schools. The Tampa board of trustees has been very generous in granting this permission. The growth in junior high school enrollment has been very rapid during the past three years. As yet, certain thickly populated districts in the city have failed to send their quota to junior high school. Without question, these sections will tend in the future to send larger percentages of their children to junior high school than they have done in the past.

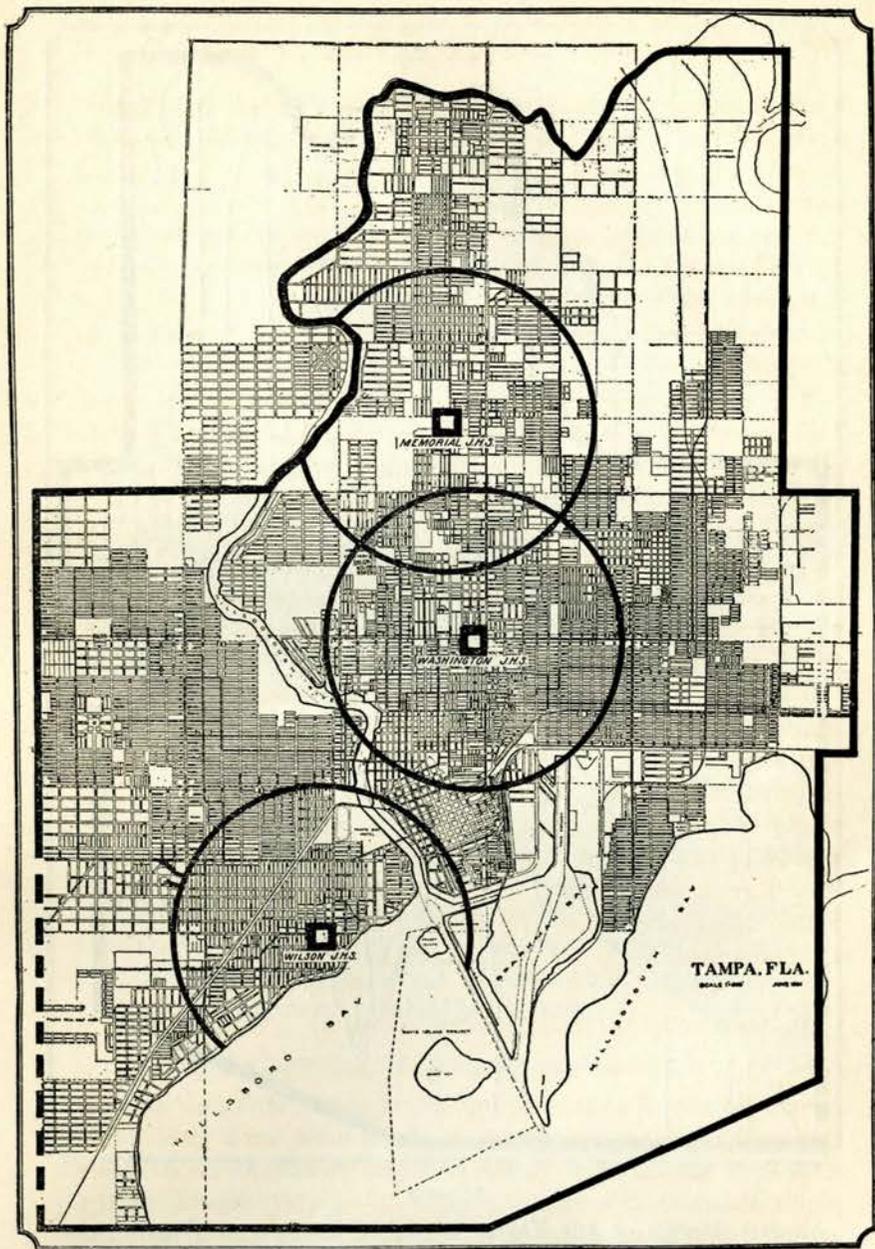
The present congestion in the junior high schools is so great that parents who can afford to send their children to private school hesitate to send them to these congested centers. As junior high schools are built, this condition will no longer exist.

As is pointed out in the study of child accounting, there are large numbers of children in elementary school who ought to be doing junior high school work. With better promotion and classification standards, enrollments in the junior high schools will increase considerably.

The present location of the junior high schools is shown on Map 1. On this map, circles have been drawn with a mile radius and with each of the junior high schools as a center. The areas included within these circles are those sections of the city which would be adequately served by the present junior high schools, providing the buildings satisfied all junior high school needs. The Tampa and West Tampa areas which are not included within these circles are the areas in which children live who are not served by the existing junior high schools.

LONG DISTANCES TRAVELED BY JUNIOR HIGH SCHOOL CHILDREN

On Map 2 will be found the circle representing the territory served by the Washington Junior High School. The dots on this map represent the homes of the children who attend this school. A measurement of the distances from the homes of the pupils shows that a great many of them walk more than the accepted maximum distance of one mile. The children of the East Tampa, Gary, and Jackson Heights centers, as well as many from the congested Ybor section, are required to pass along heavily traveled thoroughfares in order to arrive at the Nebraska Avenue and Michigan Avenue location of this junior high school.



MAP 1
LOCATION OF PRESENT JUNIOR HIGH SCHOOLS
OCTOBER 1925

The center of each circle represents the school site. A radius of one mile has been used in describing the approximate areas served by each school.

This further indicates the need for expansion of junior high school facilities within the districts of Tampa and West Tampa.

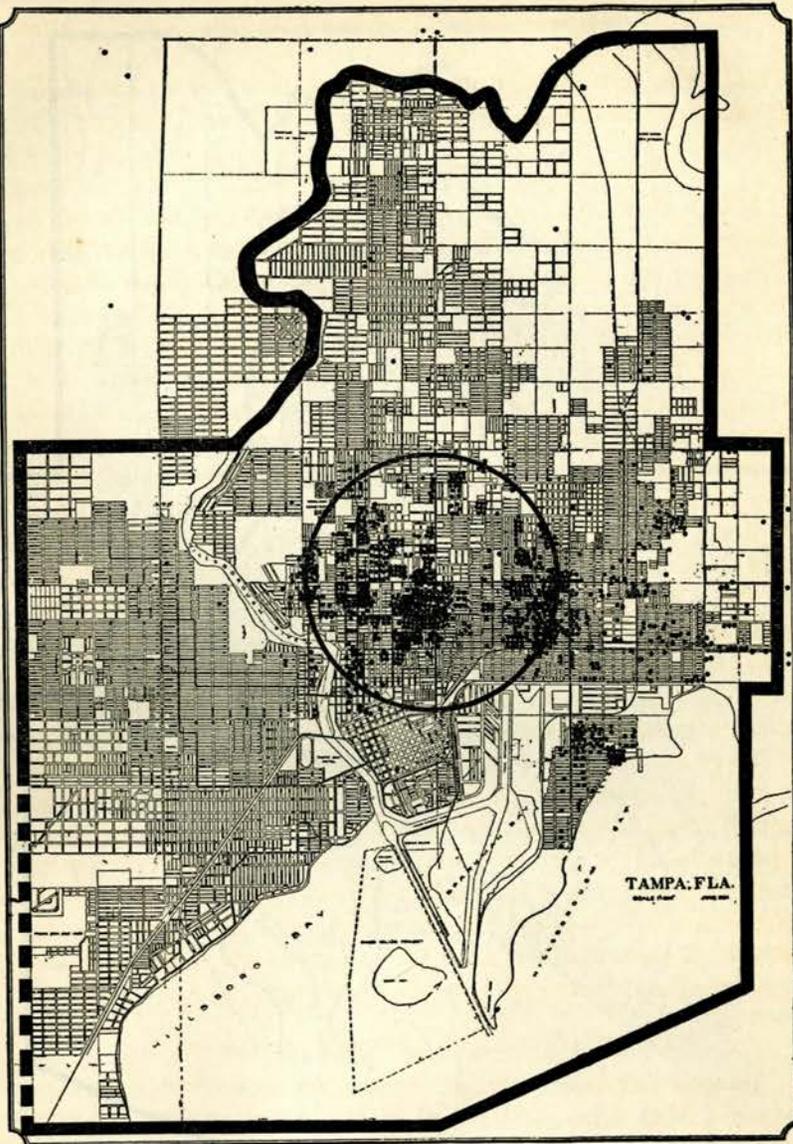
ELEMENTARY SCHOOLS FOR WHITE CHILDREN

Map 3 shows the location of the elementary schools for white children as they were in use or planned for use in October, 1925. The two-room Gordon School has not been included in this map. In each case, the small circle represents the location of a school. The larger circle denotes roughly the area to be served by the school. The radius of the larger circle is one-half mile. It is of interest to note that the overlapping among the elementary districts of the existing school plant, as defined by these circles, is limited to Central Tampa. This overlapping is considerably less extensive than it is in the majority of cities in the United States. In some cases, like the overlapping between the Drew and the Cuesta schools, the overlapping is not significant because of the inadequate nature of the Drew School. The most serious overlapping occurs among the Graham, Lee, Henderson, Ybor, and Madison districts. In planning the future school plant, every effort should be made to avoid overlapping of this kind, as it duplicates facilities for the same area.

There are many areas of Tampa and West Tampa not included within the circles of these nineteen schools. These areas are, in many cases, being built up very rapidly. These are the areas which should be provided with schools. In making such provision, very careful consideration should be given to such other important factors as the location of homes of the colored people, the development of through lines of automobile traffic, and the industrial and commercial trends of the city.

FAULTY LOCATION OF AN ELEMENTARY SCHOOL

To guard against errors in the location of future elementary schools, Map 4 has been drawn as an illustration of the faulty location of an elementary school building. The circular area for the Shore School overlaps the Ybor School area to a considerable extent, and also includes a very large industrial area which will tend gradually to decrease the housing facilities in this location. Two schools might have been properly located to serve adequately the enrollment now cared for in the three schools, the Ybor, the Shore, and East Tampa.

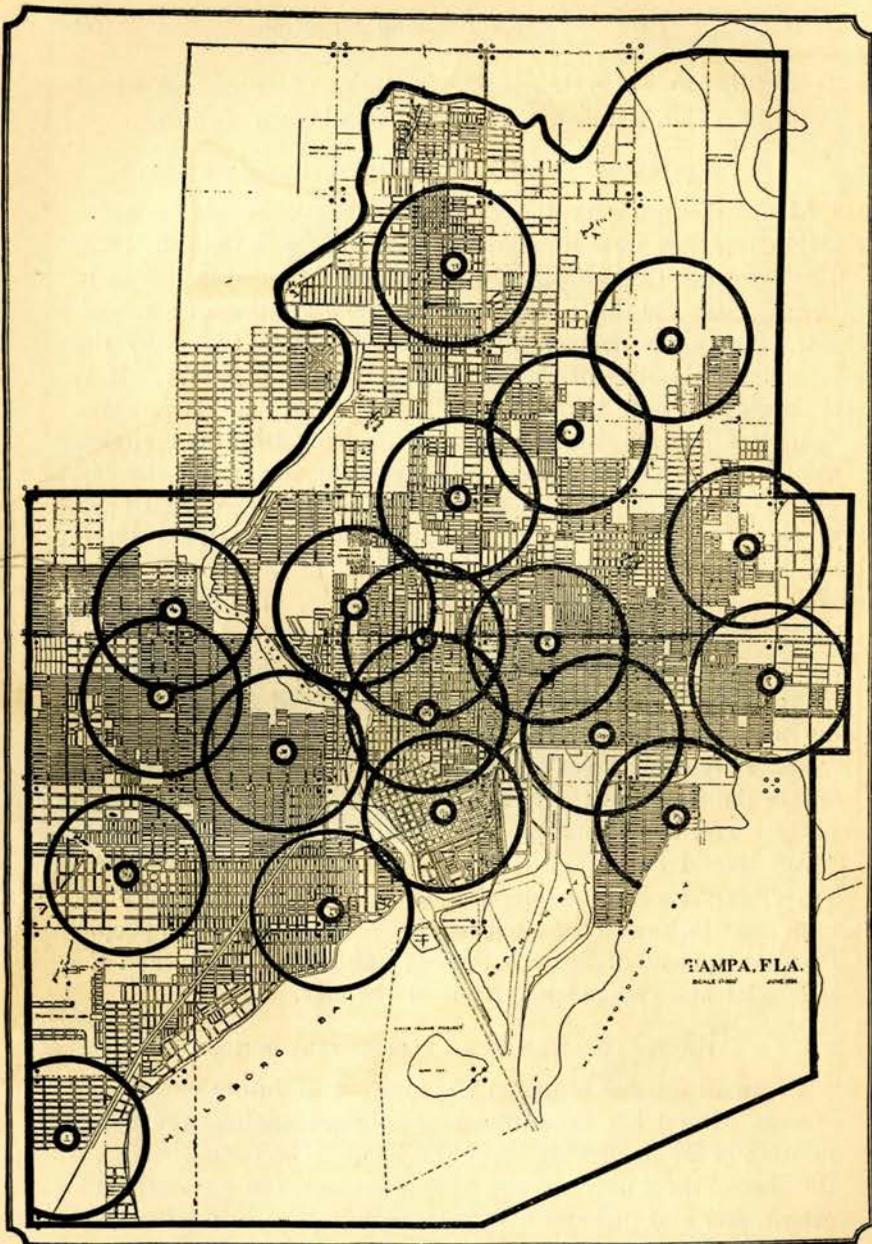


MAP 2

AN ILLUSTRATION OF THE TRAVEL DISTANCES REQUIRED OF SOME OF THE JUNIOR HIGH SCHOOL CHILDREN ATTENDING SCHOOL TO-DAY

OCTOBER 1925

The Washington Junior High School is in the center of the circle. The dots represent the homes of the children attending this school. The radius used is one mile, indicating that many children in the east and southeastern parts of the city are required to travel unreasonable distances to school. In making this study, similar maps have been made for each school in the city and have been used as one of the bases for developing the recommendations included in this study.

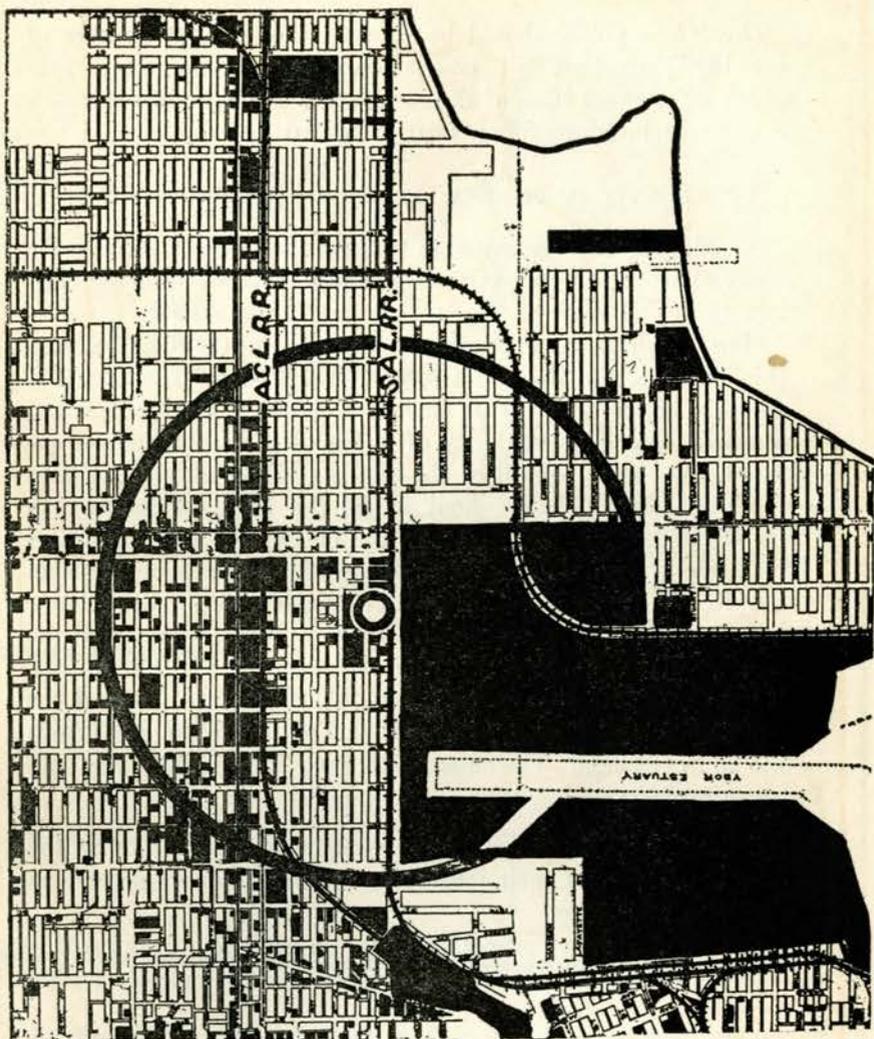


MAP 3

LOCATION OF ELEMENTARY SCHOOLS AND THE DISTRICTS THEY SERVE

OCTOBER 1925

The larger circles define the districts. They are drawn with the schools as centers and with a one-half-mile radius.



MAP 4
 THE FAULTY LOCATION OF AN ELEMENTARY SCHOOL
 OCTOBER 1925

In planning new school buildings, the effort should be made to select sites which are centralized with reference to the present and future population which they serve. The small circle represents the location of the Shore School. The black areas represent sections of the city which have been non-residential in nature and probably will continue to be so during the life of the city. In the future, such close proximity of non-residential areas to school sites should be avoided.

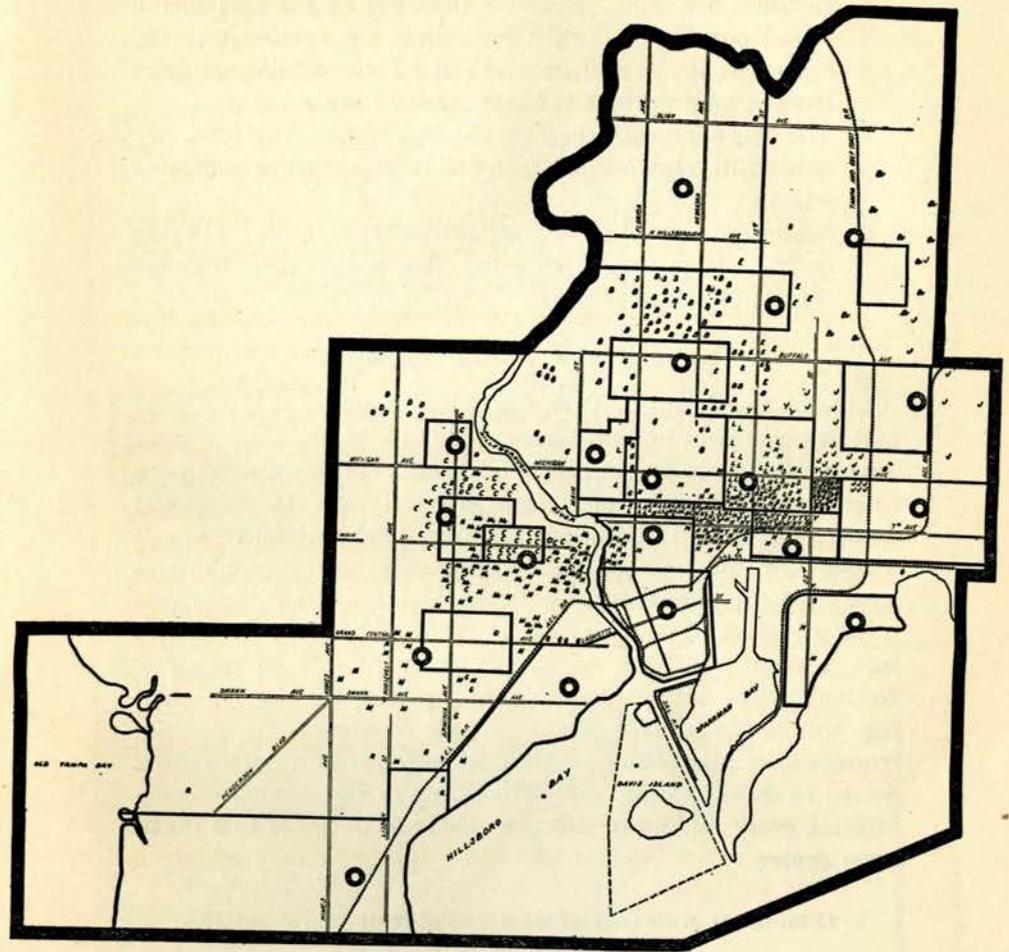
The future policy should be to erect the smallest number of school buildings that will serve adequately the community. This means a better selection of sites and larger school buildings rather than small buildings upon poorly located areas.

IRREGULARITY OF PRESENT ELEMENTARY SCHOOL DISTRICTS

On Map 5, the variation in size of the present elementary school districts and the extreme distances traveled by many children to attend some of the schools have been shown.

Map 5 is drawn to illustrate the character of the districts from which each school draws its pupils. Each school has been enclosed in heavy lines. This enclosure defines a pupil-residential area from which the majority of pupils attend the school so enclosed. For example, all of the pupils residing within the lines which enclose Madison School attend the Madison School. In the Henderson district, however, the cluster of "M's" indicates the residences of pupils who attend the Madison School, although they live in what is logically Henderson territory. Each letter throughout the entire map stands for five pupils who attend the school assigned to that letter in the legend. For illustration, in the district in which the greater number of pupils attend the Buffalo School, there are ten pupils who go to Edison, and fifteen who go to Graham. The outstanding facts indicated by this map are as follows:

1. The areas from which the elementary schools draw the major part of their respective enrollments vary greatly in size and shape.
2. The elementary school buildings do not adequately provide for the pupils residing in territory that is logically within their districts.
3. Because of poor organization or improper location of buildings, or both, some elementary schools are situated at the boundaries of the districts they serve, if not quite outside of them; viz., Bryan, Cuesta, MacFarlane, and Mitchell.
4. There is much overlapping of the areas served by the elementary schools.
5. Pupils frequently walk past one school on their way to another.



MAP 5
 IRREGULARITY IN SIZE AND SHAPE OF DISTRICTS OF PRESENT ELEMENTARY
 SCHOOLS
 OCTOBER 1925

The small circles represent the school buildings serving the outlined districts in which they are found. Initials have been placed on the map representing individual schools. Each letter so placed represents five children located outside the district of the school which they attend. The intermingling of letters shows how impossible it has been to establish definite school district lines.

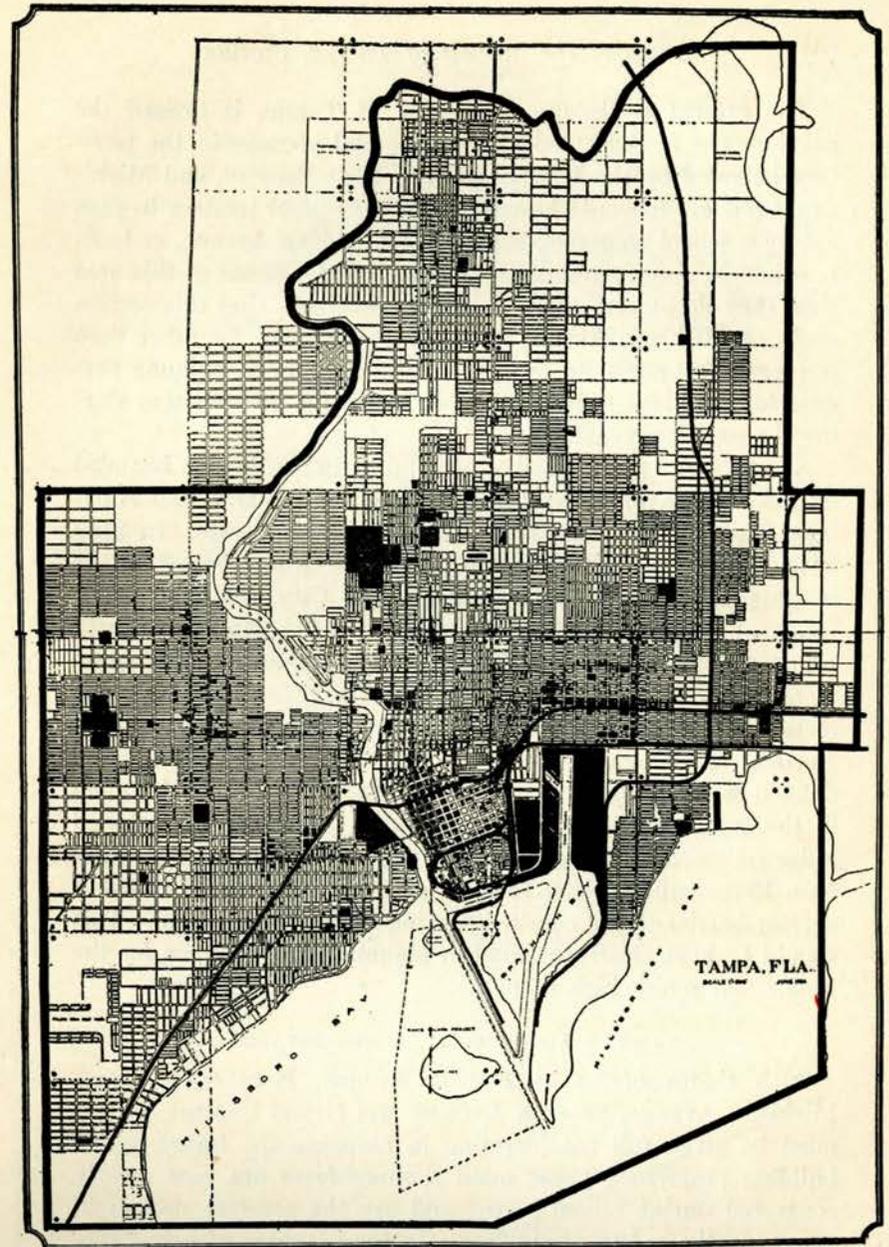
6. In Central Tampa, there is a tendency on the part of the school population to drift back from the northeast to the older schools, indicating that the school building program has not keep up with the movement of the population.
7. The facts indicate that the administration has been unable to develop a consistent policy of assigning pupils to schools.
8. A large number of elementary school children are still being drawn away from residential districts to the business centers to attend school.

TAMPA'S NEW SCHOOL BUILDINGS

Late in the spring of 1925, the school trustees of Tampa let building contracts for substantial additions to the East Tampa, Jackson, Mitchell, Wilson, Blanche Street, and Seminole schools. Contracts for the following new schools were also let: Memorial Junior High School, Bryan School, Edison School, and Roosevelt School. At the time of this writing, some of these additions have been completed, and the Bryan and Roosevelt schools are being occupied. Upon the completion of all of these new buildings, a child will have registered for every seat so provided. Not only will these new buildings be crowded, but the old buildings will not be relieved of any of their congestion. The school trustees have also planned additional play facilities at the Ybor School to make possible the platooning of this school, thereby utilizing every facility of this congested school center to a maximum degree.

INDUSTRIAL AND COMMERCIAL DEVELOPMENT IN TAMPA

Map 6 shows the areas in Tampa which are devoted to industrial and commercial purposes, together with such other areas as parks, cemeteries, and school grounds which probably never will revert to residential use. The non-residential areas in Tampa and West Tampa are shown in black on this map. These black areas represent the industrial and commercial housing as well as other non-residential areas as of July 1, 1925. The largest in-roads of industry and commerce into residential and school areas have been in the districts of the Madison School and the Henderson School.



MAP 6
INDUSTRIAL AND COMMERCIAL TRENDS IN TAMPA
 OCTOBER 1925

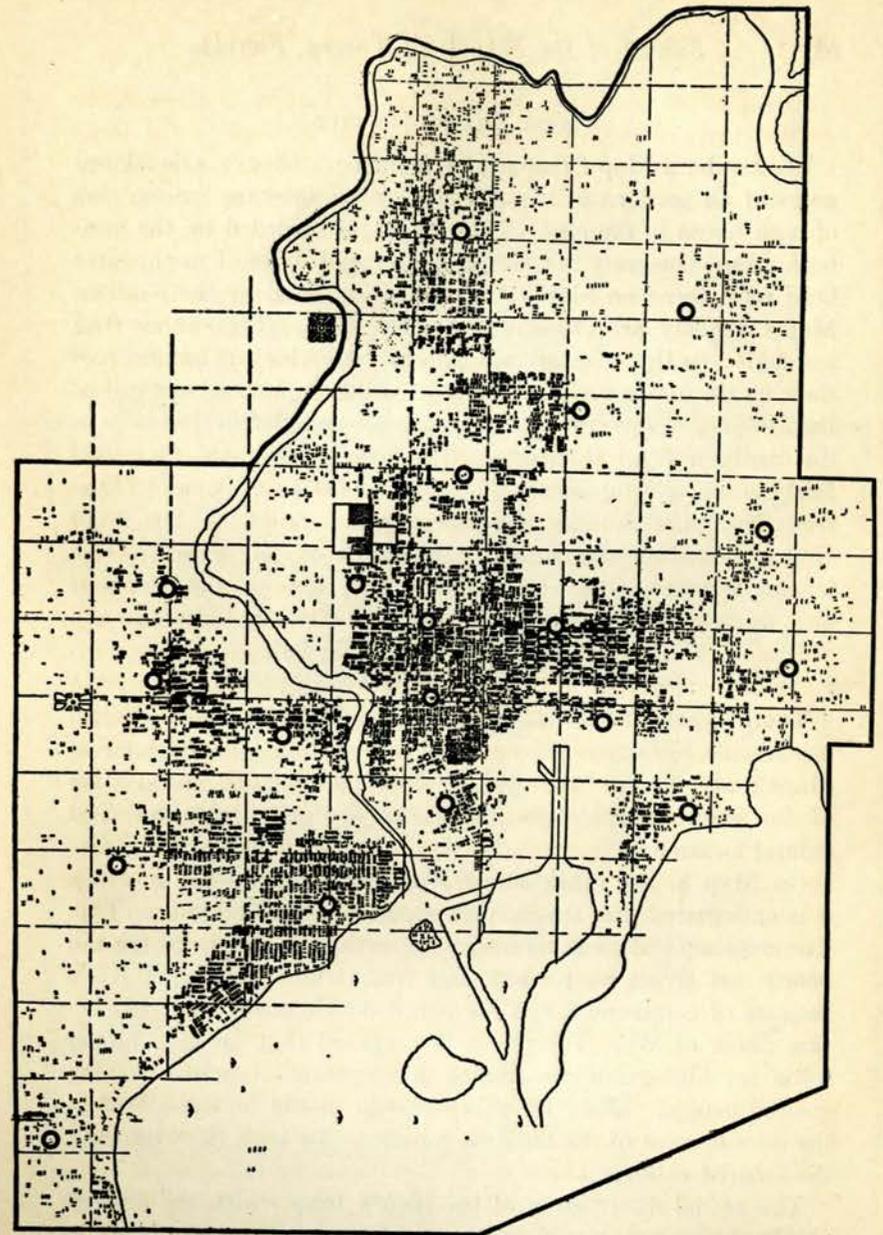
All of the black areas are areas that will probably never be devoted to residential purposes. These black areas do not require school buildings. The marked tendency is toward the complete development of the section south of Ross Avenue and Michigan Avenue for commercial and industrial purposes.

The present tendency in the city of Tampa is toward the development of industrial and commercial sections in the territory bounded by the Hillsboro River, Ybor Estuary, and Michigan Avenue. It would be unwise for the school trustees to plan any new school construction south of Michigan Avenue, as business houses may eventually take over larger sections of this area than they do at present. The further evidence that this section south of Michigan Avenue is being appropriated for other than residential purposes exists in the small number of building permits for dwellings which have been issued for this territory during the past few years.

As years go on, the number of children in the section bounded by Michigan Avenue, Nebraska Avenue, the Estuary, and Hillsboro River will decrease, and probably at a rapid rate. In Ybor City, the expansion will be toward the north and east. As the housing conditions are improved in Ybor City, the child population of this section of Tampa south of Michigan Avenue will also tend to decrease. Another promising industrial and commercial development for Tampa and West Tampa lies in the section bounded by the Hillsboro River, Willow Avenue, Grand Avenue, and Magnolia Avenue. The population in the area so defined will also decrease. Thus two districts will be built up in the south central section of the city. The commercial and industrial sections lying at the southern extremity of the Hillsboro River will continue to grow and will offer in the future a greater barrier to the children passing to and from school. This should be kept clearly in mind in planning the programs for the junior and senior high schools.

TAMPA'S AUTOMOBILE THOROUGHFARES

Such thoroughfares as Florida Avenue, Nebraska Avenue, Michigan Avenue, Seventh Avenue, and Grand Central Avenue must be given full consideration in planning the future school building program. These main thoroughfares are now greatly congested during school hours, and are the greatest sources of danger to the safety of children. In the planning of new structures, every effort should be made to locate schoolhouses so that a minimum number of children will be required to cross these thoroughfares. This will result in irregular school districts for the city of Tampa.



MAP 7
ALL OF THE HOMES IN THE CITIES OF TAMPA AND WEST TAMPA
FEBRUARY 1925

Data for sections within the municipal boundaries taken from the Sanborn Map used by the Insurance Underwriters. Other data taken from the child distribution maps of the school districts. In planning school buildings, this residential development is contrasted with commercial and industrial development already shown.

WHERE THE PEOPLE LIVE

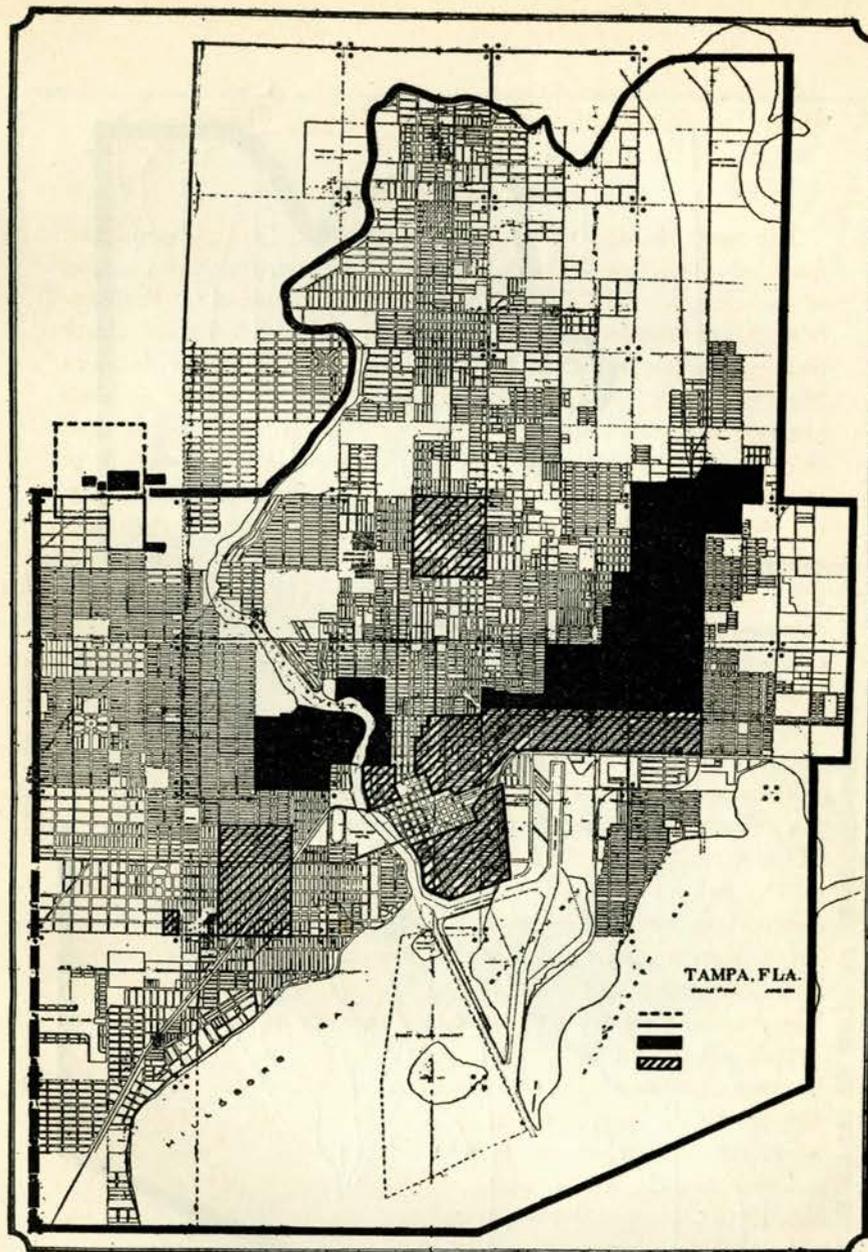
The Sanborn Map Company of New York City has developed maps of all sections of the city of Tampa showing the location of each house in the city. These facts, as recorded by the Sanborn Map Company for both Tampa and West Tampa, have been reproduced on Map 7. The data recorded by the Sanborn Map Company are those of February, 1925. The survey staff has added to this map certain information which it has secured showing the location of the homes of children in those sections of Districts No. 4 and No. 45 which were not included in the study of the Sanborn Map Company. This composite map, therefore, fairly accurately represents the present location of homes in Districts No. 4 and No. 45. On this map are shown also the small circles indicating the present elementary school centers. This exhibit is presented that the reader may get an impression of how extensive the school problem is for these two districts.

RESIDENTIAL DISTRIBUTION OF POPULATION

Tampa's school building problem consists of two parts, building schools for white children and schools for colored children. Maps 8 and 9 have been used to show the approximate location of the colored population as well as its possible future residential location.

On Map 8, the black areas represent the sections in which it is anticipated that the colored population will continue to live. The crosshatched areas represent the sections in which the colored people are living at present, but from which they may move because of commercial and industrial development. In the section north of West Tampa, it is proposed that an area be set aside for high-grade residential development of homes for the colored people. All of these boundaries should be considered in the development of the building programs for both the white and the colored children.

The actual distribution of the homes from which the colored children who are attending the public schools to-day come is shown on Map 9. The areas of this map correspond somewhat roughly with the areas of Map 8. Map 9, no doubt, gives a better picture of the exact location of the homes of colored people to-day. Each dot on Map 9 represents one child attending public



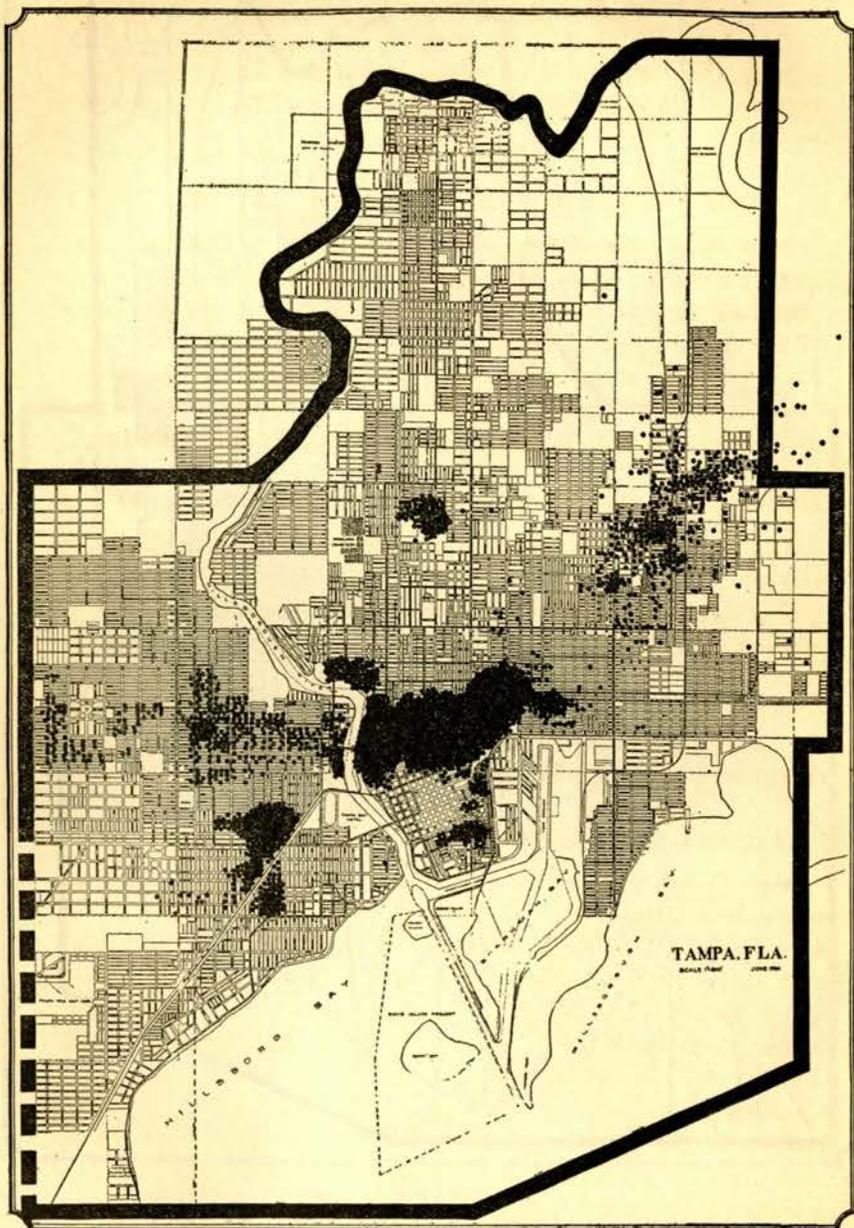
MAP 8

THE PRESENT LOCATION OF THE HOMES OF THE COLORED PEOPLE

OCTOBER 1925

Showing regions from which colored population is gradually withdrawing and prospective region for colored residential development. These facts vitally affect the building programs for both the white and the colored children. Data assembled by the Association for the Tampa Urban League.

The dotted line	= prospective development
The heavy line	= present development
The black area	= probable future areas for colored population
The crosshatched area	= areas from which colored population is slowly moving out



MAP 9

WHERE THE COLORED CHILDREN LIVE WHO ATTENDED THE PUBLIC SCHOOLS
OCTOBER 1925

Each dot represents the approximate location of the home of a colored child. The dense population in the center of the city will be vitally affected by the northerly growth of commercial development.

school. The large mass of colored population lives in a part of the city which is rapidly changing into commercial and industrial sections.

WHERE THE WHITE ELEMENTARY SCHOOL CHILDREN LIVE

Map 10 has been developed to show the location of the homes from which the white children of grades 1 to 6 come. The points of density of this map correspond closely to the points of density in maps showing the housing distribution of the city. From this map, it is clearly seen that those sections of the school districts which lie outside of the cities of Tampa and West Tampa are furnishing their quotas of children for the public schools.

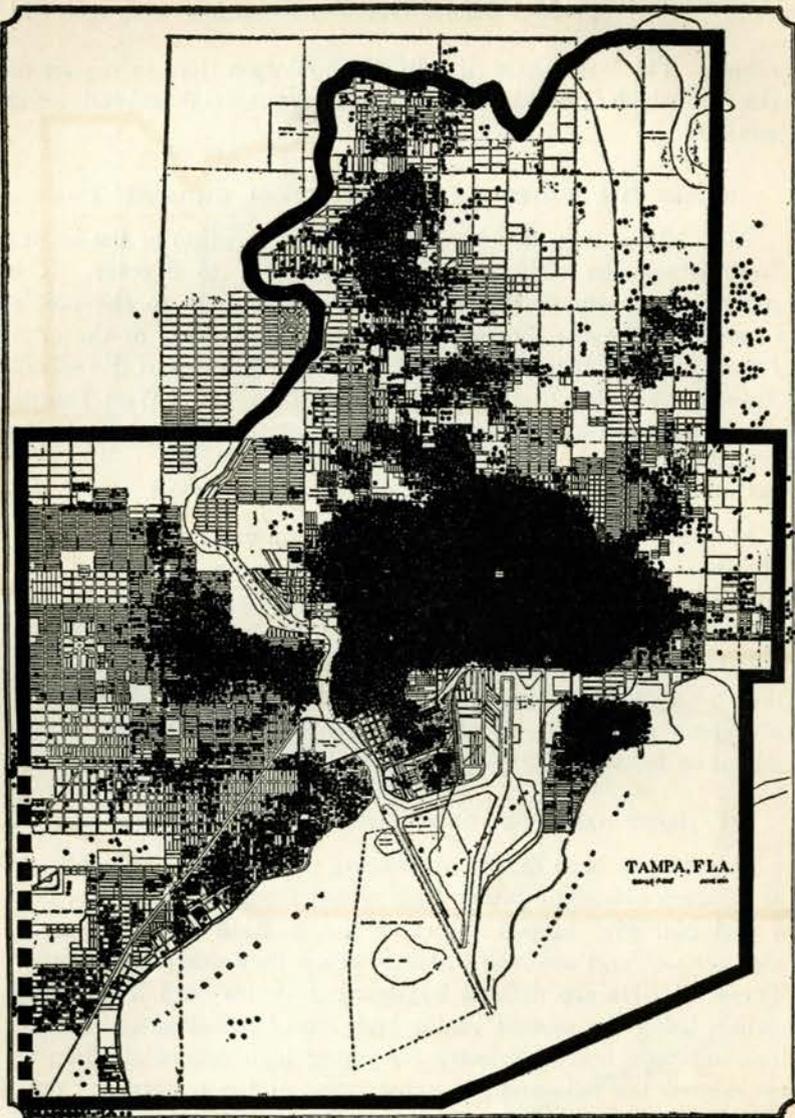
RESIDENTIAL DISTRIBUTION OF JUNIOR HIGH SCHOOL CHILDREN

Map 11 shows the residential distribution of junior high school children. Each dot represents the home of a child attending junior high school in October, 1925. All sections of the city are sending children to junior high school. If comparison is made between the distribution of elementary school children and junior high school children, it will be clear that in many sections the same proportion of children is not attending junior high school as is attending the elementary school.

GREAT NEED FOR JUNIOR HIGH SCHOOL BUILDINGS

Map 11 has been drawn to indicate the location of the homes of children attending junior high school from both districts, No. 4 and No. 45. Map 1 indicates the location of these junior high schools and also the districts which they adequately serve. These districts are defined by drawing circles with a one-mile radius, using the present junior high school buildings as centers. The one-mile travel distance for junior high school children is considered the maximum in most cities of the country. Comparison of the circle map and the dot distribution map shows that there are not enough junior high schools in the city to serve adequately the junior high school population.

It should be remembered that the present elementary school population is the source from which the junior high school enrollment comes. If comparison is made between the residential distribution of elementary school enrollment and of junior high

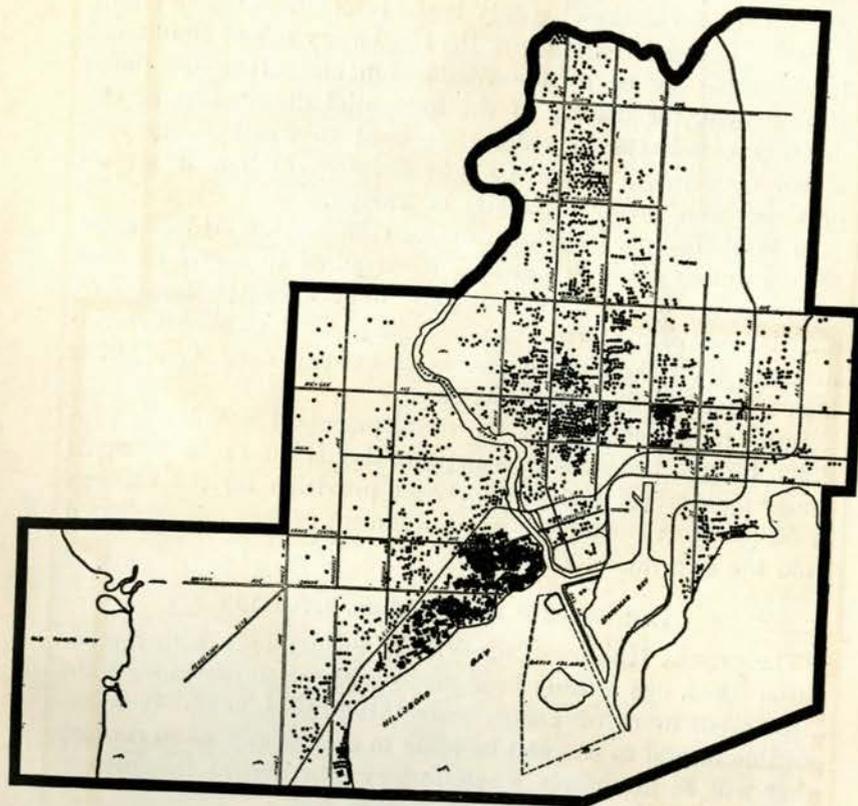


MAP 10

RESIDENTIAL DISTRIBUTION OF CHILDREN ATTENDING THE ELEMENTARY SCHOOLS OF THE CITY

OCTOBER 1925

As commerce and industry grow in Tampa, the large mass in the center of the city will tend to spread in various directions. This tendency has been recognized in the development of the new building program for elementary schools.



MAP 11

RESIDENTIAL DISTRIBUTION OF CHILDREN ATTENDING THE JUNIOR HIGH SCHOOLS

OCTOBER 1925

Contrast this map with the residential distribution of children attending the elementary schools and the senior high school. Apparently, the junior high school appeal has been limited to certain sections of the city and to a selected group of children. The effort should be made to provide high school facilities which will have a wider appeal and will draw more children into school during that period. This distribution of junior high school children should be contrasted with the circle map of the present junior high schools. The need for more junior high schools is readily apparent if all children are to be provided for.

school enrollment, it will be seen that the junior high schools do not serve equally well every part of the city. In the southwestern section of the city only is the junior high school enrollment at all commensurate with the elementary school enrollment. In the areas served by the Washington and Memorial Junior High School, the density of the residential distribution of elementary enrollment indicates the extent to which junior high school opportunity might be accepted by children if greater provision were made in the city of Tampa.

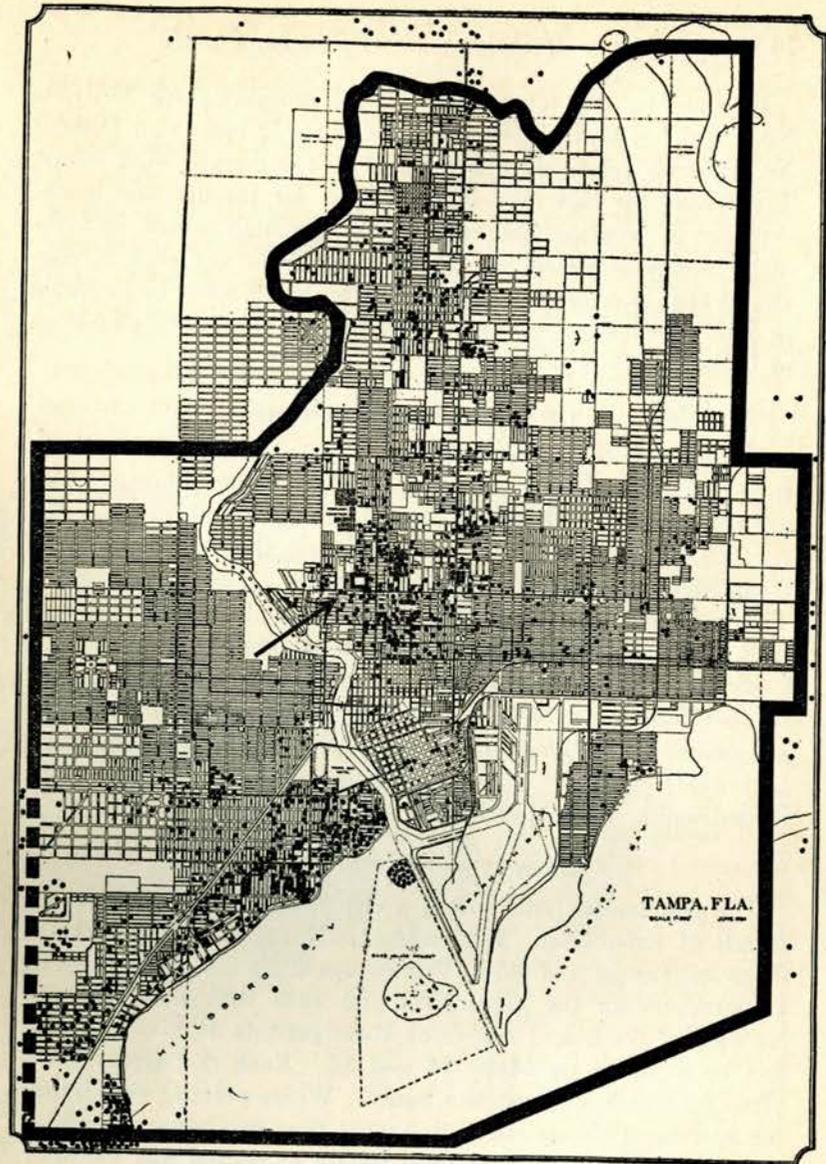
In West Tampa, large numbers of children are attending the Wilson Junior High School and are required to travel extreme distances in so doing. A comparison between the residential distributions of the elementary and the junior high school enrollments in West Tampa emphasizes the extreme need for a junior high school in this part of the city.

From the standpoint of the development of a building program, the greatest need in Tampa to-day is the extension of its junior high school facilities to make provision for the children of the present elementary school enrollment as they are graduated from the elementary schools.

THE PRESENT HIGH SCHOOL SITUATION

The present Hillsboro County High School, even with the addition which has already been made, will not suffice to meet the high school needs of Tampa after this present year. It is impossible to add to site and building in such a way as to develop what will be ultimately a satisfactory situation at this present location, except at an excessively high cost.

Map 12 has been drawn to indicate the location of the homes of the students attending the Hillsboro County High School at present. This map shows that the enrollment is divided into two distinct parts, separated by the Hillsboro River and the rapidly growing commercial and industrial area in the south-central part of the city. The evidence which has been accumulated, showing the extension of residential growth to the north, northeast and east, and to the west and southwest of the present School District No. 4, indicates the trend of residential development away from the centralized business section of the community. This trend is naturally affected by automobile transportation and the availability of sites for homes.



MAP 12
PRESENT LOCATION OF THE HILLSBORO HIGH SCHOOL
INDICATED BY ARROW
OCTOBER 1925

Each dot represents the home of a student attending this high school. The residential distribution of these high school students is broken into two parts by the Hillsboro River and the rapidly developing commercial and industrial section lying in the south-central part of the city. It is unwise to add to the congestion of the commercial section by sending high school students back and forth through this region. The high school enrollments are increasing to the point where two buildings are necessary, one for the eastern section of Tampa and one for the western section.

In planning the future high school provisions for Districts No. 4 and No. 45, the facts should be borne in mind that District No. 45 sends relatively few children to the present high school. The reason for this may be accounted for through the inconvenience of location, the crowding in the high school, and the social problems which are involved. The survey staff is convinced that two separate high school buildings must be provided to care adequately for the advancement of secondary education in Districts No. 4 and No. 45.

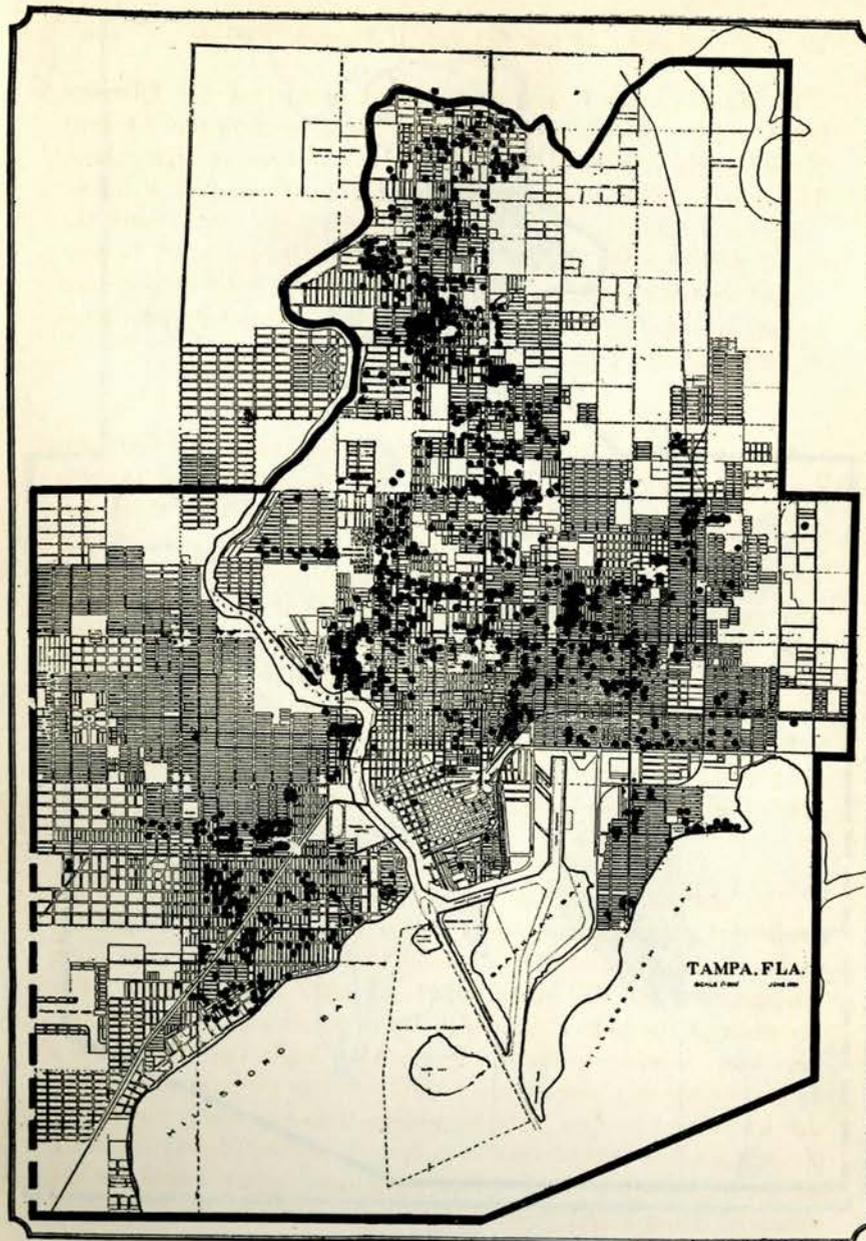
TRENDS OF GROWTH IN TAMPA

Members of the survey staff have visited many times all sections of Districts No. 4 and No. 45. The number of homes which are being built in all of the vacant sections of both of these districts is evidence that in a relatively short time no part of Districts No. 4 and No. 45 will be left without some type of housing. The residential developments to the east and northeast of District No. 4, to the north, west, and southwest of Woodlawn Cemetery, and in the territory extending from Howard Avenue to Old Tampa Bay, will tend to cover the whole of these two school districts. The problem for these districts is, therefore, to provide adequate schoolhousing for all of the territory included within their boundaries.

RESIDENTIAL BUILDING PERMITS

The new homes built within a city form a good index of the trends of population. The residential building permits for the cities of Tampa and West Tampa issued by the City Building Department for the years 1924 and 1925 were secured. The location of the homes for which these permits have been issued has been shown on Maps 14 and 15. Each dot represents a home for which a permit was issued. Where permits were issued for apartment houses containing more than one home, the policy of using a dot to represent each family so housed was followed. It should be borne in mind that these permits are issued for the cities of Tampa and West Tampa only, and not for the school district. It is thus impossible to show the trend for the entire school district.

Maps 13 and 14 show the very widespread nature of the residential development in Tampa and West Tampa. In the section

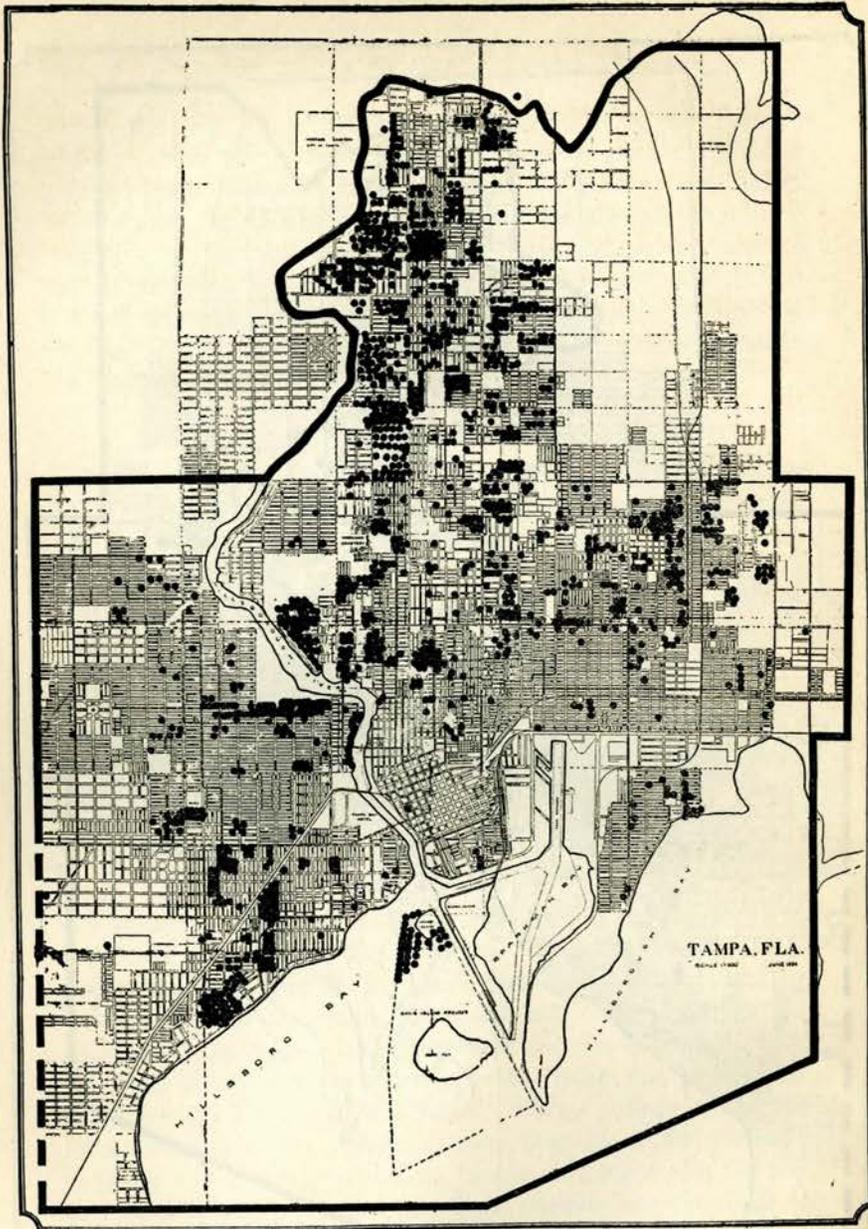


MAP 13

TREND OF GROWTH IN THE CITY OF TAMPA AS INDICATED BY THE RESIDENTIAL PERMITS ISSUED IN 1924

Each dot represents a new home built in the city in that year.

south of Ross Avenue and Eleventh Avenue, relatively few homes have been built during the past two years. A combination of the building permits issued during these two years shows a residential development of such a widespread nature as is rarely found in American cities. This emphasizes the fact that the new school building program for Tampa must take into consideration all sections of the city. It should be borne in mind also that similar residential developments have occurred in all these sections of the school districts which are not included within the boundaries of the cities.



MAP 14

TREND OF GROWTH IN THE CITY OF TAMPA AS INDICATED BY THE RESIDENTIAL PERMITS ISSUED IN JANUARY, 1925, TO OCTOBER, 1925

Each dot represents a new home built in the city during that time. The sections to the northeast and southwest represent parts of the school district not included within the city where similar home-building activity has taken place. These trends of residential growth indicate that the school building problem for School Districts No. 4 and No. 45 is no longer limited to special parts of these districts but covers the entire territory within their boundaries.

CHAPTER IV

THE PROPOSED SCHOOL BUILDING PROGRAM

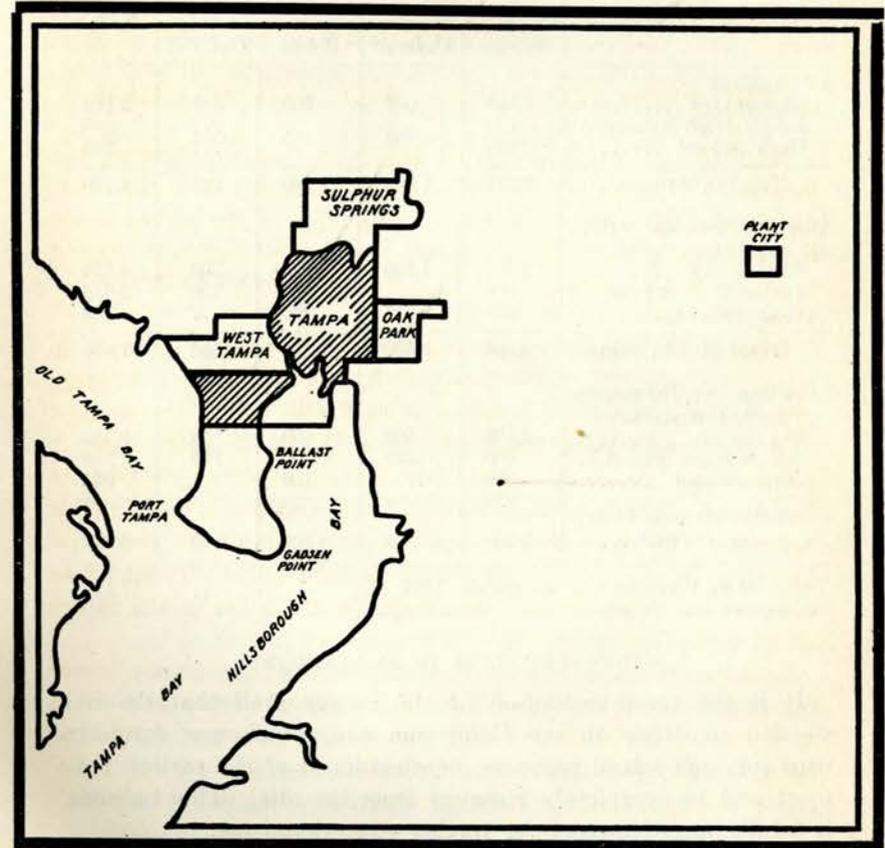
Map 15 is a reproduction of Hillsboro County, showing the location of Tampa and West Tampa with reference to the other districts of the county. In the authorization of the survey made by the county board of education, the survey staff was invited to study the educational conditions and needs in Districts No. 4 and No. 45.

District No. 4 is more extensive than the city of Tampa, as shown on Map 15. A report on a proposed school building program will include the areas of this map which are marked "Tampa" and "West Tampa." In a relatively short time, it will become necessary to include within Supervisory District No. 4 such other districts as Ballast Point, Oak Park, and Sulphur Springs. The methods employed in determining the needs for Districts No. 4 and No. 45 should be subsequently extended to discover the needs of the other districts which are in the future allied with District No. 4.

It is the opinion of the survey staff that the benefits now accruing to the school system of Tampa through the establishment of a superior administrative and supervisory program should, as soon as occasion permits, be extended at least to three other districts; namely, Oak Park, Sulphur Springs, and Ballast Point.

ESTIMATE OF THE TOTAL NUMBER OF CHILDREN TO BE PROVIDED FOR IN THE NEW BUILDING PROGRAM

In Table 5 are given the estimates of the number of children for whom new school buildings should be provided by September, 1927. These estimates are divided into three parts; namely, the total number for whom the facilities are now in arrears, the total number who are estimated as not attending school and who would be attending if proper facilities were provided, and the total number who will be added to school population due to the continued growth of the total population of these two school districts.



MAP 15

HILLSBORO COUNTY, FLORIDA, SHOWING LOCATION OF TAMPA AND WEST TAMPA
OCTOBER 1925

This study was authorized to include the Tampa and West Tampa sections of Hillsboro County. The residential expansion of these sections has been so rapid that it will be necessary to consider in the near future Sulphur Springs, Oak Park, and Ballast Point as parts of this urban educational area. In planning the school building needs of Tampa and West Tampa, the ultimate consolidation with the adjoining school districts has been taken into consideration.

TABLE 5

ESTIMATE OF TOTAL NUMBER OF CHILDREN TO BE PROVIDED FOR
IN NEW SCHOOL BUILDING PROGRAM

	TAMPA		WEST TAMPA		Totals
	White	Colored	White	Colored	
IN ARREARS					
Elementary	1,600	967	100	295	2,962
Junior High School....	634	335	...	...	969
High School	345		...	...	345
Total in Arrears.....	2,579	1,302	100	295	4,276
NOT IN SCHOOL (ESTI- MATED)					
Elementary	2,500	1,000	750	300	4,550
Junior High School....	1,000	500	900	250	2,650
High School	500		200	...	700
Total Not in School.	4,000	1,500	1,850	550	7,900
INCREASE (BY SEPTEMBER, 1927, ESTIMATED)					
Elementary	2,100	500	400	150	3,150
Junior High School....	600	300	200	100	1,200
High School	500	....	100	...	600
Total Increase to Sep- tember, 1927	3,200	800	700	250	4,950
TOTAL TO BE PROVIDED FOR SEPTEMBER, 1927.....					17,126

SCHOOL BUILDINGS TO BE ABANDONED

It is the recommendation of the survey staff that the old wooden structure on the Henderson site, which was formerly used for high school purposes, be abandoned at the earliest moment and be completely removed from the site. This building is totally unsatisfactory for further educational use.

In the program proposed, abandonment of the Gordon and Drew schools in West Tampa is also suggested. These buildings are confessedly of temporary nature, and can never be a satisfactory part of the school plant of West Tampa. They are not properly located for future school centers.

PROPOSED SCHOOL DISTRICTS FOR THE PRESENT ELEMENTARY SCHOOL BUILDINGS

No recommendations to abandon any of the elementary school buildings now existing in Tampa have been made. The lack of

planning in the past makes necessary the development of irregular school districts for the future housing of elementary schools.

Map 16 shows the future irregular districts proposed for the present school buildings. It also shows the approximate location of proposed new elementary school centers. The survey staff has not attempted to indicate the exact location of these centers. The symbols on the map merely indicate the general region in which the new schools should be located. The new elementary school centers are roughly defined as follows:

1. A new school located to the east of the Gary School and probably providing, if feasible, for children from the Oak Park district.
2. The Washington Junior High School should be retained at present for junior high school purposes, but ultimately should be made an elementary school center.
3. A new elementary school center should be planned west of Main Street, north of Ross Avenue and east of the Hillsboro River.
4. A new elementary school building should be planned to the west or southwest of the Memorial Junior High School, and east of the Hillsboro River.
5. A new school should be planned in the extreme northwestern section of the present city of Tampa. The size of this school and its location will depend upon what action is taken with reference to consolidation of the Sulphur Springs District with District No. 4.
6. A new elementary school center should be planned east of Nebraska Avenue in the northeastern section of School District No. 4.
7. A new elementary school center should be located in the section north of Yborville and west of Jackson Heights.
8. A new elementary school center should be located in the section of the city north of the Roosevelt School and southwest of the Mitchell School.
9. A new plant west of the MacFarlane School to incorporate the enrollment of the Gordon and the excessive enrollments of the MacFarlane and the Cuesta.
10. An elementary school building should be located upon a new site selected west of the Drew School.

As these new units are being developed, it is contemplated that no further significant changes will be made in the following buildings: Gary, Jackson, Ybor, Madison, Graham, Seminole, Buffalo, Roosevelt, and Mitchell. Minor changes are required at East Tampa, Gorrie, Lee, and Cuesta.

It is recommended that increased accommodations be provided at the Bryan and the Edison.

It is recommended that an auditorium be added to the Shore School.

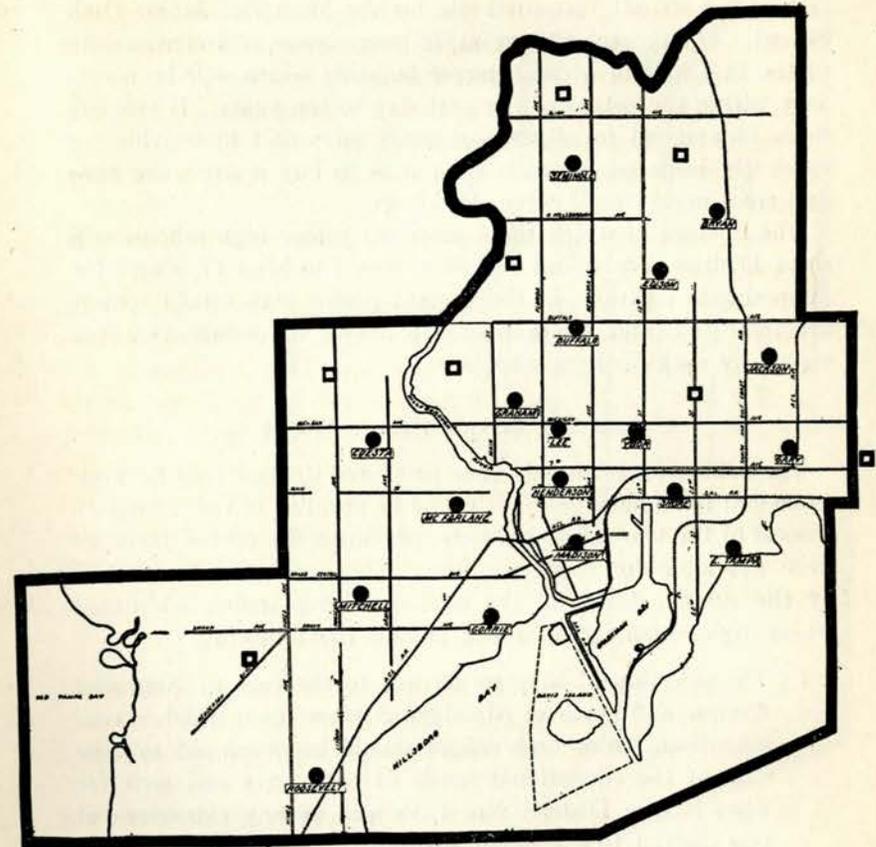
The elimination of the wooden building on the Henderson grounds is urged.

In practically all cases, it is necessary for the board of education to acquire additional land about the existing schools whenever such acquisition can be made. This is extremely important so that adequate play space will be available, as the population centers around these schools become more congested.

It is recommended that no further additions be made at this time to the MacFarlane School and the Cuesta School. The Gordon School should be abandoned. The Drew School also should be abandoned when the new unit to the west has been constructed.

NEW JUNIOR HIGH SCHOOLS PROPOSED

1. A junior high school building is recommended to serve the children of West Tampa. This should be located centrally with respect to the present total population distribution of the city.
2. A new junior high school is proposed in the northern end of the city to provide for the children of the Seminole Heights area, and possibly for the Sulphur Springs area, if this section is combined with District No. 4.
3. A junior high school is proposed northeast of the Memorial Junior High School to provide for children in the north-east section of the city.
4. A junior high school is proposed east of the Washington Junior High to provide for the children of the Jackson Heights area and for those east and south of this region.
5. When the present Hillsboro County High School is abandoned for junior high school purposes, this building should be used for another junior high school center at this point.



MAP 16

LOCATION OF THE PRESENT ELEMENTARY SCHOOLS AND THE PROPOSED ELEMENTARY SCHOOLS

Each circle represents the location of an existing elementary building. The squares represent the approximate location where new elementary units are to be planned. The heavy lines surrounding each building represent the approximate district to be served. Effort has been made not to require the passage of children across dangerous thoroughfares.

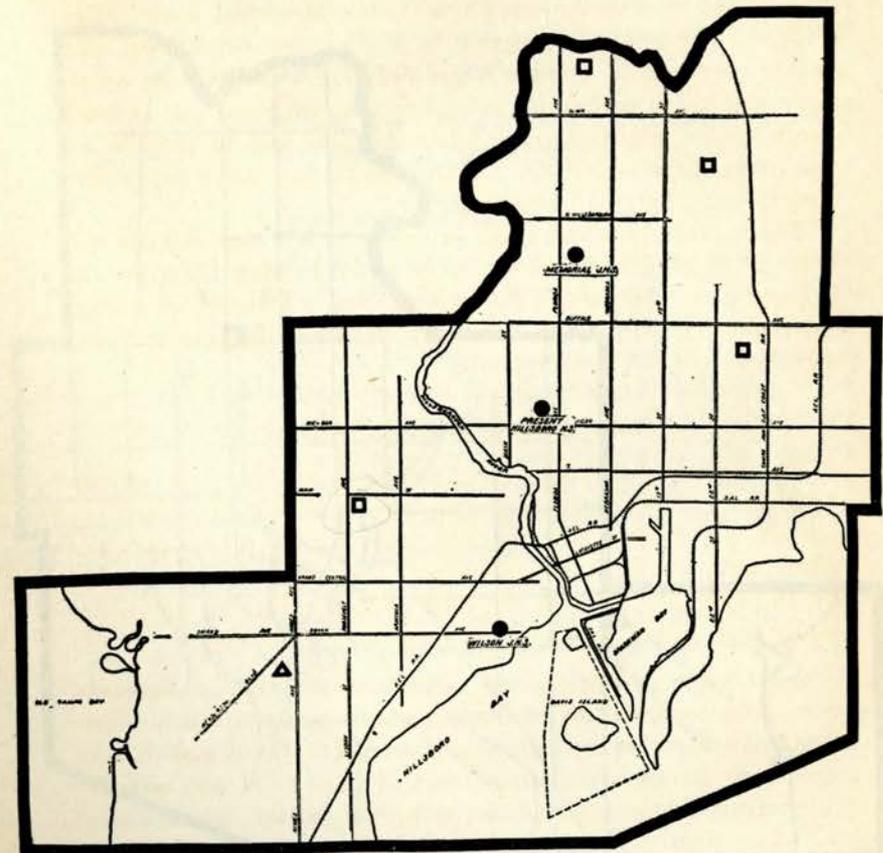
In every case, it is of the utmost importance that larger sites be bought than have heretofore been provided, with the exception of the recently acquired site for the Memorial Junior High School. The proposed program, in many cases, will consist only of the first unit of a much larger building which will be necessary within the period of the next five to ten years. It is much more economical to acquire adequate sites and to provide for relatively large school units than it is to buy many more sites and erect many small school buildings.

The manner in which these proposed junior high schools will serve Districts No. 4 and No. 45 is shown in Map 17, where the approximate locations of the present junior high school centers are indicated, and where lines are drawn to include the area served by each of these schools.

THE NEW SENIOR HIGH SCHOOLS

The evidence has already been presented to show that between 1,000 and 1,500 more children would be enrolled in the secondary schools of the two school districts, providing the proper facilities were available for these children. The conclusion is reached by the survey staff that the next step in planning additional senior high school facilities will include the following:

1. The selection of a large acreage to the east of Nebraska Avenue and north of Michigan Avenue upon which a cosmopolitan senior high school should be developed to take care of the educational needs of both boys and girls for what is now District No. 4, as well as any extensions of this district to the north and east.
2. The utilization of the present Hillsboro County High School for junior high school purposes, as soon as this provision has been made.
3. Other secondary school provisions which will ultimately care for all children west of the Hillsboro River and east of Old Tampa Bay. The building which is planned at present may be planned as a six-year school to provide for the junior high school needs of the extreme west of District No. 4 and the senior high school needs of the entire area west of the Hillsboro River. A large site is needed for this school, since it will ultimately become as large a secondary



MAP 17

THE ULTIMATE JUNIOR HIGH SCHOOL BUILDINGS

In planning the ultimate junior high school program, it is proposed to retain the Wilson and Memorial Junior High Schools for this purpose, to change the Hillsboro High School into a junior high school, to convert the Washington High School into an elementary school, to plan four new junior high school centers, and one center for a combination junior-senior high school. The hollow squares represent the new junior high school centers. The triangle represents the new junior-senior high school center.

school district as the one proposed in the eastern section of the district. It is extremely urgent that these sites be well chosen and be sufficiently adequate to care for the units built at present as well as the extensions which will be proposed as Tampa's needs grow.

Map 18 shows how these two schools are intended to serve the secondary school needs of the districts.

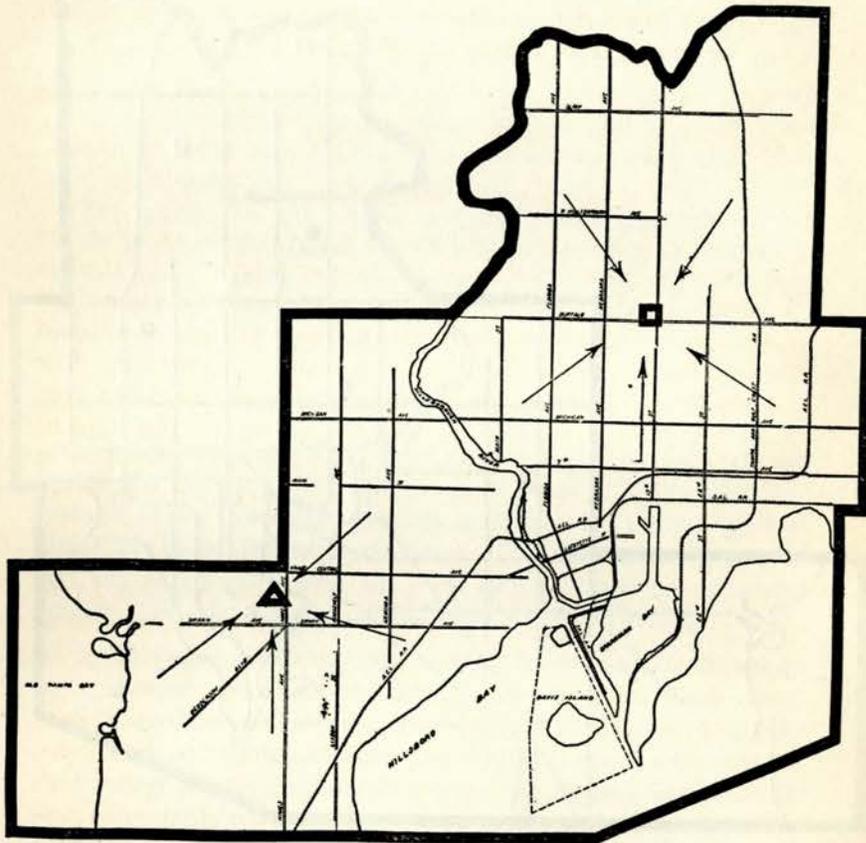
SCHOOLS FOR COLORED CHILDREN

The only satisfactory buildings for the colored children are the Blanche Street School and the Lomax School. The Harlem Academy building will be used for a considerable period but the prospect is that its use for school purposes will be discontinued through the pressure of commercial growth in this district. The Lomax School has been renovated recently and improved very much over its appearance when the survey began. The Blanche Street School has been well constructed although placed on a very limited site. This school is now very greatly overcrowded. This is also true of the other schools.

The building program for the colored children should take into full consideration the trends of development for the colored people. As each future school is planned, it should be considered as a community center which will afford the best opportunity for educational training for both children and adults.

A new site for the high school should be selected by the board of education. The program of school buildings for the colored children will include new provisions for the junior-senior high school as well as new provisions for elementary children to prevent overcrowding and to provide more satisfactory housing conditions.

Sizes of Sites Recommended.—Wherever possible, it is hoped that Tampa will follow the policy pursued in other cities, such as Atlanta and Augusta, Ga., and Charlotte, Goldsboro, Greensboro, Salisbury, and Winston-Salem, N. C., in the selection of their sites. In the cases enumerated above, these cities, in many instances, have been able to select four or more acres for elementary school, six to fifteen acres for junior high school, and ten to twenty acres and more for senior high school sites. The survey staff is fully aware of the difficulties now being encoun-



MAP 18

THE ULTIMATE SENIOR HIGH SCHOOL PROGRAM WITHIN THE PRESENT DISTRICT LIMITS

The square represents the approximate location of a new senior high school in Tampa. The triangle represents the approximate location of a new senior-junior high school in the western section of this study area.

tered in Tampa to secure ample land. Tampa, however, is building for the future, and in so building should assure itself that it is making adequate provision for the educational and play program of children.

Cost of the Proposed School Building Program.—In estimating the amount of money necessary to provide the accommodations which have been outlined above, the survey staff has been guided by the costs prevailing in Tampa and by the conditions prevailing in the building trades. The members of the survey staff have been most favorably impressed by the results that have been secured from the expenditures of the funds made available in the million-dollar bond issue of the spring of 1925. Tampa has secured more high-grade school facilities for the money expended during the spring and summer of 1925 than has been secured in most other cities where like sums have been spent. In most cities in the United States, the amount of money required to provide the accommodations needed by Tampa would be 25 to 50 per cent more than the amount it is estimated Tampa will require. Soil, climatic, and labor conditions account for this variation.

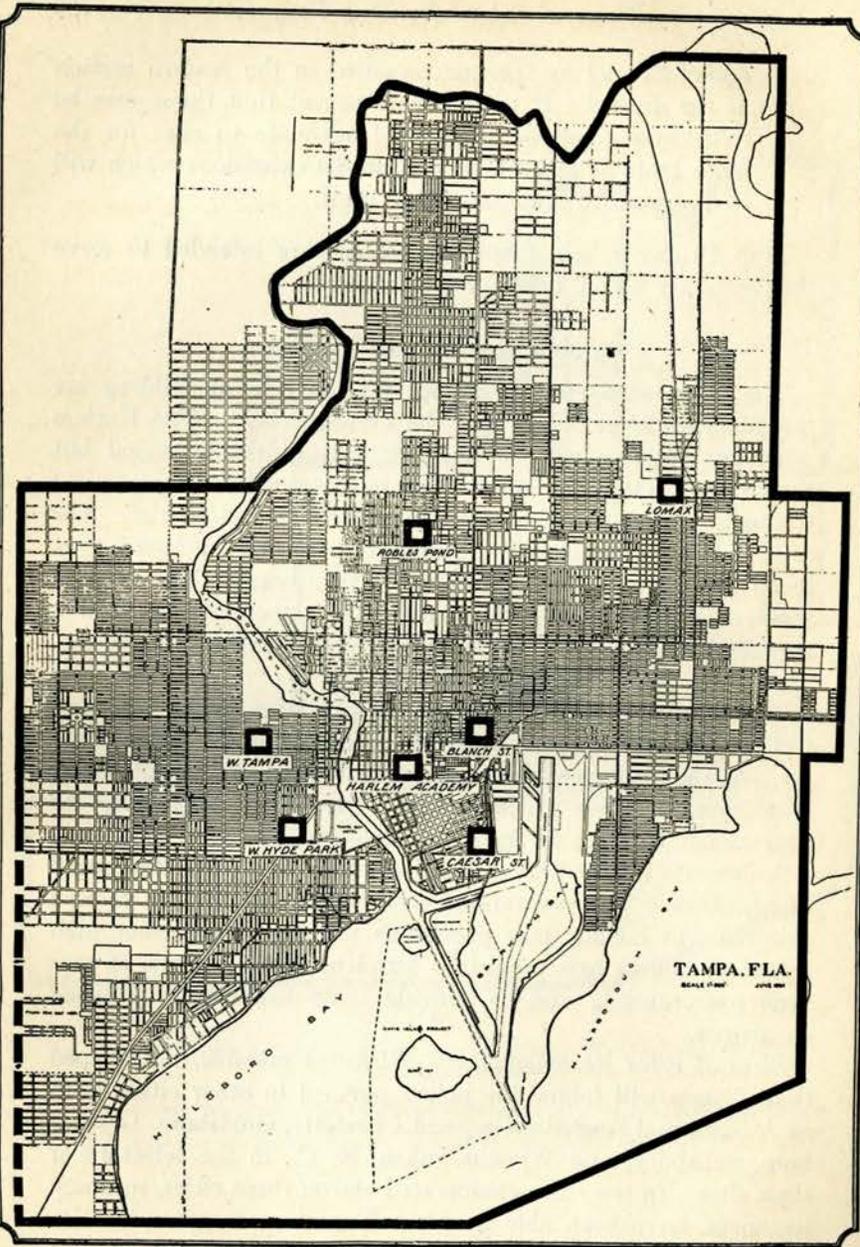
In making the estimate of costs, the numbers of children (in Tampa and West Tampa) for whom provision is to be made are stated below:

White	{ Elementary Schools	7,450
	{ Junior High School	3,234
	{ Senior High School	1,645
Colored	{ Elementary Schools	3,212
	{ Junior-Senior High School	1,485

The estimated cost of buildings, equipment, and grounds to take care of the needs of the elementary school children, as listed above, is \$2,350,000.

To provide accommodations for the senior and junior high school children listed above, the estimated cost is \$3,250,000. The total cost is \$5,600,000.

The survey staff is of the opinion that this sum should be divided so that the citizens of West Tampa will be asked to vote \$600,000 and the citizens of Tampa \$5,000,000.



MAP 19

LOCATION OF PRESENT SCHOOLS FOR COLORED CHILDREN

CHAPTER V

SCHOOL FINANCING AND SCHOOL COSTS IN TAMPA

INTRODUCTORY STATEMENT

It is the purpose of this chapter to present the facts relating to the financial problems of the Tampa schools. The discussion of these problems will be treated under four main headings: (1) The source of Tampa's school moneys; (2) a detailed analysis of school expenditures; (3) a study of Tampa's ability to finance the public school system which will include an interpretation of the cost of putting into effect the recommendations of the survey staff; and (4) a discussion of the changes in practice or in state law which are essential to the sound financing of an adequate school system in Tampa in the future.

Each of these four divisions will be treated from two points of view. First, a detailed analysis of the financial data concerning the Tampa schools for the fiscal year beginning July 1, 1924, and ending June 30, 1925. Second, a comparison of the financial situation in Tampa with that in each of nineteen southern cities of approximately the same population as Tampa. This comparative study is based upon the financial data for the year 1923-1924. No agency in the United States has yet collected financial data for American city school systems for the year 1924-1925. The only data available are for one year earlier.

SOURCE OF TAMPA'S SCHOOL MONEYS

Educational facilities for the school children of Tampa are provided through three different agencies—the Hillsboro County Board of Education, and the School Trustees of District No. 4 and of District No. 45. Elementary and junior high school education in the two districts is financed through the district trustees and the county board. Senior high school education for the children of Tampa is provided by the Hillsboro County High School. This and the vocational school are financed di-

rectly and almost entirely by the state and the county board of education.¹

The receipts of school moneys, therefore, have been analyzed into those for District No. 4, for District No. 45, for the Hillsboro County High School, and for the vocational school. Included in the receipts for Districts No. 4 and No. 45 are the amounts contributed by the state of Florida and by the Hillsboro County Board of Education.

The complete detail of this analysis is shown in Table 7 at the end of this chapter. This table shows that during the last fiscal year the schools which cared for the needs of Tampa's school children received moneys to the gross amount of approximately \$1,820,000. Of this amount more than \$1,040,000 came from the sale of bonds and from short term loans. The remainder of approximately \$775,000 represents the revenue received for the purpose of carrying on the regular educational program of the Tampa schools. It will be shown in another section of this chapter that \$600,000 of this revenue was paid out to meet current expenses and \$165,000 to carry the indebtedness which had been incurred for school purposes.

The analysis reported in Table 7 shows that Tampa's school moneys come from two types of sources. Moneys from these sources are listed as revenue receipts and as non-revenue receipts. Revenue receipts are primarily derived from public taxation and may be paid into the school treasury from the federal government, the state, the county, or directly from taxation in the local district. Other moneys, such as those derived from the issuing of bonds, the borrowing of money on short term loans, or from the sale of school property, are classed as non-revenue receipts. The total revenue receipts amounted to almost \$777,000 this past year, and the non-revenue receipts were to the amount of \$1,045,000. One million dollars of this sum was due to the issuing of bonds in that amount by District No. 4.

The percentage distribution of the revenue receipts accruing to the Tampa schools is shown in the last column of Table 7. The important relation which the county board of education bears to the city schools is clearly shown in this column. Almost a negligible amount of money is received from the federal gov-

¹The county board and the state each contributed one-third of the support to the vocational school, but the total expenditure on this school is relatively small.

ernment. Approximately $5\frac{1}{2}$ per cent of the revenue receipts, a total of less than \$42,000, comes from state funds; but the county receipts properly credited to the schools of Tampa and West Tampa were more than \$294,000, or approximately 38 per cent of all revenue receipts. This is an amount greater by \$32,000 than that derived by the local district tax of ten mills for school purposes. It is interesting to note that more than 73 per cent of the Hillsboro County Board of Education receipts are placed to the account of the Tampa schools—about 50 per cent to District No. 4, 5 per cent to District No. 45, 17 per cent to the county high school maintained in Tampa, and $1\frac{1}{2}$ per cent to the vocational school in Tampa.

Tampa's receipts of school money were compared with those of nineteen other southern cities for the year 1923-1924. The facts for this study were secured from the reports made by Tampa and by these other cities to the Federal Bureau of Education at Washington. A summary of this comparison of Tampa with the other southern cities is shown in Table 8 at the end of this chapter. It is there shown that Tampa's revenue receipts were \$175,000. According to this report the Tampa schools received $5\frac{1}{2}$ per cent of their unborrowed moneys from the federal government and from the state, practically all of this amount coming from the state. This percentage is less than the percentage of 6.7 received from these sources by the nineteen cities. During that year Tampa received 25 per cent of the unborrowed money for the local schools from Hillsboro County as compared with $29\frac{1}{2}$, the average percentage of the unborrowed receipts, which the other nineteen southern cities received from their respective counties.

ANALYSIS OF SCHOOL EXPENDITURES IN TAMPA

The system of financial accounting in use for the schools in Hillsboro County does not conform with the standard system of school accounting in general use throughout the United States. Two of the outstanding weaknesses of the present system are, first, that it does not provide for the distribution of all expenditures under some one of the eight subdivisions commonly accepted, and second, that it does not provide for the allocation of each expenditure to the building or type of school for which that expenditure is made. The first weakness of the accounting sys-

tem makes it impossible to make valid comparisons with Tampa's expenditures for school purposes and the corresponding expenditures of other cities. Because of the second weakness it is impossible to determine readily the relative cost of the educational program being offered in different buildings or in different types of schools in Tampa.

The survey staff redistributed every item of expenditure made for school purposes during the fiscal year between July 1, 1924, and June 30, 1925, and organized these expenditures in conformity with the standard system of accounting. So far as it was possible from the original vouchers, each of these expenditures was allocated to the building or type of school on whose account the expenditure was made. The facts concerning school costs in Tampa during the last fiscal year, as reported in this section, are based upon this analysis.

The biennial reports required by the Federal Bureau of Education are organized on the basis of the standard system of school accounting. Because of the lack of conformity in Tampa's system of accounting, the reports which have been turned in to the federal government have contained certain approximations and omissions. The parts of this section comparing Tampa's expenditures with those of nineteen other southern cities for the year 1923-1924 are based upon the report returned to the Federal Bureau of Education and are, therefore, not entirely accurate and authoritative as to the subdivisions of expenditure.

It may be said in passing that the adoption and use of the standard forms of school accounting in Hillsboro County would make it possible for any interested person to secure in a few hours such pertinent facts concerning school costs in Tampa as have required many days of labor on the part of trained members of the survey staff.

This section presents as nearly as is possible the complete facts concerning expenditures for public education for all of the school children of Tampa and West Tampa, whether these expenditures were made by the district trustees of one of these districts or by the county board of education on account of the educational program offered to the school children of these two districts. A proportionate share of the county board's overhead expense on account of the schools of the entire county is added to the actual expenditures of the county board on account of

the county high school, the vocational school, or the elementary schools of these two districts.

Such general charges as could not definitely be allocated to a particular building or type of school were prorated among all of the schools of the two districts. A division of these general charges between white and colored schools was made proportional to the total teachers' salaries paid to the white and colored teachers. The amount credited to white schools on this basis was then distributed to the different buildings or types of school in proportion to the average daily attendance of pupils in each such unit. In like manner, amounts credited to the colored schools were divided among the separate units on the basis of the number of pupils in average daily attendance in each unit.

A small proportion of last year's current expenses could not be allocated to a particular school building or type of school. Only 13 per cent of the total had to be prorated. Included in this 13 per cent were the salary of the supervising principal and expenses of the board of education—such charges as have to be prorated among separate schools under even the more adequate system of financial accounting.

Total School Expenditures.—During the fiscal year 1924-1925 there was a total expenditure of \$1,049,636.15 on account of the public schools maintained for the children of Tampa. The average attendance in these schools was 14,415 pupils each day. This total expenditure amounted to \$72.81 per pupil in attendance. Of this amount a little more than \$975,000 was expended on account of the 12,540 in average daily attendance in schools for white pupils. This is an average expenditure of nearly \$78 per white pupil in the elementary schools, vocational school, and junior and senior high schools. The complete analysis of total expenditures according to the purpose of the expenditure and for the white and colored pupils of each district is presented in Table 10 at the end of this chapter. This table shows that approximately \$855,000 was expended on the elementary and junior high schools of District No. 4, nearly \$102,000 on the schools of District No. 45, a little more than \$15,000 on the vocational school, and nearly \$78,000 on the Hillsboro County High School.

A study of past years shows that the total expenditure on public education in 1916-1917 was a little more than \$152,000

for a total of 7,745 pupils—less than \$20 annual expenditure per pupil. In 1920-1921 the total expenditure was about \$344,000—a total of \$34 for each of 10,193 pupils.

The last column of Table 11 shows that the total expenditure per pupil in average daily attendance in Tampa in 1923-1924 was a trifle more than \$79 as compared with \$73 during 1924-1925. This table records the total expenditure per pupil in attendance in each of eighteen other southern cities and shows that two years ago eight of them expended more and ten of them less per pupil than did Tampa.

No great importance should be attached to these facts concerning the total expenditure since they include widely varying amounts invested in school lands and buildings during the year. It is not justifiable to charge such expenditures to any single school year just because the outlay happened to be made that year. Really significant comparisons among school systems must be based upon the current expense for school purposes rather than on total expenditures.

Current Expenses for Schools.—It has been stated above that school accounting classifies all expenditures under some one of eight major heads. Six of these subdivisions are for functions essential to the actual running of a city school system. They include the expenses involved in paying teachers and janitors, in keeping buildings in repair, in running the offices of the board of education and the superintendent of schools, in providing libraries and health service, and many other services involved in providing an educational program for the school children of a city. The sum of the expenditures for these six functions is called current expense.

The two other functions of total expenditure are debt service and capital outlay. Capital outlay represents a community's expenditure for lands and buildings that it may provide adequate housing for its school children. This expenditure is an investment and not an expense. Debt service likewise is not a direct charge to the expense of providing actual instruction for school children. It is most concerned with the paying back of money which has been borrowed or paying the interest on such borrowed money. Both debt service and capital outlay tend to fluctuate greatly from year to year. For these reasons it is much more reasonable to attach importance to a detailed analysis of the

current expenses of a school system than to that of the entire expenditure of school moneys for all purposes. This is particularly true, if one be comparing a city's financial practice with that of other cities.

On page 99 is presented a diagram showing the distribution among the eight major functions of the expenditures for all school purposes. The subdivisions under each major head define clearly the group of expenditures which belong in each major function. The six subdivisions of current expenses are general control, instructional service, operation of school plant, maintenance of plant, fixed charges, and auxiliary agencies. Of the total expenditure of approximately \$1,050,000 on the Tampa schools in 1924-1925, \$601,451.89 was expended for the functions included under current expenses. Table 10, which is shown on page 123, presents a very complete analysis of the distribution of this \$600,000 among the different types of schools and also the amount expended for each of the six major divisions of current expenses.

This table shows that the current expense per pupil in average daily attendance last year ranged from \$14.30 for the colored schools of District No. 45 to \$83.19 in the Hillsboro County High School. The current expense per pupil in the elementary schools for white children in District No. 4 was \$42.57. In District No. 45 the corresponding figure was \$37.44.

One of the most interesting financial studies made by the survey staff was that of the variation in the current expense per pupil in the several school buildings and types of school in the two districts. The detailed analysis is presented in Table 11. This table shows that the current expense per pupil in average daily attendance in the elementary schools for white pupils ranged from \$34.68 in the Cuesta School in West Tampa to \$60.39 per pupil in the Gordon School in West Tampa. The heavy current expense per pupil in the Gordon School is undoubtedly due to the fact that it is so small. There were only thirty-five pupils in average daily attendance last year. The current expense in the schools for colored children ranged from \$14.30 in School No. 2 in West Tampa to \$22.87 in the Lomax School of District No. 4.

A comparison of the current expenses per pupil in the elementary schools, junior high schools, and the Hillsboro County High School shows that the amounts per pupil in average daily attend-

DIAGRAM SHOWING DISTRIBUTION OF EXPENDITURES FOR ALL SCHOOL PURPOSES

GENERAL CONTROL	FIXED CHARGES
School elections	Pensions
Board of education and secretary's office—salaries	Rents
Board of education and secretary's office—supplies	Insurance
Other expenses of business control	Taxes
Superintendent's office—salaries	Contributions and contingencies
Superintendent's office—supplies	<i>Total Fixed Charges</i>
Superintendent's office—other expenses	DEBT SERVICE
Compulsory education—salaries	Payment of bonds—direct
Compulsory education—other expenses	Payment of bonds—sinking fund
Research	Redemption of short term loans
Other expense of education control	Payment of interest—on bonds
<i>Total for General Control</i>	Payment of interest—on short term loans
	Refunds of taxes and tuition
	<i>Total Expense of Debt Service</i>
INSTRUCTIONAL SERVICE	CAPITAL OUTLAY
Supervisors—salaries	Land
Supervisors—other expenses	New buildings
Principals' offices—salaries of principals	Improvement of new grounds
Principals' offices—salaries of clerks	Alteration of old buildings (not repairs)
Principals' offices—supplies	Equipment of new buildings—heating, lighting, plumbing and electricity
Principals' offices—other expenses	Equipment of new buildings—furniture
Other expense of supervision	Equipment of new buildings—instructional apparatus
Salaries of teachers	Equipment of new buildings—other equipment
Textbooks	Equipment of old buildings—heating, lighting, plumbing and electricity
Other supplies used in instruction	Equipment of old buildings—furniture
Commencement exercises and exhibits	Equipment of old buildings—instructional apparatus
Other expense of instruction	Equipment of old buildings—other equipment
<i>Total for Instructional Service</i>	Other capital outlay
	<i>Total Capital Outlay</i>
OPERATION OF SCHOOL PLANT	AUXILIARY AGENCIES
Wages of janitors and other employees	Libraries—salaries
Fuel	Libraries—books, repairs and replacements
Water	Libraries—other expense
Light and power	Health service—medical inspection
Janitors' supplies	Health service—nurse service
General care of grounds	Health service—dental service
Services other than personal	Health service—other expense
Other expense of operation	Transportation of pupils
<i>Total for Operation of Plant</i>	Care of children in institutions
	Provision of lunches
MAINTENANCE OF PLANT	Community lectures and social centers
Upkeep of grounds (repairs)	Recreation
Repair of buildings	Other expenses
Repair and replacement of heating, lighting, and plumbing equipment	Payments to private schools and those of other civil divisions
Repair and replacement of apparatus used in instruction	<i>Total Expenditures Auxiliary Agencies and Other Sundry Activities</i>
Repair and replacement of furniture	GRAND TOTAL
Repair and replacement of other equipment	
Other expense of maintenance	
<i>Total Expense of Maintenance of Plant</i>	

ance were, respectively, \$40.07, \$50.93, and \$83.19. The attendance at the vocational school is so irregular, and each pupil attends for so short a time each week, that cost figures based on the average daily attendance would not be comparable with such figures for the other schools of Tampa. For that reason the total number of hours of instruction given in the vocational school during the past year was translated into the number of pupils in the regular day schools of the city who would have required the same number of hours of instruction during the regular school year. On this basis it was found that the teaching load in the vocational school was equivalent to the teaching load made necessary by 160 pupils in average daily attendance throughout the whole year. The total enrollment of the vocational school was actually more than 1,200. On the basis of 160 pupils, the cost per pupil in the vocational school was \$90.73 last year. As is the case in every city, the type of educational program offered in the vocational school is more expensive than that offered in other schools.

When all of the schools of both districts were grouped together, it was found that the current expense per pupil last year was \$41.72. According to the report made to the Federal Bureau of Education the current expense per pupil the year previous, 1923-1924, was \$49.42. According to these figures, Tampa's current expenses per pupil have decreased more than 15 per cent in the past year. Even the current expenses per pupil of two years ago were very low. Table 12 shows that of eighteen other southern cities nine had current expenses per pupil ranging from \$49.69 to \$70.34. (See page 126.)

Were the comparison with the eighteen southern cities to be made on the basis of the total current expense per teacher instead of on the basis of the current expense per pupil in average daily attendance, Tampa would rank two positions higher. There were seven of these cities with heavier current expense per teacher and eleven spending less than Tampa. The current expense per teacher in Tampa in 1923-1924 was \$1,571. The other eighteen cities ranged from \$919 per teacher in Pensacola to more than \$2,000 in Winston-Salem. Table 13 reports the complete detail for all of these cities. (See page 127.)

Were such a comparison to be made with cities of Tampa's size throughout the entire United States, the showing of Tampa

would be very much worse than when it is compared with southern cities only. The average current expense per pupil in American cities of more than 8,000 was \$85 per year five years ago and has been increasing slightly since that time.

Another study of Tampa's current expenses was made on the basis of the amount of money expended for each purpose or function. Of the total current expense of more than \$601,000 last year, \$42,447 was chargeable to the general overhead expense of running the school system. This amount included the expenses of the trustees of the two districts, the salary of the supervising principal and all of the expenses of the administrative staff. Included in the amount is a proportionate share of the overhead expense of the Hillsboro County Board of Education and its administrative office. This is a little less than 7 per cent of the total current expense.

Instructional service is the subdivision of current expense which always requires heavier expenditure than any other single item, or than all other items put together. The total amount chargeable to that function in Tampa last year was \$496,615, nearly 83 per cent of the total current expense. Instructional service includes all expenditures for the salaries of principals, supervisors, and teachers and also the cost of all instructional supplies. The percentage of current expense chargeable to this item is unusually high in Tampa. The facts concerning teachers' salaries in Tampa, reported in another chapter, make it clear that this percentage is high in Tampa because unusually small amounts are being expended for other functions and not because too much is being expended on teachers' salaries. That the high percentage of current expense chargeable to instructional service does not result from excessive amounts expended on principals, supervisors, and instructional supplies is indicated by the fact that only 7 per cent of all instructional service in Tampa is chargeable to these other items. As a rule 15 per cent of the expenditure for this function goes to these other items of instructional service, only 85 per cent being devoted to teachers' salaries.

This analysis of current expenses in Tampa makes it clear that the whole school system has been financed on the lowest possible level. That teachers' salaries are too low in relation to the cost of living is clearly demonstrated in Chapter XII, yet an absolute minimum is being expended upon all other functions in the city

school system. In typical American cities of Tampa's size, teachers' salaries alone are approximately 65 per cent of the total current expense. In southern cities this percentage averages nearly 70. Yet Tampa, with teachers' salaries indefensibly low, is spending 78 per cent of all current expense money for teachers' salaries.

The low level at which Tampa has financed her educational system may be demonstrated in another way. With teachers' salaries as they are it would have been necessary for Tampa to have spent \$63,000 more for the other items of current expense last year in order to have followed the practice of spending only 70 per cent of current expense money for teachers' salaries, as other southern cities do.

The total expense of operating the school plant in Tampa last year was \$39,330, or \$2.73 per pupil in average daily attendance. Two-thirds of this amount went to pay the salaries of janitors. The total cost of operating the plant is a little more than 6 per cent of the total current expense that year. Southern cities, in general, tend to spend between 9 and 10 per cent of their annual current expense budget for this item. Tampa is, therefore, operating her school plants at about two-thirds the usual cost in a southern city. The saving in fuel because of the warm climate accounts for a small part of this saving in operating costs.

Southern cities as a group spend approximately 3½ per cent of their current expense money for repairs to buildings and to school equipment of various kinds. Tampa, with a total expenditure for repairs of \$14,392 or almost exactly \$1 per pupil, used less than 2½ per cent of the current expenses for this item. As in the case of operation, this represents approximately two-thirds the usual amount expended on repairs in southern cities.

The expenditure for fixed charges, such as insurance and pensions, was a little more than \$6,000 last year, 1925—approximately 1 per cent of the total current expense. This again is a slightly smaller proportion of the total current expense budget than is usual in southern cities.

American cities, in general, tend to spend nearly 2 per cent of their current expense moneys for such auxiliary agencies as libraries, health service, school luncheons and recreation. In Tampa both the health service and playgrounds are financed by agencies other than the board of education, with the result that

an absolute minimum of public school money is expended on auxiliary agencies. The total chargeable to this function last year was \$2,363, or only 16 cents per pupil. Most other southern cities spend from two to four times as much for these important services.

As is pointed out above, the entire school system in Tampa has been financed at the lowest possible level. Teachers' salaries are so low that it requires two-thirds of a teacher's annual salary to pay for board and room alone. Yet the other expenditures on the public schools are proportionately less than those for the salaries of teachers.

A careful study of the living conditions of teachers indicates that their salaries should be twice their annual expense for board and room. On the basis of the present cost of living in Tampa, teachers' salaries should have aggregated \$620,000 last year, instead of \$465,000. If this \$620,000 were 70 per cent of the current expense budget, as is the case in the typical southern city, the total current expenses last year should have been \$885,000. This would have meant an increase of nearly 50 per cent in current expenses. Had that amount been expended, the current expense per pupil would have been approximately \$60 instead of \$42 as was actually the case. Such an expenditure per pupil would have caused Tampa to rank above three-fourths of the southern cities instead of at the middle of the group, as was actually the case.

Throughout the entire discussion of this chapter Tampa has been compared with southern cities only. It is an accepted fact that public education is financed at a lower level in southern cities than in any other geographical group in the United States. The validity of treating Tampa as a typical southern city may very well be doubted, however. With real estate values and living conditions as they now are, with a large proportion of the present population accustomed to public schools financed at higher levels than in southern cities, and with the rapid increase in Tampa's population coming in part from areas outside of the South, it may be defended as much more valid to compare Tampa with cities of Indiana, of New Jersey, or of Massachusetts. Such comparison would, of course, present Tampa in a much more unfavorable light than have the comparisons actually drawn in this chapter.

Total Cost of Public Education in Tampa.—It is entirely sound to compare city school systems on the basis of their current expenses for public education, but this should not mislead one into assuming that the current expense on account of public education represents the total cost to a community during a given year. It is true that there are included in *total expenditures* certain amounts which are *not* a part of the annual cost. The expenditure for a new school building is an excellent example of such an item. Money paid out for such a purpose is an investment. The community does not use up during the year the amount of cash thus invested. It has as much wealth at the end of the year as at the beginning, but a part of that wealth is in a different form.

On the other hand, there are elements of true economic cost which do not require cash outlay each year and which are not included in the *current expenses* for public education. For one thing, school buildings and school equipment are continually depreciating in value—a certain amount of value is worn out or actually disappears each year. This loss in value is a part of the cost to a community of maintaining a system of public education. Another element of true cost which may not be overlooked in sound accounting is “imputed interest”—a fair interest charge on the amount of capital which the community has tied up in its school plant. This capital is not available for other productive enterprises and its annual earning capacity must be charged as a part of the annual cost of public education.

When all such factors are taken into account, it is found that Tampa had to meet directly or indirectly a total charge of nearly \$750,000 last year because of the maintenance of its system of public education. This total economic cost was equivalent to \$52.35 per pupil in average daily attendance.

The complete analysis of the total economic cost of public education in Tampa last year is given in Table 14 at the end of this chapter. This table shows that the true cost per pupil ranged from less than \$18 per colored pupil in District No. 45 to more than \$111 per pupil in the Hillsboro County High School.

TAMPA'S ABILITY TO PAY FOR PUBLIC EDUCATION

The preceding sections of this chapter have presented facts concerning the sources of Tampa's school moneys and a detailed

analysis of school expenditures. It is the purpose of this section of the chapter to relate the financial facts already presented to Tampa's economic ability to support an adequate system of public education.

It has been shown that the public schools of Tampa have been financed at a very low level even in comparison with other southern cities. Were Tampa's financial effort on account of public schools to be compared with other cities of the United States of somewhat the same characteristics as to population and cost of living, the school expenses would be shown to have been very much lower relatively, than when compared with southern cities only. In the present discussion, it is proposed to ask and attempt to answer the question, “Are the economic resources of Tampa such that an adequate system of public schools can be financed without unusual or burdensome financial effort on the part of Tampa's taxpayers?”

The primary evidence required to answer this question must be secured from a consideration of the amount of taxable wealth which may be levied upon for school purposes in Tampa and in other comparable cities.

Another consideration must be whether the Tampa schools receive a fair and equitable share of the tax moneys collected for all governmental functions in the city.

A third consideration closely related to this one has to do with the tax rate levied for school purposes in Tampa and in other cities.

It is a well-known fact that different taxing areas in the several states, or even in the same state, make it a practice to assess taxable property at greatly differing percentages of the real market value of that property. It is very clear that a comparison of the assessed valuation in a city where property is assessed at 90 per cent of its real value and in a city where it is assessed at 20 per cent of its value must be entirely without validity. Any sound evidence of the relative economic ability of a number of cities to pay for governmental functions must be on the basis of the real, rather than the assessed, valuation of taxable property in these cities.

The assessment of property in Tampa is at an absurdly low percentage of its real value. A careful study² reported by the

²The Second Biennial Report of the State Equalizer of Taxes.

Florida State Tax Commission in its recent bulletin shows that taxable property in Tampa was assessed this last year (1924) at 15 per cent of its market value. With property values increasing as they are, there is much evidence to show that taxable property of Tampa is assessed at not more than 10 per cent of its real value at present. The survey staff has accepted 15 per cent, the figure of the State Tax Commission, in making comparison of Tampa's ability to pay for public schools. It is done in the full realization that this is a most conservative estimate.

The assessed valuation of Districts No. 4 and No. 45 for 1925 was \$45,062,899. Had this property been assessed at its full value, the wealth subject to taxation would have been \$300,419,326. This amount represents taxable wealth of \$21,075 back of each pupil in average daily attendance last year. Twenty-one thousand dollars per pupil may mean little to the uninitiated unless it be interpreted in terms of the corresponding wealth of other cities. Table 15 at the end of this chapter shows that the real value of taxable property in Tampa in 1924 was \$13,600 as compared with the 1925 figure of \$21,000. This table shows that in sixteen other southern cities in 1924 the range was from less than \$2,800 in St. Petersburg to nearly \$18,000 per pupil in Winston-Salem. Half of these cities report real taxable wealth per pupil of less than \$8,000. Winston-Salem was the only one of these cities whose per-pupil wealth was greater than Tampa's. In fact, Mobile and Savannah are the only other cities of the group whose taxable wealth had a real value of more than \$9,000 per pupil in 1924.

The facts just given may be interpreted as follows: Were a flat rate of \$1—or any other given amount—to be levied on each \$1,000 real value of taxable property in Tampa and in other American cities, it would last year have yielded four times as much school money per pupil in Tampa as in the typical American city and 60 per cent more than in the typical southern city.

In summary, it is concluded that a consideration of the first evidence of Tampa's ability to pay for public education presents absolute proof that Tampa is far more able to pay for an adequate system of public schools than are other American cities. It is undoubtedly true that there are not more than six cities in the United States of more than 50,000 population which have so

great an amount of real taxable value back of each pupil in the public schools.

The second consideration to be taken into account in determining the ability of a community to pay for public education is that of whether the school system is receiving a fair and equitable share of the tax moneys being collected for all local governmental purposes. With school accounting and municipal accounting done as they are in Tampa, it was difficult to determine very accurately the financial relationship of the schools to all of the municipal functions. With the two separate school districts, No. 4 and No. 45, having boundaries not so coterminous with those of the city and with the very recent fusion of the two cities of Tampa and West Tampa into a single municipal unit, it has been found practically impossible to relate the current expenses of the city government to the current expenses for public education. The relationship between the total expenditure of the city and of the total expenditure for the school was obtained. It was found that this figure for all municipal functions was \$3,535,727.50 and for the schools it was \$1,049,636.15 in 1925. In other words, the total expenditure upon the schools and the municipal government was nearly \$4,600,000. This means that 23 per cent of the total expenditure for both functions was devoted to public education and 77 per cent to municipal governmental functions.

Not all of this amount came from local taxes in the case of either the schools or the municipality. If both the schools and the city received the same percentage of the total moneys they expended from sources other than local taxation, this figure of 23 per cent would represent the part of each tax dollar devoted to the schools. If the schools received the larger proportion of all moneys expended from sources other than local taxes, as was probably the case, it would follow that *less than 23 cents* of each tax dollar was devoted to the schools in Tampa last year. A study continued through five years in many American cities indicates that the typical city of Tampa's size devotes from 30 to 45 per cent of local taxes to the public school system of the city. The average percentage for southern cities of Tampa's group was 31 five years ago.³

This evidence that Tampa spends upon the public schools only

³ Report of the Survey of the Public School System of Atlanta, Georgia. Division of Field Studies, Institute of Educational Research, Teachers College, Columbia University. Vol. II, p. 96.

20 or 25 per cent of each dollar collected in taxes is additional evidence that the public schools of Tampa are being financed at the lowest possible level. It seems to justify conclusions based upon a study of relative school expenditures in comparable cities—that Tampa should be spending from one-third to one-half more annually for public education if it is to provide adequately for its school children.

Additional evidence that the public schools of Tampa make necessary only 20 per cent of the financial effort being put forth by the taxpayers of the city is found in the fact that the net indebtedness for school purposes is only 19 per cent of the total municipal indebtedness.

A third measure of a city's ability to support public education is to be found in the tax rate which is levied for school purposes. As in the case of discussing the economic wealth back of each pupil, it is necessary to adjust school tax rates to account for the varying percentages at which taxable property is assessed in different cities. It is clear that a tax rate of \$1 on property valued at 50 per cent of its full value is equivalent to a tax rate of 50 cents on property assessed at full value. Table 15 at the end of this chapter shows the actual school tax rate levied on assessed values in Tampa and in sixteen other southern cities in 1924. In a parallel column this table reports each of these rates when adjusted on the basis of a 100 per cent assessment of taxable property. It is shown that these *real* school tax rates range from 30 cents in Savannah to \$1.28 per \$100 of real market value of taxable property in Miami. Only two of these cities, Savannah and Winston-Salem, had school tax rates lower than Tampa's rate of last year.

The figures just reported were for the year 1924. During the year just ended the school tax rate in Tampa was equivalent to \$2.23 per \$100 of assessed valuation. This amounts to the 10 mill local tax for current expenses, the 5 mill tax to care for indebtedness and 73 per cent of the 10 mill county tax, since it was shown earlier in this chapter that 73 per cent of the state and county funds coming to Hillsboro are expended upon the Tampa schools. Accepting the Florida State Tax Commission's figure of 15 per cent, this school tax rate of \$2.23 on each \$100 of assessed valuation was equivalent to only 34 cents per \$100 of real valuation of taxable property. To have increased school

expenditures by 50 per cent last year would have given Tampa a real rate for school taxes of only 50 cents on a hundred dollars. It will be noted that only three of the sixteen southern cities had a real tax rate for school purposes as low as 50 cents in 1924.

COST OF THE PROPOSED BUILDING PROGRAM

In another chapter of this report the survey staff has recommended the issuing of bonds in the amount of \$5,600,000. Table 16 at the end of this chapter presents a proposed schedule for paying off these bonds during the next thirty years. With interest at 5 per cent it would require approximately \$360,000 per year to pay principal and interest. On the assessed valuation of 1925 this added expenditure would require an additional tax of 8 mills. Since this assessment was not more than 15 per cent of the real value of the taxable property, the financial burden of carrying this additional investment would be only 12 cents a year on each \$100 of real value. As the wealth of Tampa increased, the 12-cent additional tax would be cut proportionally.

This discussion of Tampa's ability to pay for public education has attacked the school finance problem from three somewhat different points of view and in each case is presented evidence that Tampa is entirely able to finance the public schools on a very much higher level than has yet been done.

OUTSTANDING SCHOOL FINANCE PROBLEMS IN TAMPA

The preceding sections of this chapter have presented conclusive evidence that the schools of Tampa have been financed with the least possible expenditure in spite of the fact that unusually great economic resources are available for taxation. Two or three times as much money could be invested in public education each year without making the real tax burden of Tampa citizens greater than this burden already is in many American cities. Other chapters of this report of the survey staff present conclusive evidence of the need of greatly increased expenditures. The obvious solution which at once presents itself is that Tampa should accept its full responsibility to the children of the community and take steps to increase substantially the amount of money available for public education. This solution, obvious though it may be, is not so simple or practicable as it may seem.

There are two ways of securing increased funds for public education in Tampa. The acceptance of either method would secure the proposed result—larger funds for school purposes. One method is to increase the percentage of the real value of taxable property at which that property is assessed. The second is to increase school tax rates on present assessments. The practical objection to the first solution of the problem is that state taxes are collected on the basis of the same assessment upon which local school taxes are levied. To double the percentage of the assessment, with state tax rates remaining as at present, would automatically double the amount of money available for public education, to be sure, but at the same time it would double Tampa's contribution to state tax funds. The first problem faced in this connection, then, is to determine whether a considerable increase in Tampa's state taxes would be fair to the citizens of Tampa, or whether it would result in taxing them disproportionately as compared with the taxpayers of other communities of the state.

The Second Biennial Report of the State Equalizer of Taxes, dated 1923-1924, reports the assessed valuation of the taxable property in each county in Florida in 1925 and the percentage which that assessment was of the real value of this taxable property.⁴

A study of these percentages shows that there were 55 of the 63 counties in Florida in which taxable property was assessed at a higher percentage of its real value than it was assessed in Hillsboro County. Half of the counties of the state had their taxable property assessed at more than 24 per cent of its real value, as compared with 15 per cent for Hillsboro County, according to the data given in this state report. Looking at the problem superficially, it would seem that it is only fair to increase the percentage of assessment in Hillsboro County up to at least 25 per cent of its real value, since half of the counties are assessed at a percentage as high or higher than that. A careful analysis of the state equalizer's report, however, shows that such an increase would really be unfair to Hillsboro County. *The seven counties assessed at a percentage of real valuation lower than that of Hillsboro County possess almost exactly half of all real taxable wealth of the state.* These seven counties contain the

⁴*The Second Biennial Report of the State Equalizer of Taxes*, pp. 198-202. Tables IV and V.

TABLE 6
REAL AND ASSESSED VALUATION OF TAXABLE PROPERTY* FOR THE STATE OF
FLORIDA, BY COUNTIES
1925

County	Assessed Valuation of Taxable Property	Percentage of Real Valuation at Which Property Is Assessed	Real Valuation of Taxable Property
Alachua	\$ 9,734,967	32%	\$30,421,772
Baker	2,081,853	63	3,304,529
Bay	2,813,741	31	9,076,584
Bradford	2,105,897	29	7,261,714
Brevard	6,738,530	13	51,834,846
Broward	6,316,474	11	57,422,491
Calhoun	2,217,531	22	10,079,686
Charlotte	1,914,917	18	9,527,317
Citrus	3,292,211	50	6,584,422
Clay	1,916,436	20	9,582,180
Collier	1,766,440	21	8,411,619
Columbia	4,010,594	44	9,114,986
Dade	37,484,581	8	468,557,262
DeSoto	3,288,815	18	18,271,194
Dixie	1,991,446	24	8,297,691
Duval	65,913,825	30	219,712,750
Escambia	14,749,350	38	38,814,078
Flagler	1,557,121	22	7,077,822
Franklin	1,894,983	25	7,579,932
Gadsden	4,686,490	30	15,621,633
Glades	1,564,341	40	3,910,853
Hamilton	2,114,040	36	5,872,333
Hardee	3,167,042	17	18,629,659
Hendry	1,989,491	36	5,526,364
Hernando	2,442,869	20	12,214,345
Highlands	3,151,878	13	24,245,215
Hillsboro	40,399,750	15	269,331,664
Holmes	2,096,073	25	8,384,292
Jackson	4,755,634	21	22,645,876
Jefferson	2,987,202	32	9,335,006
Lafayette	1,145,601	20	5,728,005
Lake	11,990,071	20	59,950,055
Lee	7,476,509	20	37,382,545
Leon	5,428,766	36	15,079,906
Levy	3,405,623	23	14,807,056
Liberty	1,133,491	35	3,238,546
Madison	3,533,231	40	8,833,078
Manatee	7,150,273	17	42,060,429
Marion	9,004,021	23	39,147,917
Monroe	5,935,590	32	18,548,719
Nassau	3,608,614	45	8,019,142
Okaloosa	2,572,048	22	11,691,127
Okeechobee	2,678,483	25	10,713,932
Orange	18,029,700	19	94,893,158
Osceola	5,363,100	25	21,452,400
Palm Beach	11,981,542	5	239,630,840
Pasco	5,186,953	42	12,349,888
Pinellas	26,223,606	11	238,396,414
Polk	23,049,714	9	256,107,933

TABLE 6 (Continued)

County	Assessed Valuation of Taxable Property	Percentage of Real Valuation at Which Property Is Assessed	Real Valuation of Taxable Property
Putnam	6,700,999	25	26,803,996
Santa Rosa	6,202,921	28	22,153,289
Sarasota	7,422,210	23	32,270,478
Seminole	3,613,561	17	21,256,241
St. Johns	6,256,735	16	39,104,569
St. Lucie	5,977,659	19	31,461,363
Sumter	3,234,266	27	11,978,763
Suwannee	4,703,914	44	10,690,714
Taylor	4,197,047	30	13,990,157
Union	1,710,666	40	4,276,665
Volusia	22,606,846	20	113,034,230
Wakulla	1,013,529	44	2,303,475
Walton	3,444,752	28	12,302,686
Washington	2,026,491	24	8,443,712
GRAND TOTAL	\$475,153,054	17%	\$2,864,751,543
Median		24%	

* Based on data from *Second Biennial Report of the State Equalizer of Taxes*.

large cities of the state. This state report shows that property is assessed at a much higher percentage of its value in the smaller and poorer counties.

Table 6 is a summary of Tables 4 and 5 of the state equalizer's report. It presents for each county of Florida the assessed valuation of taxable property and the percentage at which the real valuation of that county is assessed. In the third column of Table 6 is reported the real valuation of taxable property in each county as computed from the figures of the first two columns. Careful analysis of the facts here given shows that 55 counties of the state have an assessed valuation of \$319,806,979 with a computed real valuation of \$1,259,224,987. In other words, the taxable property of these 55 counties is assessed at 25.4 per cent of its real value. Omitting Hillsboro County, there are 7 other counties in the state whose assessed valuation is \$114,946,325. The real value of the taxable property in these 7 counties is \$1,336,195,001, nearly \$77,000,000 more than the total taxable wealth of the other 55 counties. This is to say that 7 of the richest counties of the state have their taxable property assessed at only 8.6 per cent of its real value. There might be some argument in favor of assessing wealthy areas of the state at a higher percentage of real values but there certainly is no

sound economic justification for allowing these 7 wealthy counties to be assessed for taxation only one-third as high as are the 55 poorer counties.

The survey staff is emphatically of the opinion that the only genuinely sound solution of the school finance problems of the state of Florida is to have real equalization of assessment in all areas of the state, this equalized assessment to be at least 30 per cent of the real valuation of taxable property in each such area. It is hard to conceive of serious political opposition to such a reform in Florida when the law of Florida is so drawn that it requires taxable property to be assessed at 100 per cent of its real value.

Until this basic and necessary reform is put into effect by the state government it is essential that Tampa and Hillsboro County devise other means of increasing available school funds. One solution is that already suggested—of increasing local assessments, even though such an increase requires the paying of proportionally greater amounts to the state of Florida. To be sure, Hillsboro County is already paying the state almost exactly its proportionate share according to the state equalizer's figures, the entire state having its property assessed at 17 per cent of its value as against Hillsboro County's 15 per cent. On the other hand, state taxes in Hillsboro County amount to only ten cents on one hundred dollars assessed valuation. To double the local assessment in order that adequate funds may be available for local school purposes would have required Tampa to pay an additional amount of only \$45,000 to the state last year.

It is conceivable that the taxpayers of the county should decide that this payment of some excess taxes to the state is the easiest and best temporary solution to the distressing financial problem which is facing them in school finance.

In lieu of the sound and statesman-like solution of the public finance problem which only the state government and the state tax commission can put into effect, or until the state authorities make such a reform effective, there is one other possible solution to Tampa's school problem. This plan now to be proposed may be less objectionable to taxpaying citizens of Tampa than the plan of substantial increase in the local assessment with the resulting gratuitous donation to the state of Florida. This alternative plan requires that the constitution of the state be amended

to allow the Tampa school districts to levy a special tax on assessed values above and beyond the present constitutional limit of ten mills, the revenue accruing from this special tax to be allocated entirely to the payment of teachers' salaries. Such a constitutional amendment could be made to apply to the Tampa school districts only or to the school districts of Tampa and four or five other of the largest cities of Florida which are equally in need of relief. Since this amendment would provide for the levying of this special tax only on condition that the taxpaying voters of the district empowered the school authorities to do so, it is believed by those who know the political situation in Florida that such a constitutional amendment would readily be passed by the voters of the state.

This section of the chapter has proposed three possible solutions to the peculiar financial situation in Tampa—that of a very wealthy city finding itself unable to levy enough tax to provide an adequate educational program for the children of the city.

It is in the power of Tampa's citizens to put one of these plans into effect without any cooperation from the state government. This plan is simply to see that the taxable property of the school districts of the city is assessed at the higher percentage of its real market value. The one disadvantage of this plan is that it would require Tampa's taxpayers to pay a disproportionate amount of taxes to the state of Florida.

A second plan is to secure the amendment of the constitution of the state so that it will make possible the levying of a special tax beyond the present ten mill local tax for schools, the money derived from this special tax to be turned entirely to the payment of teachers' salaries. The disadvantages of this second plan are the length of time it would take to make it operative and the necessity of putting into operation the complicated process of securing an amendment to the state constitution.

The third plan is the only one of the three which is really sound and statesman-like. This plan is to have the state government, through the state tax equalizer, put into effect a bona fide system of equalization of assessment throughout the entire state, this assessment to be at least 30 per cent of the real value of taxable property of the state. The difficulty with this proposed solution is that it may be beyond the power of the citizens of Tampa and

of Hillsboro County to make the plan effective. Furthermore, it is probable that it would take two or three years to make the solution effective, even if this policy of equalization of assessment were adopted by the state.

It is the recommendation of the survey staff that the first of these three plans be put into immediate operation as a temporary solution. This may be done by making it clear that the taxpaying public of Tampa is in favor of the assessment of taxable property at a higher percentage of its value and that this public will support the tax assessors in making a carefully equalized assessment at rates sufficiently high to produce necessary school funds. It is recommended that at the same time all possible pressure be brought by individuals and by educational, civic, and political organizations upon the proper state officials to the end that there may be put into effect throughout the state, as soon as possible, a sound equalization of assessment of all taxable property of the state at a value which is at least 30 per cent of its real value.

The taxpayers of the entire state should be willing to give practically unanimous support to such an administration of the tax-levying machine. The taxpayers of the fifty-five poorer counties will certainly be a unit in demanding such reform when they discover the present disproportionate share they are paying to state tax funds. The demand for this change should be almost as insistent from the seven richer counties. Practically all of these seven counties are facing school finance problems very similar to those of Hillsboro County.

Immediate increase of the assessment in Tampa would provide funds now absolutely necessary for the Tampa schools. At the same time it would make necessary a less radical revision of the local assessments when the statewide plan of equalization becomes effective.

SUMMARY

1. This study of Tampa's school finances treats as a single unit all of the schools maintained for the children of Tampa. These include the elementary schools of District No. 45, the elementary and junior high schools of District No. 4, and the vocational school and Hillsboro High School maintained, to a large extent, by Hillsboro County.

Receipts of School Moneys

2. The total receipts for the last fiscal year were approximately \$1,820,000. More than \$1,000,000 of this amount was borrowed money, derived from the sale of bonds and short-term loans. The total revenue receipts were about \$770,000.

3. Five and a half per cent of the revenue receipts, nearly \$42,000, came from state funds. Two hundred ninety-four thousand dollars, or 38 per cent, of the revenue receipts were derived from Hillsboro County funds.

4. More than 73 per cent of the Hillsboro County Board of Education receipts were placed to the account of schools maintained for the children of Tampa.

5. In 1923-1924 the Tampa schools received a smaller percentage of their unborrowed receipts from the federal government and the state than did nineteen other southern cities. The two district boards also received a smaller percentage of their unborrowed receipts from the county than did these other southern cities, on the average.

School Expenditures in Tampa

6. School financial accounts have been so kept in the past that a complete redistribution must be made in order to make comparison with the expenditures of other cities which use the standard system of school accounting.

7. The survey staff was able to allocate 87 per cent of the current expenses for school purposes to the individual school or type of education for which the money was expended. To do this it was necessary to make a study of all vouchers issued on account of Tampa schools.

8. In 1924-1925 the total expenditure for schools was \$1,049,636 or \$72.81 per pupil in average daily attendance. Nearly \$450,000 of this amount was expended for capital outlay and debt service. The remainder, \$601,452, or \$41.72 per pupil in average daily attendance, represents the current expense of running the schools provided for the children of Tampa last year.

9. The current expense per pupil in average daily attendance last year was \$83 in the Hillsboro High School, \$51 in the junior high school and \$40 in the elementary schools. The current expense of providing in the vocational school the number of hours'

instruction received by the average pupil in the other schools was \$91.

10. Tampa's total expenditures and current expenses per pupil were less in 1924-1925 than they were the preceding year. This means that the school budget was not increased proportionally to the increase in the number of school children in Tampa.

11. Tampa's current expenses per pupil in 1923-1924 were exceeded by nine of the eighteen comparable southern cities. Practically all southern cities expend less per pupil for public education than do the cities of any other geographical group in the United States.

12. Because of heavy expenditures in supervising building construction, the overhead charges of running the schools last year were higher than is usual in southern cities. About 7 per cent of the current expense budget was expended for this item of general control. Three-fourths of this amount is credited to business control.

13. Eighty-three per cent of the current expense budget was expended for instructional service. Ninety-three per cent of this amount, or 78 per cent of all current expenses, went to the payment of teachers' salaries. The typical southern city devotes only 70 per cent of its current expenses to the salaries of teachers. Although teachers' salaries are shown in another chapter to be entirely inadequate to meet the cost of living in Tampa, the other functions of expenditure in Tampa have been financed even more inadequately.

14. Because other civic and municipal agencies have financed the health service and playground facilities provided for Tampa children, the school expenditures for auxiliary agencies are almost negligible—only sixteen cents per pupil last year.

15. When the depreciation of buildings and equipment and a fair interest charge on the capital invested in the school plant are taken into consideration, it is found that the total cost of providing a system of public education in Tampa was about \$52 per pupil in average daily attendance in 1924-1925. Current expenses alone average 60 per cent more than this amount in American cities of Tampa's size.

16. Every analysis of school costs in Tampa makes it very clear that the school system has been financed at the lowest possible level and that the educational program and physical

plant are entirely inadequate to meet the needs of Tampa's school children.

Ability to Pay for Public Education

17. In 1925 the assessed valuation of taxable property in Tampa was more than \$3,000 per pupil in average daily attendance. Because of the very low rate of assessment, this is equivalent to a real value of \$21,000 of taxable property back of each pupil in average daily attendance last year. These figures indicate that Tampa has an amount of wealth per pupil greater than that of 99 per cent of American cities of more than fifty thousand population.

18. Not more than 20 or 25 per cent of the money available for all governmental functions in Tampa is now expended on the public school system. Most cities of Tampa's size devote from 30 to 45 per cent of local tax moneys to their public school systems.

19. The money expended on the schools provided for Tampa's children required a school tax rate of \$2.23 per \$100 of assessed valuation last year. This rate is equivalent to a rate of only 34 cents per \$100 of real valuation of taxable property. Only three of sixteen southern cities had so low a real tax rate for school purposes as Tampa's 1924 rate.

20. To adopt the complete recommendation of the survey staff as to the school building program in Tampa requires issuing of \$5,600,000 in bonds. To pay the interest and retire the bonds in thirty years will require an annual payment of approximately \$360,000 per year. On the 1925 assessed valuation the additional tax rate required for this purpose would be 80 cents per \$100 of assessed valuation or only 12 cents per year on each \$100 of real value. As assessments are increased in succeeding years this 12-cent increase would be lessened proportionally.

21. With this addition to the real tax rate in Tampa there would still be nine of the sixteen southern cities whose 1924 school tax rates were higher than the new rate for Tampa.

Outstanding School Finance Problems

22. Tampa has unusually great financial ability to pay for public education and needs greatly increased revenues to finance this enterprise. Because of constitutional limitations on school

tax rates, and the low rate of assessment of taxable property, it is impossible to secure the additional funds needed.

23. There is great need for equalization of the rate of assessment throughout the several counties of Florida. Half of the real wealth outside of Hillsboro County is in 7 counties whose average assessment is 8.6 per cent of the real value. The other half of the wealth of the state is scattered throughout 55 counties and is assessed at 25.4 per cent of its real value. The property of Hillsboro County is assessed at 15 per cent of its real value. The only sound and statesman-like solution of the school finance problems of Tampa and of all of the rest of the state demands careful equalization of assessment throughout the whole state at a rate which is at least 30 per cent of the real value of property.

24. Unless or until such state equalization is made effective, Tampa can secure relief only through one of the two following plans or a combination of them:

- a. Substantial increase in the rate of local assessment. This plan will solve the local problem but will result in Tampa's contribution of a disproportionate share to state tax funds.
- b. Adoption of a constitutional amendment allowing the Tampa school districts or the school districts of five or six of the larger cities of Florida to levy an additional school tax above the present 10-mill limit, the yield of this tax to be allocated to the payment of teachers' salaries.

25. The survey staff recommends that the first of these alternatives—substantial increase in the rate of local assessment—be put into effect immediately and that all possible pressure be brought to bear to cause the state government to put into operation a program of careful equalization of assessments throughout the state, this assessment to be at least 30 per cent of the real value of taxable property.

TABLE 4
DISTRIBUTION AS TO SOURCES OF SCHOOL MONIES FOR ALL SCHOOLS
TAMPA, FLORIDA—1924-1925

	District No. 4		District No. 45		Districts No. 4 and No. 45		Hillsboro County High School Total		Vocational School Total		All Schools of Tampa	
	Total	Per Cent	Total	Per Cent	Total	Per Cent	Total	Per Cent	Total	Per Cent	Total	Per Cent
REVENUE RECEIPTS												
Federal	\$ 26,846.11	4.25%	\$ 2,622.00	4.34%	\$ 29,468.11	4.26%	\$ 8,885.61	\$ 1,757.67	\$ 1,757.67	\$ 1,757.67	2.20%	
State	202,470.13	32.11	19,774.75	32.74	222,244.88	32.16	66,994.88	3,242.33	41,594.05	41,594.05	5.41	
County	263,523.25	42.35	25,778.93	42.71	289,302.18	42.38	89,961.99	4,912.14	294,151.90	294,151.90	37.87	
Local—10 Mill.	3,168.15		12.66		3,168.15				289,302.18	289,302.18		
Miscellaneous	379.75		10,816.00		392.41				3,168.15	3,168.15		
Interest	79,145.99		1,386.78		89,961.99				392.41	392.41		
Local—5 Mill.	36,011.00	21.29		20.21	36,011.00	21.20			89,961.99	89,961.99	37.65	
Premium on Sale of Bonds	19,137.50											
Interest on Sinking Fund												
Total Revenues	\$630,681.88	100.00%	\$60,391.12	100.00%	\$691,073.00	100.00%	\$75,880.49	\$9,912.14	\$776,865.63	100.00%		
NON-REVENUE RECEIPTS												
Sale of Property	\$ 1,052.47		\$ 1,100.00		\$ 1,052.47							
Sale of Bonds	1,000,000.00		15.00		1,001,100.00							
Loans	40,000.00		1,619.63		40,015.00							
Miscellaneous	1,145.91				2,763.54							
Total Non-Revenue Receipts	\$1,042,198.38		\$ 2,734.63		\$1,044,933.01				\$ 5,000.00	\$1,049,933.01		
TOTAL RECEIPTS	\$1,672,880.26		\$63,125.75		\$1,736,006.01		\$75,880.49	\$14,912.14	\$1,826,798.64			
Per Cent of Total County and State Revenues Received		50.48%		4.93%		55.41%	16.70%	1.41%		73.52%*		

* This does not include Smith-Hughes money received by Vocational School amounting to \$3,515.34.

TABLE 8
TOTAL RECEIPTS FOR SCHOOL PURPOSES, TAMPA AND NINETEEN OTHER SOUTHERN CITIES
1923-1924

Sources of Receipts	Receipts for School Purposes in Nineteen Other Southern Cities		Receipts for School Purposes in Tampa		Percentage of Receipts from Each Source in Nineteen Other Southern Cities		Percentage of Receipts from Each Source in Tampa	Percentage of Receipts Exclusive of Borrowed Money in Tampa
	Total	Average	Total	Average	Of Entire Receipts	Of Receipts Exclusive of Borrowed Money		
	REVENUE							
Federal Government	\$ 30,888	\$ 1,626	\$ 28,576	\$ 1,626	19%	23%	4.11%	5.5%
State	871,667	45,877	131,752	13,730	5.40	6.42	18.94	25.3
County	3,997,017	210,369	300,396	1,488	24.75	29.46	43.18	57.7
Local	7,639,108	402,058			47.30	56.30		
Tuition	1,488	1,488			.21	.21		
All Other Local Receipts	173,217	9,117			1.07	1.28		
Debt Service Tax	538,568	28,346	60,000	60,000	3.33	3.97	8.62	11.5
NON-REVENUE								
Sale of Bonds	\$ 2,581,444	\$135,865	\$175,000	\$175,000	15.99%	1.92	25.15%	
Sale of Property	260,868	13,730			1.62	.21		
Other Non-Revenue Receipts	27,928	1,470			.17			
Total Revenue Receipts	\$13,278,735	\$698,881	\$520,724	\$520,724	82.23%	...	74.85%	...
Total Non-Revenue Receipts	2,870,240	151,065	175,000	175,000	17.77%	...	25.15%	...
GRAND TOTAL	\$16,148,975	\$849,946	\$695,724	\$695,724	100%	100%	100%	100%

TABLE 9
 PERCENTAGE OF CURRENT EXPENSES DEFINITELY ALLOCATED TO INDIVIDUAL SCHOOL BUILDINGS
 TAMPA, FLORIDA—1924-1925

Schools	Total Current Expense	Amount of Current Expense Definitely Allocated	Percentage Definitely Allocated	Percentage Pro rated
DISTRICT No. 4				
White Elementary ...	\$336,313.50	\$283,641.86	84.34%	15.66%
White Junior High School	106,847.30	93,555.72	87.56	12.44
Total White	443,160.80	377,197.08	85.12	14.88
Colored	33,311.05	27,663.22	83.05	16.95
Grand Total White and Colored	476,471.85	404,860.30	84.97	15.03
DISTRICT No. 45				
White Elementary ...	45,375.72	39,885.00	87.90	12.10
Colored Elementary ..	2,117.12	1,845.00	87.15	12.85
Total White and Colored	47,492.84	41,730.00	87.87	12.13
HILLSBORO HIGH SCHOOL	62,971.14	61,243.37	97.26	2.74
VOCATIONAL SCHOOL ...	14,516.06	14,234.85	98.06	1.94
ALL SCHOOLS	\$601,451.89	\$522,068.52	86.80%	13.20%

TABLE 10
 DISTRIBUTION OF TOTAL EXPENDITURES FOR SCHOOL PURPOSES BY FUNCTION AND BY SCHOOL DISTRICT
 TAMPA, FLORIDA—1924-1925

	General Control	Instructional Service	Operation of Plant	Maintenance of Plant	Fixed Charges	Auxiliary Agencies	Total Current Expense	Debt Service	Capital Outlay	Total Expenditure	Pupils to Average Daily Attendance
District No. 4											
White	\$35,554.63	\$362,366.81	\$28,573.00	\$11,327.13	\$3,078.02	\$2,261.21	\$443,160.80	\$138,468.34	\$203,245.08	\$784,874.22	10,411
Total Per Pupil	3.42	34.80	2.75	1.08	.30	.22	42.57	13.30	19.52	76.39	
Colored	3,525.36	26,210.73	2,022.72	1,043.83	492.13	16.28	33,311.05	9,785.66	26,948.06	70,041.87	1,727
Total Per Pupil	2.04	15.18	1.17	.60	.29	.01	19.29	5.66	15.61	40.56	
Total	39,079.99	388,577.54	30,595.72	12,370.96	3,570.15	2,277.49	476,471.85	148,250.90	230,193.14	854,915.89	
District No. 4 Per Pupil	3.22	32.01	2.52	1.02	.29	.19	39.25	12.21	18.97	70.43	12,138
District No. 45											
White	1,210.01	36,934.22	5,198.84	1,187.21	842.57	2.87	45,375.72	6,137.81	45,885.17	97,368.70	1,212
Total Per Pupil	1.00	30.47	4.29	.98	.70	.....	37.44	5.06	37.83	80.33	
Colored	56.62	1,671.76	293.63	55.55	39.43	.13	2,117.12	287.19	2,145.64	4,549.95	148
Total Per Pupil .....	.36	11.30	1.98	.88	.28	.....	14.30	1.94	14.50	30.74	
Total	1,266.63	38,605.98	5,492.47	1,242.76	882.00	3.00	47,492.84	6,425.00	48,000.81	101,918.65	
District No. 45 Per Pupil .....	.93	28.39	4.04	.91	.65	.....	34.92	4.73	35.29	74.94	1,360
Elementary and Junior High School, Both Districts											
Total	40,346.62	427,183.52	36,088.19	13,613.72	4,452.15	2,280.49	523,964.69	154,675.90	278,193.95	956,834.54	13,498
Per Pupil	2.99	31.65	2.67	1.01	.33	.17	38.82	11.46	20.61	70.89	
Vocational School											
Total	281.21	12,154.06	401.31	179.48	1,500.00	.....	14,516.06	.....	677.29	15,193.35	160
Per Pupil	1.76	75.96	2.52	1.13	9.36	.....	90.73	.....	4.23	94.96	
Hillsboro County High School											
Total	1,819.25	57,277.68	2,840.80	598.64	351.80	82.97	62,971.14	10,765.00	3,872.12	77,608.36	757
Per Pupil	2.40	75.66	3.76	.79	.46	.12	83.19	14.22	5.11	102.52	
All Schools in Tampa											
Total	42,447.98	496,615.26	39,330.30	14,391.84	6,303.95	2,363.46	601,451.89	165,440.90	282,743.36	1,049,636.15	14,415
Per Pupil	2.94	34.45	2.73	1.00	.44	.16	41.72	11.48	19.61	72.81	

TABLE
DISTRIBUTION OF CURRENT
Instructional Service and Operation by
Tampa, Florida

<i>School</i>	<i>Pupils in Average Daily Attendance</i>	<i>Principals' Salaries</i>	<i>Total Supervision</i>
DISTRICT No. 4			
White Elementary			
Lee	1,040	\$1.71	\$1.97
Henderson	744	2.39	2.65
Gorrie	865	2.05	2.32
Ybor	1,195	1.99	2.25
Madison	320	.56	.83
East Tampa	349	.52	.78
Mitchell	320	.50	.77
Philip Shore	689	.65	.91
Graham	433	.42	.68
Jackson	327	.96	1.23
Hillsboro Avenue	112	...	.27
Gary	492	.91	1.18
Buffalo Ave.	710	.63	.90
Seminole Heights	686	.66	.92
Bay Street	31	...	.27
All Elementary	8,313	1.26	1.53
Junior High School			
George Washington	1,444	\$1.73	\$2.00
Woodrow Wilson	654	3.82	4.09
All Junior High Schools	2,098	2.38	2.65
All White District No. 4	10,411	\$1.49	\$1.76
Colored			
Harlem Academy	867	\$0.46	\$0.58
Caesar Street	100	1.50	1.61
Dobeyville	294	1.14	1.25
Robles Pond	54	1.30	1.41
Lomax	412	1.80	1.92
All Colored	1,727	.98	1.10
ALL SCHOOLS DISTRICT No. 4	12,138	\$1.42	\$1.66
DISTRICT No. 45			
White Elementary			
Cuesta	719	\$1.68	\$1.68
MacFarlane	341	1.01	1.01
Drew Primary	117	2.56	2.56
Gordon	35	8.57	8.57
All White	1,212	1.77	1.77
Colored Elementary School No. 2	148	\$0.30	\$0.30
ALL SCHOOLS DISTRICT No. 45	1,360	\$1.61	\$1.61
DISTRICTS No. 4 AND No. 45			
All White Schools	11,623	\$1.52	\$1.76
All Colored Schools	1,875	.93	1.03
HILLSBORO HIGH SCHOOL	757	\$5.35	\$5.35
VOCATIONAL SCHOOL	160	\$17.94	\$17.94
ALL SCHOOLS TAMPA	14,415	\$1.83	\$2.03

EXPENSES FOR SCHOOL PURPOSES
School Buildings and by Type of School
—1924-1925

<i>Teachers' Salaries</i>	<i>Other Instructional Service</i>	<i>Total Instructional Service</i>	<i>Janitors' Wages</i>	<i>Other Expense of Operation</i>	<i>Total Operation of Plant</i>	<i>Current Expense</i>
\$31.10	\$0.09	\$33.16	\$1.47	\$0.87	\$2.34	\$40.85
37.09	.09	39.83	2.18	.87	3.05	47.86
31.79	.09	34.20	2.29	.87	3.16	42.33
25.77	.09	28.11	1.51	.87	2.38	35.47
35.98	.09	36.90	2.31	.87	3.18	45.04
27.45	.09	28.32	2.13	.87	3.00	36.29
43.23	.09	44.09	3.03	.87	3.90	52.95
26.83	.09	27.83	1.80	.87	2.67	35.47
33.12	.09	33.89	2.28	.87	3.15	42.01
34.22	.09	35.54	2.97	.87	3.84	44.35
32.54	.09	32.90	2.11	.87	2.98	40.87
35.45	.09	36.72	2.16	.92	3.08	44.87
28.38	.09	29.37	1.45	.87	2.32	36.65
26.42	.09	27.43	1.49	.99	2.48	34.88
40.65	.09	41.01	.15	.87	1.02	47.03
31.01	.09	32.63	1.92	.88	2.80	40.46
\$39.46	\$0.09	\$41.55	\$1.41	\$0.87	\$2.28	\$48.79
43.35	.09	47.53	2.23	.87	3.10	55.64
40.67	.09	43.41	1.66	.87	2.53	50.93
\$32.96	\$0.09	\$34.81	\$1.87	\$0.88	\$2.75	\$42.57
\$13.25	\$0.04	\$13.87	\$0.66	\$0.43	\$1.09	\$17.61
16.35	.04	18.00	.99	.43	1.42	22.04
12.57	.04	13.86	.69	.43	1.12	18.11
8.70	.04	10.15	6.91	.44	7.35	20.13
16.86	.07	18.85	.06	.43	.49	22.87
14.03	.05	15.18	.74	.43	1.17	19.29
\$30.27	\$0.08	\$32.01	\$1.71	\$0.81	\$2.52	\$39.25
\$26.43	\$0.12	\$28.23	\$2.04	\$1.74	\$3.78	\$34.68
31.27	.12	32.40	3.73	1.74	5.47	40.55
28.50	.12	31.18	2.83	1.73	4.56	38.43
46.71	.12	55.40	.57	1.74	2.31	60.39
28.58	.12	30.47	2.55	1.74	4.29	37.44
\$10.95	\$0.05	\$11.30	\$1.21	\$0.77	\$1.98	\$14.30
\$26.66	\$0.11	\$28.38	\$2.41	\$1.63	\$4.04	\$34.92
\$32.50	\$0.09	\$34.35	\$1.94	\$0.97	\$2.91	\$42.03
13.79	.05	14.87	.77	.46	1.23	18.90
\$68.84	\$1.47	\$75.66	\$2.36	\$1.39	\$3.75	\$83.19
\$56.92	\$1.10	\$75.96	\$1.67	\$0.84	\$2.51	\$90.73
\$32.25	\$0.18	\$34.46	\$1.81	\$0.92	\$2.73	\$41.72

TABLE 12
EXPENDITURE PER PUPIL IN AVERAGE DAILY ATTENDANCE FOR EACH FUNCTION OF EXPENDITURE
TAMPA AND EIGHTEEN OTHER SOUTHERN CITIES—1923-1924

Cities	General Control	Instruc-tional Ser-vice	Operation of Plant	Mainte-nance of Plant	Fixed Charges	Auxiliary Agencies	Full-Time Day Schools	Total Current Expense	Total Ex-penditure
Atlanta, Ga.	\$ 0.92	\$41.36	\$3.12	\$3.67	\$6.7	\$2.73	\$49.74	\$49.80	\$117.92
Augusta, Ga.	1.94	48.31	3.64	2.56	.63	.81	59.81	60.04	79.51
Birmingham, Ala.	1.44	43.27	3.73	1.83	.81	.45	51.58	51.81	52.41
Charlotte, N. C.	1.55	36.80	5.57	4.00	.02	.18	48.60	49.69	69.29
Jacksonville, Fla.	2.60	34.70	3.77	2.92	1.69	.94	45.72	53.65	84.90
Knoxville, Tenn.	2.32	40.99	4.09	3.22	.70	.30	47.74	47.74	47.74
Little Rock, Ark.	1.33	33.06	4.23	1.20	.44	.70	51.37	52.34	74.00
Macon, Ga.	1.92	34.13	2.94	1.76	.44	1.70	40.99	41.03	41.36
Miami, Fla.	1.16	39.08	5.88	1.46	.27	.26	48.71	59.67	113.36
Mobile, Ala.	2.22	39.56	2.20	1.82	.46	.77	47.03	47.96	73.56
Montgomery, Ala.	1.85	33.03	3.21	1.34	.50	.34	39.20	39.83	88.30
Nashville, Tenn.	1.37	28.23	3.62	1.93	.52	.33	35.74	35.96	37.81
Norfolk, Va.	1.39	55.70	7.20	3.22	.76	.33	68.60	70.34	95.81
Pensacola, Fla.	1.93	26.59	1.90	1.17	.08	.30	31.67	31.67	53.80
Savannah, Ga.	1.33	28.88	2.62	1.53	.22	.30	34.33	36.07	37.83
St. Petersburg, Fla.	1.67	31.35	1.69	1.14	.22	.30	36.07	36.07	100.17
Wilmington, N. C.	1.78	33.34	3.14	1.38	.58	1.52	42.04	43.03	76.34
Winston-Salem, N. C.	1.46	48.92	5.19	1.78	.97	.30	58.32	69.49	151.85
All Cities (Above) ..	1.42	38.58	3.78	2.08	.61	.48	46.95	48.54	75.41
Median City	1.55	39.08	3.57	1.66	.59	.30	47.03	49.42	76.34
TAMPA .....	...	40.23	1.90	...	.59	.26	42.98	49.42	79.39
Tampa's Rank	19	8	17	19	10	12	12	10	9

TABLE 13
EXPENDITURE PER TEACHER FOR EACH FUNCTION OF EXPENDITURE
TAMPA AND EIGHTEEN OTHER SOUTHERN CITIES—1923-1924

Cities	General Control	Instruc-tional Ser-vice	Operation of Plant	Mainte-nance of Plant	Fixed Charges	Auxiliary Agencies	Full-Time Day Schools	Total Current Expense	Total Ex-penditure
Atlanta, Ga.	\$28.46	\$1,277.37	\$96.36	\$113.21	\$20.82	\$76.72	\$1,536.22	\$1,538.06	\$3,642.05
Augusta, Ga.	54.52	1,355.11	102.12	71.89	17.72	14.89	1,678.08	1,683.82	2,230.42
Birmingham, Ala.	47.97	1,437.90	125.65	60.66	27.05	21.80	1,714.12	1,721.71	1,741.78
Charlotte, N. C.	48.63	1,154.54	173.73	125.53	.53	21.80	1,524.76	1,558.80	2,173.70
Jacksonville, Fla.	67.97	907.76	93.31	76.24	44.00	4.67	1,193.95	1,400.89	2,217.06
Knoxville, Tenn.	28.06	1,405.38	170.92	41.30	.44	32.13	1,636.49	1,636.49	1,636.49
Little Rock, Ark.	73.39	1,485.23	147.58	41.30	24.28	58.07	1,771.78	1,805.36	2,552.34
Macon, Ga.	31.42	1,165.15	69.97	59.95	14.94	7.66	1,399.50	1,400.87	1,412.11
Mobile, Ala.	50.84	1,131.23	170.26	42.27	7.75	22.20	1,410.01	1,727.52	3,281.71
Montgomery, Ala.	64.07	1,142.12	63.60	52.67	13.23	8.66	1,357.89	1,384.66	2,123.53
Nashville, Tenn.	59.90	1,068.42	103.95	10.99	16.02	8.66	1,267.94	1,288.30	2,866.04
Norfolk, Va.	57.37	1,184.13	152.05	69.84	21.81	14.26	1,499.46	1,508.32	1,593.91
Pensacola, Fla.	36.21	1,443.77	186.58	83.42	19.68	8.57	1,778.23	1,823.33	2,470.46
Savannah, Ga.	53.10	1,771.73	55.13	34.07	2.17	11.94	1,919.05	1,919.05	2,470.46
St. Petersburg, Fla.	59.59	1,156.57	104.75	21.33	27.00	11.94	1,374.09	1,453.77	1,591.36
Wilmington, N. C.	56.29	1,321.07	60.61	40.88	7.81	47.33	1,289.76	1,289.76	3,531.52
Winston-Salem, N. C.	42.61	1,035.53	97.60	48.92	26.85	...	1,306.62	1,336.38	2,370.95
All Cities (Above) ..	44.85	1,424.57	151.03	51.72	23.28	...	1,698.21	2,023.71	4,421.99
Median City	53.10	1,220.94	119.61	65.73	19.49	15.06	1,485.68	1,535.92	2,386.49
TAMPA .....	...	1,165.15	103.95	51.72	18.92	8.66	1,410.01	1,538.06	2,230.42
Tampa's Rank	19	7	18	...	18.92	8.12	1,366.63	1,571.32	2,524.38

TABLE 14

TOTAL ECONOMIC COST OF PUBLIC EDUCATION
TAMPA, FLORIDA—FISCAL YEAR, 1924-1925

	District No. 4			District No. 45			Total of Districts No. 4 and No. 45	Hillsboro County High School	Vocational School	Grand Total All Tampa Schools
	White	Colored	Total	White	Colored	Total				
	Current Expenses	\$443,160.80	\$38,811.05	\$476,471.85	\$45,375.72	\$2,117.12					$47,492.84	$523,964.69	$62,971.14	$14,516.06	$601,451.89
Actual Interest Paid	32,416.44	2,089.50	34,515.94	5,028.42	228.18	5,256.60	39,765.94	9,042.60	150.00	48,808.54
Imputed Interest	55,444.38	3,590.94	59,035.32	3,707.98	164.90	3,871.98	62,907.30	6,459.75	150.00	69,517.05
Depreciation (Buildings)	20,210.00	754.00	20,964.00	1,845.00	105.00	1,950.00	22,914.00	4,306.00	.....	27,220.00
Depreciation (Equipment)	5,429.75	314.25	5,744.00	457.50	15.00	472.50	6,216.50	1,291.80	150.00	7,658.30
Totals	\$556,661.37	\$40,069.74	\$596,731.11	\$56,411.72	\$2,625.60	\$59,037.32	\$655,768.43	\$84,071.29	\$14,816.06	\$754,655.78
Number Pupils in Average Daily Attendance	10,418	1,720	12,138	1,212	148	1,360	13,498	757	160	14,415
Total Cost Per Pupil in Average Daily Attendance	\$53.43	\$23.30	\$49.16	\$46.54	\$17.74	\$43.41	\$48.58	\$111.03	\$92.60	\$52.35

TABLE 15
VALUATIONS OF TAXABLE PROPERTY, SCHOOL TAX RATES AND VALUATION OF SCHOOL PROPERTY *
TAMPA AND SIXTEEN OTHER SOUTHERN CITIES—1924

City	Average Daily Attendance	Real Value of Taxable Property	Real Value of Property Per Pupil in Average Daily Attendance	Net Bonded Debts for School Purposes	Net Bonded Debt Per Pupil in Average Daily Attendance	School Tax Rate on \$100 Real Valuation of Taxable Property	School Tax Rate on \$100 Assessed Valuation of Taxable Property	Total Value of School Property	Percentage of School Property Per Pupil of Real in Average Daily Attendance	Valuation of School Property Per Pupil
Atlanta, Ga.	42,499	\$297,107,143	\$ 6,990.92	\$ 30,000,000	\$ 3.15	\$0.60	\$0.85	\$6,090,000	2.05%	\$143
Augusta, Ga.	9,538	76,693,333	8,040.82	3,907,000	119.12	.74	1.40	978,000	1.28	103
Birmingham, Ala.	32,799	245,021,666	7,409.42	1,558,000	107.69	.75	1.25	4,405,000	1.81	134
Jacksonville, Fla.	14,467	129,690,000	8,964.54	.....	.....	.56	1.40	2,738,000	2.11	189
Knoxville, Tenn.	15,050	130,000,000	8,637.87	.....	.....	.49	.49	1,662,000	1.76	110
Little Rock, Ark.	11,279	80,000,000	7,092.83	.....	.....	.72	1.20	645,000	.81	57
Macon, Ga.	11,335	56,887,879	5,001.14	.....	.....	.57	.86	1,582,000	2.79	140
Miami, Fla.	6,803	26,000,000	3,821.84	1,197,000	175.95	1.28	2.55	140,000	.54	21
Mobile, Ala.	7,679	80,000,000	10,418.02	.....	.....	.72	1.20	826,000	1.03	108
Montgomery, Ala.	6,631	51,666,667	7,791.69	500,000	75.40	.54	.90	988,000	1.91	149
Nashville, Tenn.	18,835	94,293,000	5,006.26	1,044,000	55.43	.54	.54	2,292,000	1.76	122
Pensacola, Fla.	4,556	22,500,000	4,938.54	465,000	102.06	1.15	2.30	722,000	3.21	158
Savannah, Ga.	10,732	120,353,333	11,214.44	.....	.....	.30	.50	2,080,000	1.73	194
St. Petersburg, Fla.	4,219	11,703,333	2,773.96	664,000	156.43	2.25	2.50	767,000	6.55	182
Wilmington, N. C.	6,118	55,000,000	8,989.87	479,000	157.38	.67	.84	522,000	.95	85
Winston-Salem, N. C.	8,445	151,988,000	17,997.40	2,056,000	243.46	.34	.45	1,975,000	1.30	234
TAMPA, Fla.	8,458	115,000,000	13,596.59	411,000	48.59	.46	2.30	1,099,000	.96	130
Rank	9	7	2	9	15	15	3 1/2	9	14	10
Median	9,538	\$ 80,000,000	\$ 7,791.00	\$107.69	\$0.60	\$0.60	\$1.20	\$1,099,000	1.76	\$134

* From reports to Federal Bureau of Education, Washington, D. C.

TABLE 16
SUGGESTED SCHEDULE FOR PAYMENT OF \$5,600,000 BOND ISSUE
5 PER CENT SERIAL BONDS, THIRTY-YEAR TERM

End of	Interest Due On	Principal to Pay	Interest to Pay (5 Per Cent)	Total Amount to Pay (Interest Plus Principal)
1st year	\$ 5,600,000	\$ 84,000	\$ 280,000	\$ 364,000
2nd year	5,516,000	88,000	275,800	363,800
3rd year	5,428,000	93,000	271,400	364,400
4th year	5,335,000	97,000	266,750	363,750
5th year	5,238,000	102,000	261,900	363,900
6th year	5,136,000	108,000	256,800	364,800
7th year	5,028,000	113,000	251,400	364,400
8th year	4,915,000	119,000	245,750	364,750
9th year	4,796,000	124,000	239,800	363,800
10th year	4,672,000	131,000	233,600	364,600
11th year	4,541,000	137,000	227,050	364,050
12th year	4,404,000	144,000	220,200	364,200
13th year	4,260,000	151,000	213,000	364,000
14th year	4,109,000	159,000	205,450	364,450
15th year	3,950,000	167,000	197,500	364,500
16th year	3,783,000	175,000	189,150	364,150
17th year	3,608,000	184,000	180,400	364,400
18th year	3,424,000	193,000	171,200	364,200
19th year	3,231,000	203,000	161,550	364,550
20th year	3,028,000	213,000	151,400	364,400
21st year	2,815,000	224,000	140,750	364,750
22nd year	2,591,000	235,000	129,550	364,550
23rd year	2,356,000	247,000	117,800	364,800
24th year	2,109,000	259,000	105,450	364,450
25th year	1,850,000	272,000	92,500	364,500
26th year	1,578,000	286,000	78,900	364,900
27th year	1,292,000	300,000	64,600	364,600
28th year	992,000	315,000	49,600	364,600
29th year	677,000	330,000	33,850	363,850
30th year	347,000	347,000	17,350	364,350
Total	\$106,609,000	\$5,600,000	\$5,330,450	\$10,930,450
Average	3,553,633 $\frac{1}{3}$	186,666 $\frac{2}{3}$	177,681 $\frac{2}{3}$	364,348 $\frac{1}{2}$

Range of Yearly Payments..... \$363,800 to \$364,900

CHAPTER VI

THE ELEMENTARY SCHOOLS OF TAMPA

INTRODUCTION

Judgment regarding the merits and defects of the Tampa elementary schools must be based upon a conception of what an elementary school system should be and should accomplish. It is essential, therefore, that those who read this report should at the outset know the ideals that have been in the minds of those who offer suggestions for improvements. Basing judgment on the practices followed in many cities and also upon the best thought that educational leaders present, it is reasonable to expect the following features in any elementary school system that proposes to meet the requirements of good schools.

SOME CHARACTERISTICS OF GOOD ELEMENTARY SCHOOLS

There should be provision for eight profitable years in the elementary grades, followed by the regular high school; or six years, to be followed by the junior high school. Opportunity for at least one year of care and instruction of the kindergarten type should be possible. This would mean that a child who entered kindergarten at the age of five, or the first grade at the age of six, would, if he progressed regularly, be able to enter the junior high school at the age of twelve, or the high school at the age of fourteen.

Children between these ages should be in school. In part, the legal provision of the compulsory education laws, if enforced, will secure this result; but everywhere it is necessary so to direct public sentiment that parents will start their children in school at the age that is customary in their own city, even though that age be below the legal requirement of the state. Unless the school can have children who begin their work at about the same age, it is difficult, if not impossible, to conduct a good school. The younger children suffer because of their association in class with

those who are older, and the older children, in turn, have outgrown many of the interests that the younger members have.

In every community there are children who belong in different age and ability groups. Good elementary schools recognize these conditions and make provision for an effective grouping of pupils. To this end a good system employs appropriate tests and measurements of the child's ability and of his achievement in school, so as to deal with him intelligently.

A good school keeps the number of pupils in a class small enough to make it possible for the teacher to give attention to each one in the class. Forty children in a classroom in the elementary school represent the maximum that can be cared for effectively by the teacher, and even this number must be carefully selected in order that there may not be individuals who cannot move with the rest of the class.

The classrooms, school building, and grounds should be suitably equipped for the type of work required of the school. When children are compelled to spend five or six hours each school day within a room, it is essential that that room be furnished and equipped in a manner that will contribute to their comfort as well as to their development as desirable citizens. It is expected that the school will help children to be more appreciative of good books, desirable pictures, suitable furniture, and appropriate conduct. This carries with it the demand that the classroom be supplied with books; that, as far as possible, the standards of suitable art be employed in decorating the schoolroom; that pictures have a place on the walls; that the furniture be such as to meet both the physical and social needs of the children.

A good system of elementary schools will have a definite program which will serve as a guide to the teachers. This program, or course of study, will state the aims and purposes that those in charge of the schools believe to be important. It will indicate the subject matter that shall be used; and there will be suggestions as to the best way in which to accomplish the desired results. In the United States there are rapid shifts in the population. Parents, with their children, move from one city to another, or from one section of a city to another, with surprising frequency. Unless there are definite specifications which will within reasonable limits control the work in a school system, a child who moves from one school to another is likely to suffer loss of time.

While it is true that a measure of uniformity of studies is desirable, it is also true that every city differs from every other city in the needs of the schools. In a city where manufacturing predominates, children will enter school with an understanding of industrial matters that cannot be expected of those who come from purely residential sections. Children who live in a mountainous region will already understand some features of geography that children who live in the lowlands must be taught. An effective program of studies must, therefore, take into consideration local conditions and make such adaptations as will assist the teacher.

Good teachers are essential to a good school. The personal qualities of the teacher are important. A person who is not acceptable in the homes is not acceptable as a teacher of the children from these homes. It is essential that those who teach school have a knowledge of the subjects that are taught. Added to character and knowledge is the need of knowing how to teach. This latter ability may sometimes be gained through experience, but this is too wasteful of the lives of those children who supply the experience; therefore, the professional training of the teacher is an important matter.

Good teachers are not content with the training that they have at the beginning of their careers. They are constantly trying to improve by additional professional training and association. They avail themselves of the various opportunities offered by summer schools, extension courses, and national, state, and local meetings. This implies that the teacher receive such a salary as will make it possible to take advantage of these opportunities.

Good school systems provide advisors or supervisors for their teachers. It is not to be expected that a teacher who is given forty children to instruct in a variety of subjects, such as is found in the elementary schools, can possibly deal intelligently with all of the difficulties that she is certain to meet. It is important, therefore, to provide persons who may be called upon by those in charge of the school to help in the remedying of any difficulties that are found. Such persons also endeavor to develop new methods that are adapted to the peculiar needs of the city or the schools in which they work. Whenever the size of a school justifies it, the principal of the school should be free to devote a reasonable part of his time to the helping of his teachers. Such

problems as he is unable to solve, he should be able to refer to those who are employed as general advisors.

The real test for a good school is, after all, found in the treatment that children receive in their school work. A good school is extremely anxious to prepare its pupils to become effective citizens. Those in charge look ahead far enough to determine that certain things will be required when the child leaves the school and takes his place in the broader life of the community; but a good school does not lose sight of the fact that the child is not alone preparing to live in the future, but that he is living now and is entitled to just as broad and interesting a life as conditions will permit. When he leaves school, a comparatively small amount of his time will be devoted to books. On the other hand, the major part of his time will probably be concerned with doing things and meeting people. Schools that recognize this need on the part of the children do not hesitate to provide various ways for its achievement in school. Provision is made, for example, for those who can profit by handling hammers and saws or for those who enjoy modeling in clay. Play of the proper sort is made an integral part of the school work. School becomes a happy place, and the laughter of children is not uncommon. These conditions require an attitude of mind on the part of the teachers as well as of the parents, and without this no amount of equipment or provision in school buildings will ever achieve the result. It does not mean that boys and girls are to learn less arithmetic and spelling and reading, but it does mean that along with this knowledge they will secure that which is equally important both for the present and for the future.

No one does his best work unless he recognizes its value to him. This implies that his interest be awakened and sustained by his tasks, whether they be the handling of tools or clay or the studying of a page of geography or reading. It is as important that children acquire the habit of studying with interest and enthusiasm as it is that they learn the multiplication table or the spelling lesson; it is as necessary that they see the need and value of a chapter in their geography or history books as it is that they know the facts therein contained. The best way to secure adult citizens who are interested in their work, their homes, and their civic duties is to accustom them in their school life to the joy of doing well interesting tasks, the value of which they recognize

and respect. A school cannot accomplish desirable results when a considerable portion of the children are anxiously waiting to reach the age when the compulsory education law will permit them to leave a life of drudgery in the school.

CONDITION OF ELEMENTARY SCHOOLS IN TAMPA

When the Tampa elementary schools are judged in accordance with the features just mentioned, there are aspects that call for praise and some that offer opportunity for improvement.

Elementary School Opportunities in Tampa.—The city has made provision for six years of elementary school followed by the junior high school. As far as the elementary school itself is concerned, this is adequate. There is, however, evidence that the city should begin to provide for those who are under six years of age. The need for this attention is found in the various private enterprises in Tampa that now control this part of the child's education.

It is estimated that there are no less than fifty so-called "Home Schools," each enrolling from ten to thirty-five children. In these schools children from four to twelve, or even to fourteen, years of age are received each week day at seven o'clock when the mother goes to the factory and they remain until she comes home at five o'clock or after. The schools are held in ordinary dwellings with no special adaptation for this work. There was in every one visited a lack of books and other school equipment. The "teacher" is not trained for this work. In general, she is a person who commands the confidence of those whose children she takes, not because of her ability to teach, but because she can control satisfactorily the group of children. Often these women do not speak English, and they seldom attempt to teach the younger children. Sometimes children who were eleven or twelve years old were reading a primer. If they had been transferred to the public school, these children, who should have been in the fifth or sixth grade, would have been compelled to enter the chart class before they could be placed even in the first grade.

These home schools are not effective educational institutions. When the child reaches the age when he can no longer be controlled under this organization, he enters the public school. The result is that he is older than the children with whom he must be associated; he becomes discouraged and feels out of place; and

the work of the elementary school is very seriously hampered.

It remains true, however, that at present the home school renders a service that the public schools are not organized to offer. For a fee that is usually seventy-five cents a week, parents can have their children under care during the entire time that they are away from home. It should be kept in mind that these schools are entirely private institutions. There is no supervision of their work. Evidently, they have developed in response to a demand. Such schools must continue until parents are convinced that there is some better way to manage their children.

There are a number of mission schools supported by the various religious denominations. Those who conduct these schools have a commendable desire to serve the best interests of the child and, in this way, to serve the best interests of the city. Like the home schools they take care of children during the time that the parent is at work. In general, they endeavor to carry out the course of study used in the public schools, and their pupils often transfer to the city schools.

There are a number of nurseries and kindergartens combined. Some of these are managed and supported by individuals; others are controlled by associations; and, in two instances, they are subsidized by the Community Chest. The Helping Hand Day Nursery, controlled by the Tampa Urban League, cares for children from two months to six years. Kindergarten training is provided for the older children. This is a most commendable institution. The Wolfe Settlement in Ybor City was one of the larger nurseries and kindergartens that were visited. Provision is made here for young children, and the rooms and equipment are desirable. Institutions of this sort, including the private kindergartens, are rendering very valuable service in the care of younger children.

The number of these private enterprises is indicative of the need that exists for the care of the younger children. Most cities of the size of Tampa provide public kindergartens in connection with the elementary schools. Tampa ought to introduce kindergartens in one or two of the public schools, and from its experience with these, determine whether kindergartens shall be introduced in all of the elementary schools.

There should also be an attempt to care for children of kindergarten and school age during the time that parents are at work.

This again should be a matter of development rather than an attempt to establish at once this plan in all of the schools. It is suggested that in one or two schools provision be made for someone who will be in charge of the children from seven to nine o'clock and from the close of school until parents call for them. The cost of this care would not be great, and the results that would be derived from bringing these children in touch with the public school earlier would be a very decided advantage to everybody concerned. The persons who were placed in charge of the children would have to recognize the desires of the parents concerned. It is doubtful whether the parents would be willing to have their children out on a playground before and after school. They certainly would not until they had gained some confidence in the ability of the school to care for the children.

Chart Classes.—Chart classes are found in some of the schools. These classes are maintained for the purpose of teaching English to children who speak only a foreign language. The need for this work is very great in some of the schools. When there are but two or three children who do not know the English language in any particular grade, they can be handled without great difficulty. They learn the language by association with others. The situation within the classroom is such as to compel the child to speak English in order to make his needs and desires understood. In some of the rooms as many as half of the children come from homes where the Spanish language is spoken. This introduces a very difficult situation because the child is now able to obtain what he desires just as readily by speaking Spanish as he is by speaking English. The school authorities have very properly decided that they must give attention to the teaching of English with this group of children. They have, therefore, provided chart classes. Conditions have made it necessary for them to have classes that often number sixty. This has driven them into a very formal method of handling this work.

It is not difficult to understand that with sixty children in a room the opportunity for each one to use the English language in connection with a lesson is very small. The words that the children learn are not those that children ordinarily use. Perhaps it is this lack of adaptation to needs that causes children in many of the schools to retain Spanish as the language of the playground.

From time to time the particular topics to be covered each

day are obtained by the teacher from the supervisor of chart classes. The following outline will give a conception of the way that subjects are covered.

CHART A

October 5, 1925

Conversation

In the Bedroom

- Monday: What do you do in the bedroom?
- Tuesday: Name the furniture in this bedroom.
Answer: There is a bureau, bed, chair, rocking chair, rug, in that bedroom.
- Wednesday: *Sheet, blanket*
Where do you put the sheet?
What is this? That is a blanket.
Where do you use the blanket?
- Thursday: *Spring, mattress*
What is there on the bed? There is a spring and mattress.
- Friday: Review. How to ventilate a bedroom.

The chart classes as now organized do not represent a desirable way of solving the problem. A child who does not speak English is now automatically retarded one year. This should not be necessary. The conditions in these classes are not adapted to child life. Children are taught to shout these formal expressions in voices that are as unnatural as the words that they use. A different conception of childhood is needed.

The modern kindergarten with its opportunities for work and for play, for doing the tasks that are assigned and also for doing the things that grow out of the child's own desires, is perhaps the best expression of the ideals of child life. Activities such as are provided in the kindergarten supply the opportunities for the use of English. A vocabulary learned in this way is natural and therefore useful. It corresponds with that which textbook writers strive to use in the earlier grades. Such work, therefore, is the best preparation for beginning reading. Older children, moreover, can be taught to recognize words and sentences and thus improve their chances in the grades.

Tampa should introduce one or two kindergartens for younger children who do not speak English. These classes should be under the care of competent teachers, who in turn should receive whatever assistance can be furnished. The outcome should be the

gradual development of the subject matter and methods of teaching that will be appropriate to the needs of the city.

In the meanwhile chart classes should be continued for the older children. The number of pupils in a class should be reduced to not more than thirty; a smaller number would be better. The subject matter and methods of teaching should be changed so as to conform more closely to good educational practice as employed in various other cities, a list of which is appended to this report.

School Attendance.—The elementary schools are hampered by the presence of a large number of children who are too old for the grades in which they must be placed. Part of the difficulty is due to the coming of people whose children have not had adequate school advantages, but part of it is due to lax methods employed in enforcing the attendance laws. Another part of the report will deal with the matter of attendance. It is sufficient here to indicate that the elementary schools are made less effective because this condition exists.

In general, the size of classes in the elementary schools is too large. Classes having more than sixty pupils were observed. The administration is making a vigorous effort to reduce the classes so as to have no more than forty pupils. With an increase in school facilities it is reasonable to suppose that a more equitable distribution of pupils will be made.

Grading and Placement of Pupils.—The public schools of Tampa receive large numbers of children who come from other cities and places scattered throughout the United States. It is extremely difficult to place properly these children unless there is available some means of determining what they are able to do. In the confusion that the child experiences from change of conditions, he is likely to make a poor showing when questioned by teachers or principals. The temptation, therefore, on the part of the school is to underrate his real ability and to place him in a lower grade, thereby causing him to lose time. There is also a natural tendency to overrate the effectiveness of the work done within the school itself. One way to safeguard the interests of children, and also to reach a real conception of the achievement of the schools, is to use occasionally the tests that have been employed in various schools throughout the United States. These are known as standardized tests because it is possible to find the proportion of children who have been able to pass these examina-

tions elsewhere. In this way a school system learns how it stands in comparison with other cities, and the individual school within a system may learn how it stands in comparison with the other schools. Tampa should make reasonable use of these tests. A list of suitable tests is appended to this report.

Nothing is now done for the underprivileged children. The regular work of the school is not adapted to their needs and their time is wasted. There should be some "opportunity" classes that will aim to meet the needs of children who are not able to do the work that is now required of all.

The Course of Study and Methods of Teaching.—As has been indicated, a good course of study states the aims and purposes of the leaders of the school system, discusses the subject matter that shall be used, and suggests the best ways to accomplish desired results.

The Florida course of study is used in Tampa. The subject matter of this course is to a large extent determined by the textbooks adopted and made compulsory by the state. Little change, therefore, in the subject matter of the course can be considered practical.

The ideals of the state course are uniformly high. In its pages the best principles of modern education find clear and frequent expression. Problem and project work, the utilization of the home environment, the need for motive and purpose in school work, the desirability of teaching children how to study, training for effective citizenship; these and other worthy ideals are urged as necessary for good teaching.

When the course undertakes, however, to describe the best ways of attaining the aims and purposes which are stated in general terms, it is not so successful. In some parts of it, such as language in the sixth grade or composition in the eighth grade, general principles are stated and little space is given to subject matter. In other parts, as in geography in the fourth grade or history in the seventh, the principles of method are preceded or followed by a bare and unsuggestive outline of pure subject matter. While in some cases, notably in geography for the third grade, ideals, subject matter, and method find adequate expression, such instances are not characteristic of the course as a whole.

The teachers of Tampa are faced, therefore, with the necessity of trying in their own way to translate the high aims and pur-

poses of the state course into methods of treating subject matter in their classrooms. As this is an exceptionally difficult task, even for the expert, it is not surprising that the teachers are failing to do it successfully.

Methods of instruction used in Tampa represent too frequently a slavish memorization of the textbooks. Confronted on the one hand by the compulsory use of specified texts and on the other by a course of study which, though enunciating high ideals, fails to show in detail how to put them into practice, the classroom teacher adopts the obvious course of action and forces a memorization, bit by bit, of the facts in the texts. Such a procedure cannot fail to be subversive of the very principles so definitely indicated in the state course.

The remedy for this situation consists for the present in doing for the entire course of study what has been done, as pointed out above, in certain cases; namely, amplifying the method side of the course. Under the leadership of a competent supervisor, committees of Tampa principals and teachers may undertake to show more adequately how Tampa children can learn in the most interesting and efficient way the subject matter prescribed by the state. Lesson plans based on local conditions are sorely needed by the teachers in Tampa; and demonstration lessons which will embody in action the methods worked out by teacher committees would be of real service. These demonstration lessons may be held in various sections of the city and may serve as a basis for discussion led by the principals or supervisors.

There is a noteworthy lack of supplementary books and equipment such as are found in schools elsewhere. This defect should be remedied as soon as possible. The Florida course of study gives a suggested book list for pupils and several other desirable lists are appended to this report.

The teachers and principals should become familiar with desirable courses that have been developed in other states and cities. A list of such courses is indicated in a supplement to this report.

Provision for Enriching the Courses of Study.—In the preceding section of this report it was pointed out that the curriculum of the Tampa schools is deficient in many essential respects. Courses in music, art, science, manual and industrial arts, citizenship, physical education, and the like, are generally included in the curriculum of the modern school. Some of these special

subjects are listed in the adopted course of study, but in practice they are generally neglected or "taught incidentally." Approximately 85 per cent of the school day is devoted to the fundamental subjects—the traditional three R's. This allotment of time is not in keeping with that employed in better schools elsewhere.

Progressive schools have long since recognized the need for richer curricula. The development and training of the child with respect to his physical, social, and æsthetic needs is quite generally recognized as an obligation of the school. Special classrooms and equipment and special teachers are usually provided for health education, manual and industrial arts, science, music, and art; and schedules are arranged so that during each school day each class goes to some special room for one or more school periods.

In Tampa special rooms and equipment and specialized teachers are almost wholly lacking. The regular teachers are already carrying heavy burdens. But even if they were not overburdened and even if they were competent to teach the special subjects, they could not do so satisfactorily because of the lack of adequate supplies and equipment.

One possible solution might be the addition of special rooms and equipment to the existing school plants, and the employment of special teachers for the special subjects. It is obvious that such schools would provide far richer experiences for the children than do the schools which offer only the traditional subjects in the traditional way. It is also obvious that they would cost more. Special rooms, special equipment, and special teachers would increase the cost without increasing the pupil capacity of the school building. The increase in cost is not due primarily to the special subjects *per se*. Special rooms and equipment and special teachers cost very little if any more per unit than do regular classrooms and equipment and regular teachers. The increased cost per pupil is due primarily to the fact that in such a school a part of the school plant and a part of the teaching staff is idle throughout the school day. When the special rooms and teachers are engaged a corresponding number of regular classrooms and regular teachers are disengaged, and vice versa.

Under existing circumstances the possible solution just mentioned does not seem a wise one. Many of the school buildings in Tampa are already practically obsolete and will have to be aban-

done within a few years. School grounds are quite generally insufficient and the erection of additional buildings on them would make a bad situation even worse. Moreover, such funds as may become available for building purposes are badly needed elsewhere.

A second solution is possible—one which will permit the Tampa schools to offer a highly enriched curriculum without increasing materially building costs or instructional costs. With the view of securing the benefits of an enriched curriculum without incurring a large additional expense, certain schools in other cities have been organized in such a way that the entire school plant is in constant use during the school day. Classes are scheduled so that they spend one half of each day with the regular or home teacher, and the other half with each four or five special teachers. The school is divided into two equal sections (or platoons) which alternate between home rooms and special rooms so as to use both to maximum capacity. This arrangement is known as the platoon plan.

Chart 15, which is taken from a report on the platoon schools of Cleveland, will illustrate the outstanding differences between the three types of schools herein discussed.

In the chart it will be noticed that certain types of special rooms are indicated in both the departmentalized school and the platoon school. These particular special rooms are not essential to either type of school. Others might be substituted equally well. In Tampa, for example, an indoor gymnasium would not be necessary because the weather is mild enough for the children to play out of doors the whole year.

On the recommendation of the survey staff the Ybor School of Tampa was reorganized at the beginning of the present school year as a platoon school. At the time of the last visit of the survey staff the schools of Tampa had been open only a few weeks and the reorganization of Ybor School had not been completed. Much of the necessary physical equipment had not been delivered and many administrative and teaching adjustments remained to be made. At present, Ybor School has only the skeleton of a platoon organization. As equipment is added and program and teaching adjustments are made, satisfactory results may be expected.

The Shore, the Henderson, and the Cuesta schools have prob-

ings where the problems of the schools are freely discussed and conclusions reached. The amount of help that will come to the individual from such meetings will be in direct proportion to the energy he expends. These meetings should often take the form of demonstration lessons that are followed by discussion. Desirable modifications of the course of study may also be discussed. When new principals are brought into the schools, the matter of their professional training as well as their experience should receive very careful consideration.

The principals, in turn, should help to give the teachers opportunity for training while they are in service. Suitable lectures, conferences, and demonstration lessons are some of the means that could be employed.

The school system now employs a supervisor of art and a supervisor of music. There are also five supervisors of play-ground activities supported and controlled by the Tampa Play-ground Association. The city employs a small staff of supervisors when compared with that found in most cities of similar size. Just what new supervisors should be employed is a question that should be left to those who are in direct touch with the schools and who are aware of the needs that exist. Experience shows that whenever a new subject is introduced, or whenever there is a change in the treatment of any subject, there is very definite need for the services of the supervisor. The troubles that the teachers in the lower grades now have with children who have language difficulties indicate the desirability of having an additional supervisor who is thoroughly familiar with the kindergarten and primary school. In the same way, some person who is familiar with the newer methods of enriching the curriculum in the upper grades should be employed, at least temporarily.

Teacher Training.—The problem of securing enough teachers for a growing school system like Tampa is a difficult one. It becomes increasingly difficult when the city endeavors to enforce standards that are likely to bring teachers of better preparation. These are the conditions that exist in Tampa. Recently girls who have been graduated from the high school have been employed as "cadets" to work in the schools under the direction of the principals. Many of these cadets have state licenses to teach and could, if they so chose, accept positions outside of the city. It is expected that these girls will serve for two years as

cadets. What will happen at the end of this period is not entirely clear. If these persons are then taken as regular teachers in the Tampa system, there is an element of injustice, because they would then be on the same footing as those who had attended a normal school for two years and had sacrificed the salary that the cadets now receive. While it is true that the services that the cadets might render could be extremely valuable, this can never take the place of normal school training. It is certain that the present plan would not be satisfactory as a permanent arrangement. It grew up in response to the demands created by an emergency. The welfare of the cadets should be considered and the administration should study the procedure best adapted to accomplish its purposes. As matters now stand, the salaries paid to elementary teachers in Tampa are not large enough to attract people from a distance unless they have some purpose outside of education that brings them to this city. Until there is a change in salary schedules, the problem of teacher supply will remain a perplexing one. Those in charge of the schools will be compelled to resort to any measure that will bring teachers, irrespective of its real educational importance.

SUMMARY OF RECOMMENDATIONS

1. One or more kindergartens should be organized.
2. Radical changes should be made in the chart classes.
3. Children of legal school age should be forced to attend.
4. Number of children in a room should be decreased to forty.
5. Proper tests should be employed.
6. State course of study should be amplified to meet the needs of the city.
7. Supplementary books and equipment should be supplied.
8. Provision for teaching various special subjects should be considered.
9. Other schools in which conditions are like those at the Ybor City School should be reorganized on the platoon system.
10. Present organization of supervision should be continued and additional supervisors should be employed.
11. Inadequate salary schedules in the elementary schools in Tampa so complicate the problem of the training of prospective teachers that no recommendation can be made.

CHAPTER VII

THE SECONDARY SCHOOLS OF TAMPA

Junior high schools were established in Tampa as early as 1915, but as far as can be determined the only difference between the Tampa junior high schools during the years 1915 to 1925 in seventh and eighth grades and the ordinary seventh and eighth grades is the fact that in the junior high schools the work was departmentalized. During the period from 1915 to the beginning of this school year there have been practically no administrative changes in the organization of the work in either the senior or the junior high schools, each school seeming to be more or less a law unto itself. In September, 1925, however, a director of secondary education was appointed for the city as well as a supervising principal for each of the three junior high schools. In addition to the principal, the administrative staff of each junior high school consists of a woman assistant principal and a full-time clerk. The assistant principal carries approximately a half-time teaching program. While division of clerical administration and supervisory duties is as yet very indefinite, due to the newness of the arrangement, nevertheless, a good start has been made in the right direction.

The director of secondary education has formulated uniform plans for the enrollment and grading of pupils and a tentative program of instruction which the principals are assisting him in putting into effect.

Considering the intricacy and variety of the problems with which the administration of the junior high schools has been faced because of the unprecedented increase in school population, the results obtained thus far are highly gratifying. Naturally, emphasis has had to be placed upon problems of routine to the neglect of those concerned with curriculum construction, supervision of instruction, and the like. Conditions, however, have made this plan of emphasis entirely justifiable.

Even superficial investigation soon brings to light the fact that

complete records of pupils' past school work, and even promotion from grade to grade are not available. Possibly because of the lack of systematic organization, and certainly in spite of the serious efforts of principals and teachers, the checking of pupils' attendance has been so lax that many cases of tardiness for reasons entirely unsatisfactory were found as well as frequent cutting of classes. At the Washington School such delinquency is promoted by the fact that the boys' physical training is carried on in a field some distance from the school. It is obvious that, while conditions such as these prevail, the work of the schools will be tremendously handicapped. Much improvement was noted the fall of 1925, and, when the present serious efforts of principals and teachers is supplemented by adequate buildings and a reorganization of courses of study and teaching methods, these conditions will probably disappear. In the meantime a clear cut division of responsibility among the members of the school staff and the installation of a complete set of records will go far toward correcting the evils referred to above.

As indicated in the first paragraph of this report, the unprecedented influx of new population and its shifting character, together with the pitiable lack of space, make it mandatory upon the principals to devote a large measure of their time to details of administration for the remainder of the first semester of the school year, 1925-1926, but by the beginning of the second semester, the principals should begin to save as much time as possible for supervision. This will mean that the responsibility for the management of administration routine will be shifted to the assistant principals, the deans of the girls, and the home room teachers. The records and reports should be entrusted to the principals' clerical assistants, although for the first few months the work will have to be carefully and rather frequently checked. The principals will find it useful to have the teachers send to the office daily a slip of unusual happenings which contain the outstanding good and bad features of the day's proceedings. It is amazing how much can be learned about the school with the assistance of these "unusual" slips.

The records needed include those for attendance, a system of permanent records of a pupil's school and out-of-school activities, individual progress, age, date of birth, occupation of parents, language spoken in his home, health, scores attained in intelli-

gence and achievement tests, together with provision for recording chief interests, and personal qualities as seen by the teachers. Class and home room teachers should assist in the drafting of these records. In fact, it will be found most helpful if the teachers as well as representative pupils be requested to sit in conference with the principal in the formation of many administrative policies. In view of the conditions noted at the beginning of this section, however, it would probably be undesirable to inaugurate any type of student self-government prior to the time when the smooth working of the administrative machine has been firmly established, for the students are not now ready as a group for any large measure of participation in the conduct of the school, but gradually more and more responsibility can be placed upon them.

CURRICULUM ORGANIZATION

The curriculum organization which is at present in operation in the three junior high schools, is as follows:

SEVENTH B		SEVENTH A	
English	5	English	5
Mathematics	5	Mathematics	5
Geography	5	U. S. History	5
Sanitation	3	Physiology	3
Home Economics, or Practical Arts	2	Home Economics, or Practical Arts	2
Music	2	Music	2
Art	2	Art	2
Physical Education	1	Physical Education	1
	<hr/>		<hr/>
	25		25
EIGHTH B		EIGHTH A	
English	5	English	5
Mathematics	5	Mathematics	5
U. S. History	5	Civics	5
Agriculture	5	Home Economics, or Practical Arts	2
Home Economics, or Practical Arts	2		
	<hr/>		<hr/>
	22		17
ELECTIVES		ELECTIVES	
Art	3	Latin	5
Music	3	Spanish	5
Physical Education	2	Common Science	3
Public Speaking	2	Art	3
		Music	3
		Public Speaking	2
		Physical Education	2
		Constitution	1

NINTH B		NINTH A (Same as Ninth B)	
English	5		
Algebra (Math. 9)	5		
General Science	5		
Civics	2		
	<hr/>		
	17		
ELECTIVES			
Latin or Spanish	5		
Art	3		
Music	3		
Home Economics	2		
Practical Arts	2		
Physical Education	2		
Public Speaking	2		
Constitution	1		

As soon as equipment permits, physical education is to be required in all grades.

The six-hour day is divided into five sixty-minute periods for supervised study and recitation. Of the remainder of the six-hour day, about thirty minutes is used for auditorium, home room organization, extracurricular activities, etc. This means twenty-five periods per week for each pupil.

Since this curriculum has been in effect for only three months, no objective results are available. Criticism must, therefore, be based on a general consideration of the functions of the junior high school in connection with the principles of adaptation necessary in the light of special problems to be met in the Tampa schools.

The two chief functions of the junior high school may be stated as follows:

1. To continue, but not in a monotonous way, and certainly in a gradually diminishing degree, the pupil's training in the command of those fundamental processes, skills, habits, attitudes, and informations which form the common integrating background for any individual who is to be a proper member of society. This means in part that the reading, writing, and arithmetic skills of the first six grades are to be reviewed and continued, but that they are no longer to be allowed to occupy the major portion of the child's school day.
2. To determine wherever possible, by means of material in itself worthwhile, the interests, aptitudes, and capacities of pupils by revealing to them the possibilities both in the major fields of learning and in the vocations, and, having

determined the desirable ones, to foster them in a way that will result in each pupil's being placed in that field of endeavor which will result in the greatest good and happiness to himself and society.

While the present junior high school curriculum at Tampa offers a valuable beginning in the performance of these functions in that it provides in its required courses for a continuance on a higher plane of the instruction in the fundamental subjects begun in the elementary school, and in some measure for the exploration of pupils' interests through its elective offerings, the survey staff believes that the plan suggested in the following pages will carry out both of these functions in a more effective way.

Under the present organization junior high school pupils are now offered courses of study in six general fields:

1. Academic subjects begun in the elementary school and forming the basis of much of the work of the senior high school—English, mathematics, and the social studies.
2. Subjects relatively new to pupils entering the junior high school, but likewise forming the basis of much of the senior high school work—natural science (including sanitation and physiology) and foreign languages.
3. *Æsthetic* subjects (art and music).
4. Industrial subjects (practical arts and home economics).
5. Agriculture.
6. Physical training.

A detailed analysis of the present curriculum reveals certain fundamental lacks. Much, in fact most, of the time in the classes in the regular subjects is being devoted to a continuance of the teaching of the fundamentals begun in the first six grades. This is an error into which teachers of seventh and eighth grade children the country over usually fall. Feeling that a high degree of proficiency in reading, writing, and arithmetic is more necessary to the child's future success than anything else in the world, the teacher is tempted to continue work in these subjects to the exclusion of all else, often without realizing that the application of more efficient drill methods and the introduction of work in the fundamentals through literature and child experience material will do more than the old fashioned methods which teachers have always employed in the lower grades.

A closer examination indicates the lack of sufficient work in health and physical education as well as that which deprives the child of opportunities for sampling the different subjects to be offered in the later years of the high school. Neither is there provision made for vocational information. The principle that the junior high school should carry on its work by means of materials which shall in themselves be worthwhile is often violated. This is especially true in the fields of music and art. Above the seventh grade these subjects are entirely elective, while in that grade, where the work is required, much time is devoted to the study of technical music which might better be employed to instill in the pupils an appreciation of music, which is teaching from the consumer's point of view.

Another violation of the principle that the junior high school should offer work which should be of worth as far as pursued can be noted in the courses in agriculture and mechanical drawing. The formal details presented are no doubt of use to the specialist in these fields but are of questionable value to junior high school pupils who are seeking not long-continued specialized training, but opportunities to learn of the defects and advantages presented in these various fields and to determine their own interest in them as avenues for possible further study. The difficulties in these courses, however, are traceable in a large degree to the prescription of school textbooks by the state department of education. These books present in many instances rigid formal outlines of subject matter in many respects undesirable as a basis for any kind of teaching which is adapted to pupils' needs and interests. In some cases they are the old type high school texts, rather than books especially planned for junior high school pupils. Until the state law is modified, it is essential to the success of the junior high schools that courses of study in each of the subject offerings be made in order that the work presented in the books may be properly supplemented. Beginnings in this direction have already been made by the director of secondary schools and committees of teachers in the various junior high schools. These committees should make careful study of the methods of curriculum construction now under discussion by various authorities in the field and should especially direct their attention to the detailed reports of the various committees on the reorganization of secondary education.

After several conferences with the director of secondary education and the principals of the junior schools, the curriculum presented below is recommended as one which the survey staff feels will take into account the best theories now known regarding junior high schools, together with those modifications that will make the scheme fit into Tampa conditions.

SUGGESTED JUNIOR HIGH SCHOOL PROGRAM

1. English, which should include:
 - a. The literature of childhood and youth
 - b. Composition
 - c. Spelling
 - d. Grammar
 - e. Penmanship
 - f. Speaking

Accomplishment tests should be given frequently (four times a year) in composition, spelling, penmanship, and grammar to make certain that the children are up to standard. But these tools of English should not be made the major portion of the course. The children should not be denied the pleasure of following the escapades of Tom Sawyer, nor the adventures of the pirates of Treasure Island, in order to learn, only to forget, the difference between gerunds and objective complements. The course in English should be offered five periods a week.

2. Citizenship, or social studies, an interesting study of the duties and privileges of the home, the city, and the county, together with their history and geography background, should be made in the seventh grade. In the eighth grade the state and federal governments should be studied with their appropriate backgrounds. Though citizenship should be emphasized throughout as the central element of this course, effective organization of teaching materials will be aided by the adoption of special problems for the work of each grade. While the problems suggested above are in the opinion of the committee most appropriate, the state adopted texts may compel some deviations from the suggestions made. In this case the compromise suggestion is that a combined study of American history and geography be made in the seventh grade, a study of world history and geography in the eighth grade, and the elementary study of fundamental problems in current American history, with reference to their appropriate

backgrounds in state and federal government in the ninth grade. These courses should meet five periods per week.

3. Mathematics, which should consist of:
 - a. Sufficiently varied and engaging drill in the fundamentals to keep the pupils up to standard;
 - b. The practical portions of arithmetic, with as constant application as possible to out-of-school problems;
 - c. The conception of form from geometry and mechanical drawing; and
 - d. Algebra through simple equations.

This course should meet five periods per week.

4. Health and physical education should be required one period daily, unless a physician's certificate is presented. In this course should be given not only formal physical exercises and spontaneous games, but some work in civic and personal health. It is suggested that pupils be handled in groups of one hundred.

5. A combination course, which should consist of:
 - a. Spelling, penmanship, and grammar. This nine-weeks course should be offered either in the commercial or English department, and should be supplementary to the grammar, writing, and spelling which should be offered incidentally in the English course.
 - b. Geography and history facts. This course should be supplementary to the work in citizenship suggested above, and should provide for a more extensive study of needed geography and history facts than is permitted in the time allowed in the citizenship course.

Units (a) and (b) under the combination course present particular advantages from the drill point of view. Here in a nine-weeks' intensive course a good teacher who is thoroughly acquainted with drill methods and the principles of habit formation can do much not only to bring children to standard in the fundamentals, but to keep them there. It is the opinion of the committee that an intensive nine-weeks' course devoted exclusively to drill on skills and informations has that psychological advantage which comes from having the pupil realize that instead of being dragged through materials over two or three years he is going to have just a short nine-weeks' course; namely, that he will be willing to put everything he has into the work.

The five courses here suggested represent the constant subjects in the first two years of junior high school training. It yet remains for the survey staff to formulate that part of the program which will particularly provide for individual differences, exploration, and enrichment.

BROADENING AND FINDING COURSES

While the combination courses and the regular subjects mentioned above have many features of enrichment, the unique and distinctively junior high school feature suggested by the committee is the broadening and finding courses. These broadening and finding courses should be nine and eighteen weeks in length—nine weeks in the seventh grade and nine or eighteen weeks in the eighth grade—and should be open to every boy and girl in these two grades. It should be the aim of these short courses to present glimpses of the future studies in the fields in which they are given, as well as to show the pupils the possibilities of the different professions and businesses of which each is a sample. In other words, these courses should be cross-sections of later work. For example, the English-Latin broadening and finding courses offered by the Latin department should attempt to show the pupil what is in store for him if he continues his work in Latin in the senior high school, whereas, the electricity broadening and finding course should present not only cross-sections of the higher courses in electricity, but also problems and possibilities of electrical work as it is carried on in the city and in the nation. The junior high school pupil should be given the opportunity to sample practically every subject that is offered in the senior high school. For the sake of clarity a further example will be given more in detail.

The automotive department should offer nine weeks of work to seventh grade boys and nine- and eighteen-weeks' courses to eighth grade boys. It should be the aim of the instructor of these courses to point out to these young pupils the possibilities of this subject, and some of the bright spots as well as the drab ones should be brought to the boy's attention. The youngster should be brought in touch with the joys and thrills of the ignition work and the motor, but he should also be compelled to experience the difficulties and dirt found in greasing a car. The instructor's aim should be to paint for the boy an accurate picture of the working

of the automotive department in the senior high schools and of the automobile industry. Incidentally, he should be trying to discover which boys in this broadening and finding course have aptitudes for automobile work, and hence will make good grist for his more advanced courses.

All broadening and finding courses should be elective with the exception of science. Every pupil, however, should be compelled to take four in the seventh grade, and two, three, or four in the eighth grade, the only requirement being that one of the broadening and finding courses in each year be science. This scheme should enable a pupil to taste with profit six or eight different fields in these two years. For example, a boy in the seventh grade might take journalism for the first nine weeks; typewriting, the second nine weeks; science, the third nine weeks; and carpentry, the fourth nine weeks. In the eighth year he might take either four more entirely different nine-weeks' courses, or two nine-weeks' courses, and one eighteen-weeks' course in that subject which he seemed to like best of the four which he had chosen in the seventh grade; or, if he and the school authorities thought it likely that he drop out of school at an early date, he should be allowed to specialize by taking two eighteen-weeks' courses; for example, an eighteen-weeks' course in carpentry and another eighteen-weeks' course in an allied field, such as mechanical drawing.

Hence, it would be possible to take four broadening and finding courses in the seventh grade, four in the eighth grade, and begin with the differentiated curriculum in the ninth grade, or to take four courses in the seventh grade, two in the eighth, and differentiate in the ninth; or four in the seventh and three in the eighth and differentiate in the ninth.

These courses have been called broadening and finding courses, for when tried elsewhere it has been found that (1) through them many of the pupils find the later courses for which they seem to be best fitted, and in which their interest seems to lie; (2) in some instances they find also their life work, although this happens less frequently; and (3) whatever the finding, the pupils are profitably broadened by coming in contact with these different fields.

In order that the finding may be facilitated, part of the time of the shop courses should be spent in regular instruction in vocational guidance. For example, during the nine-weeks' broadening and finding course in automobile mechanics, the instructor should

show the boys the kind of work they can do and the amount of money they can earn by qualifying for a job in a garage. He should also point out to them the greater amount of compensation in, as well as the larger amount of preparation necessary for, electrical engineering. There should also be additional offerings in vocational guidance in the activity periods when the possibilities in all fields should be more or less carefully discussed.

The chief aim and value of the broadening and finding courses seem to be the broadening effect. While for purposes of finding, a more or less typical cross-section of future school work or life work is portrayed, nevertheless, an attempt is made to present only material which is in itself worthwhile. Hence, if the finding were reduced to zero quantity, which would be well nigh impossible, the enrichment alone would more than justify the cost.

The working of this program is now well understood by the junior high school principals and the director of secondary education in Tampa as well as by the director of industrial work and the survey staff feels that little trouble will be experienced in inaugurating the entire plan. In order that pupils may select their broadening and finding courses with more intelligence, it is suggested that the 6A pupils be permitted each semester to visit the broadening and finding courses in the junior high school some two or three weeks before the end of their work in the 6A grade. This procedure has the additional advantage of bringing about better articulation between the elementary grades and the junior high school.

In order that the administration of a program, such as that suggested above, may be expedited, typical program cards for the seventh grade are presented on pages 160 and 161.

If this pupil should continue in the eighth grade, his program would be similar to his work in the seventh, except that he would have more advanced work in English, citizenship, and mathematics, and could select other activities and broadening and finding courses. In the ninth grade he should begin his specialization for the majors and minors of the regular courses of the senior high school.

The outlines of all the courses should be given careful study in order that they may be based as exactly as possible upon pupils' actual problems and needs rather than upon formal analyses of manual operations. For example, the course in woodworking

should be extended to include home repairs as well as the usual model and furniture making.

The work in home economics should be carefully studied to determine whether it is offering girls opportunities comparable to those offered boys. In all the practical arts courses, it is important that the junior high school take definite cognizance of the rapidly increasing field of occupations open to women and the growing number of women entering skilled and semi-skilled occupations. The occupation of the home itself, moreover, is demanding increasingly broader training for the girls whose vocation is to be home making. The traditional courses in cooking, sewing, etc., must be very largely expanded by training in such fields as household management, interior decoration, and in the more specialized courses in the businesses and professions now open to women.

The above recommendations will necessitate the introduction of much more shop work than now exists in the junior high schools. This can be easily arranged in the present junior high school buildings, however, by employing a modification of the platoon plan, especially as it relates to the use of the auditorium for large sized classes in music appreciation, and of the playground for classes of 100 to 150 in health and physical education.

The program also demands the introduction of commercial work. Junior business training should be emphasized particularly with girls in the seventh and eighth grades because of the increasing number of young women who are entering this field yearly.

EXTRACURRICULAR ACTIVITIES

The extracurricular activities of the Tampa junior high school have in the past been limited entirely to athletics—especially football and swimming. The daily time schedule introduced this fall provides, however, for a thirty-minute period each day to be used for auditorium exercises, home room organization, and various club activities. This period is at present being used entirely at the discretion of individual home room teachers, since pressure of administrative detail has prevented principals from inaugurating any definite extracurricular program. About a third of the teachers have taken advantage of it to establish more or less parliamentary home room organizations; the others are using it as a study period or for miscellaneous purposes.

CHART 16
TYPICAL PROGRAM CARD

SEVENTH GRADE—FIRST QUARTER

Periods	DAYS				
	Monday	Tuesday	Wednesday	Thursday	Friday
8:35 A.M.—8:45 A.M.	Advisory	Advisory	Advisory	Advisory	Advisory
8:50 A.M.—9:35 A.M.	Citizenship	Citizenship	Citizenship	Citizenship	Citizenship
9:40 A.M.—10:25 A.M.	Science (B & F)	Science (B & F)	Science (B & F)	Science (B & F)	Science (B & F)
10:30 A.M.—11:15 A.M.	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics
11:20 A.M.—12:05 P.M.	Art Appreciation (Combina- tion)	Art Appreciation (Combina- tion)	Art Appreciation (Combina- tion)	Art Appreciation (Combina- tion)	Art Appreciation (Combina- tion)
12:05 P.M.—12:35 P.M.	LUNCH				
12:40 P.M.—1:10 P.M.	Assembly	Travel Club (Activity)	Boy Scouts (Activity)	Burbank Club (Activity)	Glee Club (Activity)
1:15 P.M.—2:00 P.M.	English	English	English	English	English
2:05 P.M.—2:50 P.M.	Physical Education	Physical Education	Physical Education	Physical Education	Physical Education
2:55 P.M.—3:40 P.M.	Study Hour or Dismiss				

SEVENTH GRADE—SECOND QUARTER

Periods	DAYS				
	Monday	Tuesday	Wednesday	Thursday	Friday
8:35 A.M.—8:45 A.M.	Advisory	Advisory	Advisory	Advisory	Advisory
8:50 A.M.—9:35 A.M.	Citizenship	Citizenship	Citizenship	Citizenship	Citizenship
9:40 A.M.—10:25 A.M.	Auto. Repair (B & F)	Auto. Repair (B & F)	Auto. Repair (B & F)	Auto. Repair (B & F)	Auto. Repair (B & F)
10:30 A.M.—11:15 A.M.	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics
11:20 A.M.—12:05 P.M.	Geography (Combina- tion)	Geography (Combina- tion)	Geography (Combina- tion)	Geography (Combina- tion)	Geography (Combina- tion)
12:05 P.M.—12:35 P.M.	LUNCH				
12:40 P.M.—1:10 P.M.	Assembly	Short Story (Activity)	Radio (Activity)	Short Story (Activity)	Glee Club (Activity)
1:15 P.M.—2:00 P.M.	English	English	English	English	English
2:05 P.M.—2:50 P.M.	Physical Education	Physical Education	Physical Education	Physical Education	Physical Education
2:55 P.M.—3:40 P.M.	Study Hour or Dismiss	Study Hour or Dismiss	Study Hour or Dismiss	Study Hour or Dismiss	Study Hour or Dismiss

This program might be profitably varied by using 50- instead of 45-minute periods. In case this should make the school day too long in the opinion of the school authorities, six 50-minute periods could be used.

CHART 17
TYPICAL PROGRAM CARD

SEVENTH GRADE—THIRD QUARTER

Periods	DAYS				
	Monday	Tuesday	Wednesday	Thursday	Friday
8:35 A.M.—8:45 A.M.	Advisory	Advisory	Advisory	Advisory	Advisory
8:50 A.M.—9:35 A.M.	Citizenship	Citizenship	Citizenship	Citizenship	Citizenship
9:40 A.M.—10:25 A.M.	Journalism (B & F)	Journalism (B & F)	Journalism (B & F)	Journalism (B & F)	Journalism (B & F)
10:30 A.M.—11:15 A.M.	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics
11:20 A.M.—12:05 P.M.	Music Appreciation (Combina- tion)	Music Appreciation (Combina- tion)	Music Appreciation (Combina- tion)	Music Appreciation (Combina- tion)	Music Appreciation (Combina- tion)
12:05 P.M.—12:35 P.M.	LUNCH				
12:40 P.M.—1:10 P.M.	Assembly	Athletic Club (Activity)	Radio (Activity)	Athletic Club (Activity)	Glee Club (Activity)
1:15 P.M.—2:00 P.M.	English	English	English	English	English
2:05 P.M.—2:50 P.M.	Physical Education	Physical Education	Physical Education	Physical Education	Physical Education
2:55 P.M.—3:40 P.M.	Study Hour or Dismiss				

SEVENTH GRADE—FOURTH QUARTER

Periods	DAYS				
	Monday	Tuesday	Wednesday	Thursday	Friday
8:35 A.M.—8:45 A.M.	Advisory	Advisory	Advisory	Advisory	Advisory
8:50 A.M.—9:35 A.M.	Citizenship	Citizenship	Citizenship	Citizenship	Citizenship
9:40 A.M.—10:25 A.M.	Instrumental Music (B & F)				
10:30 A.M.—11:15 A.M.	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics
11:20 A.M.—12:05 P.M.	Penmanship and Spelling (Combina- tion)				
12:05 P.M.—12:35 P.M.	LUNCH				
12:40 P.M.—1:10 P.M.	Assembly	Orchestra (Activity)	Vocational Information (Activity)	Orchestra (Activity)	Glee Club (Activity)
1:15 P.M.—2:00 P.M.	English	English	English	English	English
2:05 P.M.—2:50 P.M.	Physical Education	Physical Education	Physical Education	Physical Education	Physical Education
2:55 P.M.—3:40 P.M.	Study Hour or Dismiss				

Each day following lunch, a period should be set aside for leisure activities. The aim of these activities should be to broaden the child through coöperative work and play that he may be better fitted to enjoy the present and to take up life's later responsibilities. A premium should be placed on the pupil's initiative throughout. Each instructor, in offering an activity, should be asked to present those things from his department which are recreational in their nature. The question asked of the instructor should be, "What is there in your department with which a child might profitably and pleasurably spend his leisure time?" The activity period should be forty minutes in length, and should be placed in the middle of the school day rather than at its close, for in the past parents have underestimated the value of work of this kind, and occasionally have requested the schools to release their children at the close of the so-called regular day.

It is suggested that at the beginning the activities program be not too ambitious, but there is no reason why thirty to forty good activities should not be under way by the end of the first semester of 1926-1927. A few examples of the kind of activities that can be offered are given below.

The home economics department could offer such activities as:

- a. Camp-cooking
- b. Catering for special occasions
- c. Courtesy Club
- d. Fancy work

The science department could present:

- a. Burbank Club
- b. How-to-Treat-Your-Kodak Club

The citizenship department could offer:

- a. Social Service Club
- b. Travel Club
- c. Going to College Club

The teachers of mathematics could offer the following and similar activities:

- a. Visits to the stars
- b. Beauty of geometric designs

In this period also could come the literary societies, most of the musical organizations, and other activities now considered extra-

curricular. The activities should be offered once or twice a week, and permitted to run as long as a sufficient number of elections on the part of the pupils attests to their popularity. Some of them may run for one quarter, some for a semester, and others for the entire year. Since some could be held weekly and others semi-weekly, it would be possible for one pupil to take from two to four different activities each week, thus adding variety and interest to his leisure time program. This should be one period when pupils are given an absolute choice of what they shall do.

It is suggested that one of the five forty-minute periods be called efficiency hour and another be the assembly period, leaving three periods for activities. During the efficiency hour, constructive plans for school and grade betterment, beautifying of home rooms, improvement of school grounds, and preparation of special exercises or entertainments could be carried forward. During the other three periods clubs and activities such as those suggested above can be carried out. It might be well to have the twice-a-week activities on Tuesdays and Thursdays, such as glee club or theatricals, whereas once-a-week activities can come Tuesdays, Wednesdays, and Thursdays. This would leave Monday for assembly and Friday for efficiency hour. The efficiency hour is meant to be supplemental to the ten-minute home room periods which should be held at the beginning of each school day. This is a time when the principal can present through his teachers any particular school policy that requires more time than the ten-minute home room periods afford. A weekly bulletin from the principal's office to each teacher should announce the things to be discussed at this efficiency hour. For example, it might be a preparation for an Armistice Day program, for a thrift drive, or for an intensive drive towards better discipline. Here each teacher can in a personal and a careful way carry the message of the principal directly to her group. It is suggested that pupils return to their home room teachers for the efficiency hour.

The activities themselves, such as the clubs, should depend entirely upon the interests of pupils and teachers, every teacher being allowed to offer an activity in whatever field she may choose. It has been the experience in other cities that teachers often make far better preparations for an activity which is connected with a particular hobby of theirs than when they are confined to their own field.

The assembly should be an outgrowth of both the home room and the special club activities and should be the dynamo for generating both school and citizenship spirit. Quite often clubs or activities which have prepared work of special merit during activity hours can be asked to present assembly programs.

The activities should be popular and profitable, and time spent on them will be far from wasted, for, during these periods, emotionalized attitudes, right habits of coöperation, and general elements of good citizenship are developed, which otherwise might be entirely neglected.

IMMEDIATE PROBLEMS IN CURRICULUM REVISION

It is to be recognized that the reorganization of both curricular and extracurricular offerings here suggested must be brought about even more through careful study and experimentation by teachers and administrative officers alike, than through purely administrative changes. Though the new form of organization may be established almost at once, progressive improvement of subject matter and methods of presentation will necessarily prove a slow and difficult task. The present work on curriculum revision, already referred to, must be expanded to include all courses of study; its effectiveness will be greatly aided by the establishment of the curriculum committees recommended as part of the schools' supervisory organization on page 153.

For the guidance of these committees the survey staff recommends careful study of current discussions of curriculum revision, notably Bobbitt's *How to Make a Curriculum*, Charter's *Curriculum Construction*, and Bulletin No. 1, 1925, of the Missouri State Department of Education. To these should be added books pertaining especially to the junior high school: Davis' *Junior High School Education*, Briggs' *The Junior High School*, Koos' *The Junior High School*, Thomas, Tyndal, and Myers' *Junior High School Life*, Bruner's *The Junior High School at Work*, and others. Committees in special subject matter fields will do well to make extensive use of the reports of the various National Committees on the Reorganization of Secondary Education (published as bulletins of the United States Bureau of Education) and of recent books and articles on materials and methods in the various subjects. Care must be taken, however, to regard none of these treatments as prescriptive. The whole field of

the curriculum, and especially that of the junior high school, is as yet in an unsettled state; and the best curriculum for Tampa will be achieved through a study of the specific activities in which Tampa children are to engage or ought to engage, of the preparation necessary for those activities, and of detailed materials and methods by which such preparation may be afforded. The most accessible and effective method of starting curriculum reconstruction is to have each teacher turn in the best piece of teaching she has ever done. Some of these reports will be in the form of projects, others of drill devices and still others of laboratory experiments. These best pieces of teaching and course of study can gradually be brought nearer the level of the best teaching in Tampa. The second step should be a consideration of the best teaching done elsewhere as indicated by the best courses of study from other cities. Even with the work of other schools for guidance, however, the major part of the curriculum must therefore, be evolved through a study and discussion by Tampa's teachers and supervisors, for, after all, the chief value of a program of curriculum reconstruction is that which accrues to the teachers while they are actually engaged in the work.

Even prior, however, to the constructing of courses of study should come a careful study of the pupils who are in the junior high school grades. The test given in the sixth grades of the school in May, 1925, was a step in the right direction. At least twice during a pupil's school career, a most careful inventory should be taken of his physical, social, and mental make-up as well as of his achievements. Just as no contractor would obligate himself to build a house for ten thousand dollars without knowing whether the material to be used was to be brick, stone, or wood, neither should the schools permit children to start into secondary education without being carefully studied in every possible way. It is a matter of common-sense knowledge as well as of scientific proof that children do better when they are classed with their own kind and given work commensurate with their abilities. Hence, it is suggested that the children in each grade of the junior high school be placed in homogeneous groups selected on the basis of some such criteria as the following:

1. Group psychological tests. One of these should be given to the pupils of the 6A grade and another when they reach the 7B.

2. Individual psychological tests for the highest and lowest 10 per cent. These should be given in high sixth and low seventh, and the results utilized in making finer adjustments of these extreme cases.
3. Achievement tests, covering all subjects, arithmetic, and spelling. The results of these tests will enable the principal and teacher to gauge more accurately the work in the fundamentals and to determine those parts of various subjects which need particular stress.
4. Previous school marks made by pupils. These sometimes can be collected over the entire six-year period preceding the time the child entered the junior high school.
5. Teachers' opinion based upon class work and home visits. In the home visits will be found a particularly useful device, not only for tying up the school with the home, but for a better understanding of the pupil by the teacher and hence for easier and better teaching. A short report of the social conditions found in the home should be made by the teacher on a 4 x 6 card kept in the home room files. It is suggested that these visits be made during the first six weeks of the child's work in the junior high school for each of the three years. In order that the teacher may not be overburdened, it would be advisable for the school authorities to dismiss during the first three to six weeks at least forty-five minutes to an hour earlier daily, provided the teacher is then willing to give a similar amount of time. The visits can be easily taken care of during the early part of each school year. The survey staff cannot over-emphasize the importance and value of this home visit work for junior high school people.

In assigning pupils to their proper sections on the basis of the criteria mentioned above, it is suggested that in each school the heads of the English, citizenship, and mathematics departments, together with the vice principal and the deans of girls and boys, constitute the classifying committee, it being understood, of course, that extreme cases might await the decision of the principal. The top sections could be called "enrichment classes" and here work should be given of sufficient scope and difficulty to challenge the best efforts of these particularly fortunate pupils. While in some cases it may be desirable to accelerate

the work, thus allowing especially favored pupils to finish the three years of the junior high school in two or two and a half years, the principle of enrichment is suggested rather than the one of acceleration. There is not a more virgin nor fertile field in education than that of determining of what the curriculum for enrichment classes should consist. Undoubtedly, it is our duty here to teach children to do better the desirable things in which the leaders of Tampa are engaged. In these enrichment classes children can be offered more work in literature, art, and music and in those activities engaged in by boards of directors of the chamber of commerce, banks, and leading institutions of the city, for from this group of children will undoubtedly come many of the leaders of the next generation, and it is a duty of the school to foster these qualities of leadership.

The curriculum for the underprivileged pupils is also difficult to determine. An early opportunity should be offered these pupils to sample vocations possible for them in order that the school may place them in that work which will harmonize with their abilities and their interests. To continue to drill these over-age boys and girls on reading and writing and arithmetic alone means school suicide, and that in a short time. While some of the reading, writing, and arithmetic should be continued, the major portion of the time should be devoted to interesting them in a wide reading of the simplest, and yet best, things in literature, acquainting them with the simple but fundamental duties of citizens and, above all, in guiding them to that type of bread-and-butter education which will enable them soon to make and enjoy a living which will be productive of the best results to themselves and to society.

Since the school mortality is so great in grades 5 to 9, inclusive, it is strongly recommended that every child in Tampa who has reached the age of thirteen years, six months, and who has not finished the sixth grade, be arbitrarily promoted to the junior high schools and placed in one of these lower sections of the seventh grade, where work will be given him in consonance with his abilities. That will mean, of course, that the lower sections of the seventh grade will consist in the main, of thirteen-, fourteen-, and fifteen-year-old pupils, some of whom have only third grade ability in arithmetic, fourth grade in reading, fifth grade in penmanship, and the like, but the plan without doubt

will have the important psychological advantage of getting each of these pupils away from the notion that he is a failure. When he is grouped with others of his kind, he will soon find that a proper amount of effort will be rewarded with success, for, occasionally, he will find himself a leader of his own group, an experience entirely new to him. This should and does make for greater happiness, more effort and larger results. It is suggested that not more than twenty pupils be placed in these lower sections, whereas, in the regular sections of average pupils as well as in the enrichment sections, forty pupils can be handled by a good teacher with little difficulty and with no impairment of good teaching.

The survey staff realizes the difficulty of teaching in these lower sections, in view of the wide variations in achievement; but if the sections are kept sufficiently small and only teachers who understand the psychology of the underprivileged child are employed, the administration will reap a large measure of satisfaction from such an arrangement.

The junior high schools in Tampa are sufficiently large to make homogeneous grouping especially desirable. For example, in the junior high schools where there are approximately four hundred children in the seventh grade, eleven sections or groups of children could be provided for. Here sections 7-1 and 7-2 could be the enrichment classes; 7-3 to 7-9, inclusive, the classes for the normal children; and 7-10 and 7-11, the classes for the underprivileged.

SUPERVISION OF INSTRUCTION

With the exception of the very general oversight exercised by the supervisor of secondary education, supervision of teaching in the junior high schools is now entirely lacking. The principals have necessarily been so completely occupied with matters of administrative detail that no attention has been given either to assisting individual teachers in their work or to formulating a general plan of supervision.

The survey's study of teaching in the junior high schools has revealed certain weaknesses common to nearly all the work. The first of these is the almost absolute dependence of teachers on textbook materials. The teachers are urged in this respect to supplement the textbook with projects drawn from the experi-

ence of the children and with materials drawn from many supplementary books. The board of education should furnish a sufficient number of supplementary books to enable the teacher to get away from the bondage imposed by the use of one text.

A second weakness is found in the ineffectiveness of teaching method. In many cases primary emphasis in almost all academic subjects is placed on memorization; classwork is conducted on the old style question-and-answer basis; study assignments are in terms of reading to be done, facts "learned," or examples solved, rather than of problems to be surmounted and increased skill or experience to be gained. In some cases, however, were found teachers who were appealing to pupils' natural interests in the subject matter under discussion and were utilizing a coöperative attack upon problems in the class period. Especially was this found to be true in some of the classes in the senior high school. It is suggested, both for purposes of better articulation as well as for improvement in methods, that teachers' meetings be held once each month where special methods of teaching the subject, as well as the general philosophy of education, be discussed. Other cities have found it helpful to have demonstration classes as part of the teachers' meetings and, following the demonstration, to have the teachers present discuss the weaknesses and strengths of the presentation. At three or four of the departmental meetings, for example, English, it will be well to have all teachers in the English work in the junior and senior high schools of the city present. This will make for a better understanding of the work from grades 7 to 12, inclusive, and will do much to articulate the teaching in the two divisions of the secondary schools. These meetings should be scheduled and the programs planned by the supervisor of secondary education in conjunction with his principals and heads of departments.

Third, few of the teachers visited showed evidence of ability to make the best possible use of the time afforded for supervised study. The long class period means at present only a greater or less amount of time (depending upon the speed with which the recitation is completed) spent upon undirected study of the next day's assignment, with the teacher acting as monitor. Certain advantages are, of course, to be found in this method as contrasted with the older method of unguided home study, but

the total gain is obviously far short of what should be accomplished through skillful study supervision.

It is recommended, therefore, especially in view of the fact that short intensive drill periods are without doubt better for pupils of this age, that the period be not over fifty minutes in length. The survey staff feels that this will give sufficient time both for the drill and for as much carefully directed study as the teachers of Tampa will be able to make of maximum use.

Fourth, the relationships between teachers and pupils seem in many classes to be of the most formal and impersonal sort. This is in large measure, no doubt, a product of the present unsettled conditions in all the schools; but it seems in far too great a degree to be the result of the general formalization of the teaching process. This, of course, will be gradually remedied as the style of teaching changes to the socialized, pupil-participating, problem-solving sort.

Finally, the teachers seem, in general, to be unacquainted with any but the immediate details of the present reorganization and its purposes. Every teacher seems to be doing her best to carry out the instructions and suggestions which she has received, but the survey staff feels that a very decided improvement can be made by having the teachers assist in the formulation of policies and the planning of procedure. This is not to be interpreted as meaning that teachers should be called in on every case of tardiness or breach of discipline but, that at the general meetings held at convenient intervals, large policies effecting the school should be discussed and the teachers urged to contribute as freely as they desire. The carrying out of policies, however, as well as the final decision and formulation, must, of course, reside with the administrative officers.

The five defects pointed out above might seem to the uninformed to be very serious, but when one realizes the tremendous and rapid growth of Tampa, together with the ensuing congestion in the schools—to say nothing of the fact that the city supervising principal has been on the job for less than a year and the director of secondary education and the principals of the junior high schools for less than two months—the conditions are far better than one would expect. In fact, the members of the survey staff wondered at the speed and accuracy with which the general organization of the schools was being thrown into shape.

With an insufficient number of desks, with the state embargo on school equipment, with half-day sessions at the buildings, and a complete reorganization of the school system under way, any achievement would be worthy of note, but the teachers and the administrative officers of the secondary schools have done far more than merely keep school. They have their plans laid not only for bettering their general organization, but for improving the school morale, methods of instruction, and their own professional status.

In view of existing conditions, supervision at the junior high schools has, as the survey staff see it, three major functions to perform:

1. Enlisting of the intelligent interest and coöperation of teachers in the present reorganization of the schools;
2. Improvement of classroom teaching in all subjects (which will involve the definite training of teachers in service); and
3. Assisting teachers to work out details of the courses of study in such a manner as to make them of greatest interest and value to the pupils.

To these should be added a fourth function—coördination of the work of the junior high schools with that of the senior high school above and the elementary schools below.

SUMMARY

To summarize, the following supervisory organization is recommended to make possible the fulfillment of these functions:

1. Each junior high school principal should appoint, with the advice and approval of the supervisor of secondary schools, a chairman for each subject matter department in each junior high school. To these teachers should be entrusted the improvement and the special details of instruction in their own departments and at their own schools. Teachers of more than one subject should participate in the work of each department which they represent.

2. Departmental committees consisting of one or more representatives from each junior high school, each senior high school, and the sixth grades of each elementary school should be selected by the principals and the supervisor of secondary education. To

such committees working in coöperation with the supervising principal in Tampa, should be entrusted the revision of courses of study in the separate subjects.

3. A teachers' council of from five to ten members in each school, chosen by the teachers themselves, but meeting at the call of the principal, should be instituted to assist in formulating the policies of administration and supervision.

4. A principals' council, consisting of the junior and senior high school principals, should hold regular monthly meetings to formulate, with the director of secondary education, the general policy to govern the work of the schools.

5. Department heads in cases where there are as many as six or more teachers in the department should gradually be relieved of from one-fifth to one-third of their regular class duties as they show themselves able to be of real supervisory assistance to the teachers of their departments.

In all of the work the supervisor of secondary education is the coördinating head. In every building, however, the principal occupies a similar position. It is the business of these administrative officers to assist each departmental group in solving supervision and curriculum problems pertaining especially to their own departments by stimulating and encouraging them as well as by making improvement in service possible through proper teaching assignments, and furnishing of supplies.

TEACHER ASSIGNMENTS AND TEACHER LOADS

A casual study of the assignments of teachers indicated that in many instances all their work is confined to one grade. While this, in some instances, may be necessary because of inadequate preparation to do both seventh and ninth grade work, the survey staff feels that it would be desirable for teachers to conduct classes in all three grades. For example, an English teacher could with profit, where qualifications will permit, teach English classes in the seventh, eighth, and ninth grades or could teach citizenship classes in all three grades. In the 7B grade, however, it is not at all undesirable that the same teacher conduct classes in both English and citizenship, thus making the transition from the grade to the departmental teaching idea more gradual and hence less disturbing.

The survey staff feels that a reasonable load for a junior high school teacher would be twenty-seven teaching periods plus three periods to be devoted to supervised study or other duties which might be assigned by the principal. This would mean that an academic teacher could handle regular classes four periods daily; broadening and finding work, one period daily; activities, two periods per week; and supervised study, three periods per week. A reasonable amount of time to expect from shop people would be six periods daily.

ARTICULATION OF ELEMENTARY SCHOOLS WITH JUNIOR HIGH SCHOOLS AND JUNIOR HIGH SCHOOLS WITH SENIOR HIGH SCHOOLS

The junior high schools are at present entirely separated from both the elementary schools and the senior high schools, except in so far as they receive their pupils from the one and discharge a few of them into the other. In order to secure better articulation the following procedures are suggested:

1. Promotion of all over-age pupils from the elementary schools into the junior high schools (discussed under Curriculum Organization, p. 150).
2. A "visiting day" for elementary school pupils about to enter the junior high schools, in which they sample an abbreviated program representative of the work of the schools.
3. A similar visiting day for junior high school pupils about to close their junior high school work, in which they sample the work of the senior high school.
4. Abandonment of the formal junior high school graduation; granting of certificate without ceremony to pupils leaving school at any point, showing work completed and proficiency attained.
5. Visits of selected junior high school teachers (department heads especially) to elementary school and senior high school classes.
6. Similar visits of elementary school and senior high school teachers to the junior high schools.
7. Formation of departmental committees and principals' councils as suggested above.

8. Occasional "exchange" of teachers for a day, a week, or a half year between the junior high schools and the elementary or senior high schools.
9. Formation of a general teachers' council for the whole school system, with representation from all schools.
10. Curriculum articulation, as discussed in preceding sections, should consist of allowing all pupils who are promoted from the elementary schools to the junior high school to take whatever work their abilities warrant, while the curriculum articulation between the junior and senior high schools is best taken care of through the broadening and finding courses where pupils have had the opportunity to sample in the junior high schools the offerings of the senior high school instructors.

RELATION TO COMMUNITY

It is highly important that parents, as well as teachers, understand fully the purposes and methods of the school reorganization. Initiative in this matter must rest even more largely on the schools than upon the parents. The junior high school principals should feel a definite responsibility, therefore, for working in cooperation with the presidents of the parent-teacher associations to provide lectures, demonstrations, and discussions which will make clear the work of the junior high schools and the specific problems to be faced. Parents should be encouraged to visit the schools at every opportunity, and occasional provision should be made for school programs which will allow them to see, at stated times, samples of the school's work. Since most parents cannot visit the schools during the regular sessions, special reliance must be placed upon the parent-teacher associations to keep them in touch with the formal education of their children. Teachers should feel it a part of their work to come in personal contact with the parents in the association meetings, and every effort should be made to provide programs of such interest and value as to attract a large proportion of the parents of the community.

Some schools have found it helpful during American Education Week, or at some other time, to offer a complete school program on one evening when short recitations were held and parents passed from recitation to recitation along with their children. A

program of this sort can be consummated in two to two and a half hours, by scheduling fifteen-minute periods. It is surprising what a reliable cross-section of work a parent can become familiar with in one program of this type. Other methods of keeping the school and the community in close touch were discussed in a preceding section, "Study of Pupil Material."

The survey staff feels that it is especially desirable that the schools of Tampa inaugurate and maintain a carefully planned campaign for keeping the community and the school in close contact since the city is growing so rapidly and the school programs are being reorganized more or less radically. While the pressure of other seemingly more professional duties may at times tempt the school authorities to neglect this work, there is no doubt but that such neglect would in the long run, when both school and city are no longer faced with such abnormal conditions as now exist, cause more trouble and demand more time and energy than would a gradual and continuous program.

SOME OBSERVATIONS AND RECOMMENDATIONS RELATING TO THE SENIOR HIGH SCHOOL

While junior high schools the country over are passing through an experimental stage which permits the individual school to exercise more or less freedom in constructing its courses of study, programs and courses of study in senior high schools have, because of college entrance examinations as well as those of various associations, continued to crystallize until they are more or less uniform in their offerings. The Hillsboro High School is no exception to this general rule.

In the main, the school is a well ordered, smoothly running machine, and the classes are carried on with the usual effectiveness found in the average American senior high school. Both the administrative staff and the teachers are conscientious and seem to be putting forth their best efforts. A few suggestions, however, in addition to those made regarding the junior high school, may be of assistance.

Records and Reports.—The simple and rather incomplete system of records in use until recently is entirely inadequate for a modern high school of the size of Hillsboro. The local staff is to be congratulated on the fact that a new system is being developed and installed this year. The plan, however, of having

the posting to permanent records done by groups of students in so-called office practice is open to serious question. Ultimate economy, as well as the fair treatment of students, makes it highly important that enough competent clerical help should be employed to keep the necessary records. A careful study of the Strayer-Engelhardt system¹ of records by the principal and his administrative staff would probably result in the improvement of some of the forms now used. If the system now in use is continued, inaccuracies at some later date may result because of the ambiguous way in which grades are recorded. For example, courses are described in one place as "Senior B" or "Sophomore A" and elsewhere the same courses are referred to as "1-B" and "2-A." This double system of nomenclature was confusing to members of the survey staff and will probably be misunderstood by others.

SCHOOL CITIZENSHIP

Order in the Hillsboro School is entirely satisfactory. The system of discipline, however, seems to be a little too much of the policing type. It will probably be necessary to maintain the present system until a coöperating school citizenship attitude can be developed within the student body. Highly valuable results in school citizenship can be obtained by the proper organization of assemblies and school activity programs.²

GROUPING STUDENTS IN CLASSES

In all the larger departments, especially in the sophomore and junior years, where there is a sufficient number of divisions of the same subject, students of like ability should by all means be placed in the same group. The five criteria mentioned in the discussion of this problem for the junior high schools are recommended here. Pending the time when careful tests can be given, accumulated records and teachers' opinions should be utilized in placing pupils in proper groups.

METHODS OF TEACHING

From the large number of classes visited by members of the survey staff, various impressions were secured regarding the

¹ Strayer, G. D. and Engelhart, N. L. *School Records and Reports*. Bureau of Publications, Teachers College, Columbia University, 1923.

² See Foster, Charles R. *Extra-Curricular Activities in the High School*. Johnson Publishing Co., Richmond, Va. 1925.

teaching. A few of the recitations moved aimlessly to no apparent goal and others were very formal textbook exercises. In the main, however, excellent teaching was the rule. The teaching staff contains some real talent, but the need for supervision is very apparent, for much of the ability of teachers is now being directed toward formal textbook teaching alone. It is true that the teachers lack working materials. The laboratories are poorly equipped, maps and charts are scarce, and the school is without a library. A few books are accumulated in a small room, but a high school the size of Hillsboro should have a room, at least the size of one of its large study halls, equipped with hundreds of good books in every field of learning. The survey staff recommends that there should be secured immediately at least five to eight thousand carefully selected books, catalogued according to modern methods, and placed in charge of a trained librarian. This librarian will need, for at least the first six months, while the books are being catalogued, a full-time clerical assistant. In addition to the original outlay it would be necessary to add at least one thousand books per year for several years to come in order to make anything like adequate provision for the reading needs of the Hillsboro student body.

SUPERVISION

Three to seven departments now represented in the senior high school have effected an organization but very few departmental meetings have been conducted and all of the time of these meetings has been devoted to routine matters. One department, however, is taking steps to do some serious, critical work with teaching methods by carrying out a particular experiment and another is planning to take college extension courses in the methods of teaching that subject. These are indications that the teachers are willing but that organized guidance is immediately necessary.

Curriculum revisions and the making of courses of study would immediately point every department toward a real program. In addition to this work the following list of activities is submitted for the consideration of department heads:

1. Classroom visitation by the department head.
2. Conference with individual teachers subsequent to classroom visits and at such other times as the teacher may feel the need of the sympathetic advice of the department head.

3. Demonstration teaching done in turn by members of the department followed by a frank critique participated in by all members of the department, including the teacher who made the demonstration.
4. Visitation of one another's classes by members of the department.
5. A free exchange of teaching methods, materials, etc., in order that the entire department may benefit by any good method any teacher may have.³

The senior high school of Tampa shares with most of the high schools of the South and of the nation the necessity for making a thoroughgoing revision of its curriculum. This has been made necessary by the explosion of the theory of training "faculties" and the economic, social, and political development of recent years. The high school of to-day is charged with a responsibility not only of preparing certain pupils to enter college, but to assist all others as well.

There are at present three curricula in the Hillsboro High School, the academic, general, and commercial. Outside of the commercial course there is little or no assistance given pupils who will not enter college. *Curriculum revision is by far the most important task ahead for the faculty of Hillsboro High School.* It can be brought about as follows:

1. By a revision of the requirements and election privileges applying to the different curricula, and by the addition of new courses of study. Very close articulation should be made with the junior high schools. If these junior high schools faithfully discharge their responsibility of finding the future courses of study children should pursue, then it is obviously the duty of the senior high school to offer adequate training in those courses of study in which children have found themselves to be most proficient. This will mean, of course, the addition of many new courses in Hillsboro Senior High School, especially along the lines of the shops and vocations.
2. By a thoroughgoing revision of the content of the courses of study themselves. This revision, of course, should be a continuous and coöperative process. The teachers of each

³ Refer to supervision statements in the junior high school set-up. Page 168.

department should constitute committees whose task it is to revise the subject matter requirements within their own courses. All available material on this subject should be obtained from the bureaus of research at the universities, as well as reports of national committees. It is highly important that these committees keep in close touch with the junior high school teachers of their subject and that special emphasis be laid on the life needs of pupils as interpreted and modified by those of Tampa and Florida.

THE COURSES OF STUDY

The English Course.—Reference to Chart 18, page 180, indicates that English is required throughout the three years of each of the three curricula. More work has been done on the formulation of a detailed course of study for English than for any other department. The outline is really a meritorious piece of work, but it is an individual enterprise. The chief value of the committee procedure in course of study construction outlined above is the training teachers receive while at work.

The Foreign Language Course.—Reference to Table 17, page 181, indicates the important part foreign languages play in the program of the average Hillsboro boy or girl. Some twelve hundred pupils who reported to school on October 12, 1925—each to four or five classes—made a total of 4,940 pupil class reports. In other words, it may be said that 4,940 pupils reported to class on October 12, if it is remembered that each pupil is counted four times, and a few, five times. Of these, 1,027, or about 20.5 per cent, reported to foreign language classes. Outside of English, which is entirely compulsory, foreign language claims more of the students' time than any other subject.

A reference to Chart 18, page 180, indicates that foreign language is elective in all curricula after the requirement that two years of whatever foreign language has been begun in the junior high school has been met. While there is considerable practical justification for Spanish in Tampa on the ground that it is spoken quite generally, it is safe to say that foreign language forms a relatively higher percentage of the average pupil's program than its practical value justifies. Its traditional position leads to its being overstressed either in the community or in the school. The emphasis evidently falls on Latin rather than on Spanish be-

CURRICULUM - HILLSBORO HIGH SCHOOL		
ACADEMIC CURRICULUM	GENERAL CURRICULUM	COMMERCIAL CURRICULUM
TENTH GRADE		
English	Composition and	Literature
Ancient History		
Latin	or Spanish	Second Year
Algebra, Last	of Second and First	of Third Year
	Spanish or	French First Year
	Music, Taken	for Full Unit Credit
	Bakery	
	Domestic Arts (Girls)	Bus. Arith. & Com. Geog.
		Typewriting
ELEVENTH GRADE		
English	Composition and	Literature
Plane Geometry		
Latin 3 or 4	or Spanish or	French 1 or 2
	Botany or	Zoology or Physics
	Modern History	for Year or Economics for Half Year
	Music, Taken	for Full Unit of Credit
	Domestic Arts for Girls	Shorthand
		Typewriting
TWELFTH GRADE		
English	Literature	
United States	History and Civil	Government
Latin 3 or 4	or Spanish or French 2	Shorthand
	Music	Typewriting
	Physics, Chemistry,	Botany or Zoology
	Solid Geometry	and Trigonometry
	Modern History	of Economics
	Psychology and	Pedagogy
	Citizenship	Phys., Geog. & Nat. Sci.

LEGEND

☐ = Required Subject [---] = Elective Subject

CHART 18
CURRICULUM—HILLSBORO HIGH SCHOOL

TABLE 17
DISTRIBUTION OF NUMBER OF TIMES PUPILS REPORT TO CLASSES

Subject	PUPIL CLASS REPORTS IN					Total Number of Pupil Class Reports	Per Cent of Pupil Class Reports in Subject	
	Tenth Year	Tenth and Eleventh Years	Eleventh Year	Eleventh and Twelfth Years	Twelfth Year			
English	571	...	423	...	274	...	1,268	25.5
Ancient History	376	...	...	...	...	...	...	...
Modern History	149	...	...	...	...	...	...
American History...	71	...	...	...
Civics	26	...	...	...
Economics	69	...	...	691	14.1
Latin I	57	...	...	...	...	...	...	...
Cæsar	267	...	...	...	...	...	...
Virgil	144	...	...	...	...
Spanish 1	201	...	...	...	...	...	...
Spanish 2	201	...	...	...
French 1	76	...	...	...	...	...	...
French 2	81	...	1,027	20.5
Algebra 2	523	...	...	...	...	...	...
Plane Geometry	181	...	...	...	...
Solid Geometry	42	...	...	...
Trigonometry	22	...	768	15.2
Zoölogy	17	...	...
Botany	130	...	...
Chemistry	12	...	...	...	...
Physics	117	...	...	...	...
Physical Geography.	9	285	6.2
Business Arithmetic.	124	...	...
Bookkeeping	196	...	...
Typing	109	...	...
Shorthand	112	...	...
Commercial Geogra- phy	33	...	...
Commercial Law	26	600	12.5
Cooking	63	...	...
Sewing	83	146	3.0
Psychology	47	...	...	...	...
Pedagogy	12	...	...	59	1.2
Music	79	79	1.5
Journalism	17	...	17	.3
							4,940	100.0

cause only two years of the latter language is taught while four years of the former is offered.

The most significant modifications of the foreign language courses will occur in the junior high schools, but the senior high school courses should be thoroughly overhauled and modernized so that their content may be justified in the light of modern psychology and the needs of pupils and society.

The Mathematics Course.—This course comprises more than 15 per cent of the average pupil's program (see Table 17) and in two cases out of three the subject is algebra. The practice of devoting two and a half years to the study of formal algebra in the junior and senior high schools is indefensible. Only 181 are studying plane geometry, while 523 are adding one year of algebra to the one and a half years they have already studied it in the junior high school. This means that two out of three who take second- and third-year algebra never study plane geometry at all.

There should be an immediate and radical reorganization of the mathematics program along the lines suggested by the report of the committee on the Reorganization of Secondary Mathematics. This report outlines a program involving a close correlation of algebra, geometry, arithmetic, and, to a small extent, trigonometry; also a good deal of early emphasis on intuitive geometry as opposed to formal geometry demanding rigid demonstration. The report should be followed as far as formal texts adopted by the State Text-book Commission will permit.

The Social Science Program.—Social science hardly occupies the position its importance in life entitles it to, since it is found in fourth place on the program of the average senior high school student of Tampa. More than half of the entire social science program is ancient history—376 enrolling in the ancient history classes and only 149 in modern history. It is very unfortunate that more than twice as much emphasis is placed on ancient European history as is placed on modern history. Committees in this department should undertake immediately the task of rather radically reconstructing this whole program. A clearly apparent initial step is the substitution of a year of modern history or a year of general history for the year of ancient history which is now required.

The Natural Science Course.—Aside from the fact that the natural science course is of less prominence than its real importance deserves (6 per cent of the whole), the chief weakness is its lack of continuity. Botany, zoölogy, physics, or chemistry may be taken in practically any year of the high school without regard to previous science taken. The program outlined by the National Committee for the Reorganization of Science in the High School for large three-year high schools is recommended. This report arranges series of science elections and provides for increasing difficulty by making some courses prerequisites of more difficult ones.

The Commercial Course.—The commercial course as now outlined has much to commend it. It is restricted to a specific group which has made a definite choice, it is well balanced in the three years, observes a good sequence, and holds the student for the entire high school course. Future developments of the commercial curriculum should be in the direction of completely divorcing it from college entrance requirements. It needs to be recognized that commercial students are in most cases preparing to go immediately into positions. To this end there should be well organized continuous placement service not only for graduates but for others who may find it necessary or desirable to go into positions. It may be possible without impairing the holding power of the school to give more work in the early part of the course which would be immediately useful to such students as found it necessary or desirable to go into offices before completing the course. There are a large number of positions which do not require the highest type of office training and the school must not overlook its opportunity to prepare students for such positions. On the other hand, the stenographic course should not only be a full course, but should be restricted as far as possible to those who have the native ability to do this class of work. The Philadelphia and Baltimore school surveys contain more complete discussions of commercial programs than space here permits.

The Home Economics Course.—The work in this department, although formal, is above average. The courses are badly in need of reorganization with a view to making them more representative of women's work in the world to-day.

EXTRACURRICULAR ACTIVITIES

A full period should be devoted daily to extracurricular activities. While one or two of these periods per week might profitably be taken up with assembly or efficiency hour work, at least three of the periods should be reserved for wholehearted, leisure time activities.¹

SEQUENCE OF COURSES AND ELECTIVES

As the curriculum of the high school now stands, little or no attention is paid to the sequence in which a pupil takes his work. A study of Table 17 reveals the fact that a student is most likely to take sophomore English, the frequency being 571, and is almost as certain to take second-year algebra where the frequency is 523. Other subjects in the order of their frequency are: junior English, 423; ancient history, 376; senior English, 274; Caesar, 267; Spanish I, 201; Spanish II, 201; bookkeeping, 196; Virgil, 144; and the remaining subjects in descending order.

While this composite picture is scarcely typical of any particular pupil's course, it does reflect in general the kind of courses most pupils are taking. If English is omitted—and even it can be taught in a very formal way—there is a most rigid set-up, including, in order, second- and third-year algebra, ancient history, Caesar, Spanish, bookkeeping, and Virgil. The administrators and teachers of the high school should begin immediately a complete reorganization of the courses in each department. It is recommended:

1. That certain majors and minors be worked out for each curriculum, provision being allowed, of course, for easy adjustments.
2. That new courses be added which will take into account the offerings of the junior high school and the life needs of the pupils as well as the future college needs of some of them.
3. That a three or four years' intensive study be made by teachers' committees of the content of every course now being offered or to be added.

This is by far the most crying need of the Hillsboro High School.

¹ See discussion in the junior high school set-up, page 168.

CHAPTER VIII

EDUCATIONAL RESULTS

AGE AND GRADE RELATIONSHIPS

In May, 1925, Tampa District No. 4 had 11,674 pupils between the ages of four and twenty-one years enrolled in the public schools for white children. The distribution according to ages and grades is shown in Table 28. Of this number, 336 were in the classes for beginners who do not speak English, 8,651 in the elementary grades (1-6), 1,837 in the junior high school grades (7-9), and 850 in the senior high grades (10-12).

One index of the efficiency of a school system is the degree to which children are brought into school and progressed through school. The grades in which children of each age are found gives an excellent index as to how well a school system performs these two functions. If a pupil enters school at the proper age and progresses through school a grade a year, he will always be of normal age for his grade. If he repeats any of the grades he becomes over age. On the other hand, if he does not come into school until he has passed the normal entrance age, he will always remain over age for his grade unless he skips a grade or more. Table 18 shows the condition of Tampa schools compared to that in several other cities in the United States. This table shows Tampa to have the lowest percentage of normal-age children and the highest percentage of over-age children. Obviously, Tampa fails to get children into school and to progress them through the grades as well as the places with which Table 18 compares it.

The result of this condition is shown interestingly by the location of thirteen-year-old pupils in the schools. In May there were 1,113 white children thirteen years of age enrolled in the schools. An inspection of Table 19 will show the number in each grade. Thirteen-year-old children are found in every grade from 1 to 10. Children who have entered at normal age and made normal progress will be found in grades 7 Senior, 8 Junior,

TABLE 18

PERCENTAGE OF OVER-AGE, NORMAL-AGE AND UNDER-AGE PUPILS IN TAMPA COMPARED WITH SIMILAR PERCENTAGES IN OTHER CITIES

Cities	Per Cent Over Age	Per Cent Normal Age	Per Cent Under Age
TAMPA, FLA.*	44 %	48 %	8 %
42 Cities**	21	67	12
St. Louis, Mo.	26	67	7
Chicago, Ill.	15	71	14
Los Angeles, Calif.	16	72	12
Alabama Cities	43.6	52.1	4.3
Minneapolis, Minn.	14	74	12
Virginia Cities	25.5	59.9	14.6
Louisville, Ky.	35.2	60	4.8
New Orleans, La.	32	64	4
Atlanta, Ga.	39.8	59.3	.9

* Two-year normal-age span is used in calculating these percentages. Other figures given for Tampa are based on a year and a half normal-age span for the whole grade.

** Bonner, H. R. *Statistics of City School Systems*. Bulletin U. S. Department of Education, 1918.

and 8 Senior. There are 293 thirteen-year-olds or 26.3 per cent of the total in these three half years. This means that nearly 70 per cent of them are below the grade for normal thirteen-year-olds. Comparing Tampa with twenty American cities for 1920, as shown in Table 19, it is found that the median grade for Tampa's thirteen-year-olds is 6.4 or the 6 Junior, while the median for the twenty American cities is 7.1 or the 7 Junior. The standard age grade median for thirteen-year-olds is 8 Junior. The Tampa median is, therefore, one year below the median for the twenty American cities and two years below the standard age grade median. Table 19 shows also that Tampa has a much larger percentage of the thirteen-year-old children in each of the first five grades. Tampa has 41 per cent and the twenty American cities have only 25 per cent in Grades 1 to 5, inclusive. Again, 60.7 per cent of the thirteen-year-olds are below the seventh grade in Tampa, while only 46.7 per cent are below the seventh grade in the twenty cities.

HOLDING POWER OF THE SCHOOLS

Another index of the success with which a school system is functioning may be obtained by determining how well it holds pupils until they have completed the higher grades of the system. It is particularly a measure of how well the schools are adjusted to the needs of the public they should serve.

TABLE 19

GRADE LOCATION OF ALL THIRTEEN-YEAR-OLD BOYS AND GIRLS IN THE SCHOOLS FOR WHITE CHILDREN IN TAMPA, FLORIDA, COMPARED WITH SIMILAR DISTRIBUTION FOR OTHER CITIES

Grades	Boys		Girls		Total	
	Number.	Per Cent	Number.	Per Cent	Number.	Per Cent
	1	9	1.5%	6	1.1%	15	1.3%
2	16	2.7	11	2.1	27	2.4
3	37	6.4	31	5.8	68	6.1
4	95	16.3	52	9.8	147	13.2
5	102	17.5	98	18.5	200	18.0
6	122	21.0	97	18.3	219	19.7
7	109	18.7	116	21.8	225	20.2
8	72	12.4	95	17.9	167	15.0
9	19	3.3	23	4.3	42	3.8
10	1	.2	2	.4	3	.3
Totals	582		531		1113	
Median Grade.		6.3%		6.7%		6.4%

TWENTY AMERICAN CITIES—1920

Grades	Boys		Girls		Total	
	Number	Per Cent	Number	Per Cent	Number.	Per Cent
1	56	9.2%	41	1%	97	2%
2	227	.8	172	.6	399	.7
3	792	2.6	676	2.2	1,468	2.4
4	2,458	8.0	2,008	6.4	4,466	7.2
5	4,844	15.7	4,334	13.8	9,178	14.7
6	6,904	22.4	6,561	20.9	13,465	21.6
7	7,744	25.2	8,333	26.5	16,077	25.8
8	5,798	18.8	6,708	21.2	15,506	20.1
9	1,729	5.6	2,355	7.5	4,084	6.4
10	212	.7	249	.8	461	.8
11	10	.0	8	.0	18	.1
Totals	30,774		31,445		62,219	
Median Grade.		7.0%		7.2%		7.1%

Table 20 shows the largest enrollment in Tampa to be in the first grade. This enrollment is kept up fairly well until the fifth grade is reached. From the fifth grade on to the twelfth there is a rapid decrease. Table 21 shows the enrollment by ages. The largest number is found in the ten-year-old group. Beginning with the thirteen-year-old group, again, a rapid decrease in enrollment is found.

On the hypothesis that there should be as many in each grade

TABLE 20

ENROLLMENT BY GRADES IN ELEMENTARY SCHOOLS AND HIGH SCHOOLS FOR WHITE CHILDREN, SHOWING AN ESTIMATED PERCENTAGE OF PUPILS THAT FAIL TO REACH EACH GRADE BEFORE DROPPING OUT OF SCHOOL

TAMPA, FLORIDA

Grades	Enrollment	Difference from Greatest Age Group	Per Cent Difference Is of Ten-Year-Olds*	Education Secured by Per Cent in Preceding Column
1	1,676	...	..	.....
2	1,615	...	..	.....
3	1,457	...	..	.....
4	1,550	...	..	.....
5	1,293	...	..	.....
6	1,030	362	28	Less than Sixth Grade
7	780	512	40**	Less than Seventh Grade
8	594	698	54	Less than Eighth Grade
9	464	828	64	Less than Ninth Grade
10	393	899	70	Less than Tenth Grade
11	226	1,066	80	Less than Eleventh Grade
12	231	1,061	80	Less than Twelfth Grade

* The largest age group.

** Inasmuch as the junior and senior high schools draw from a larger territory than the elementary schools, this and the following percentages are low.

TABLE 21

DISTRIBUTION OF PUPILS ENROLLED IN MAY, 1925, IN SCHOOLS FOR WHITE CHILDREN, SHOWING PERCENTAGE IN EACH AGE GROUP, AND PERCENTAGE OF CHILDREN WITHDRAWING FROM SCHOOL AFTER AGE 10

TAMPA, FLORIDA

Age	Enrollment	Percentage of Enrollment in Each Age Group	Percentage of Number of Ten-Year-Olds	Percentage Eliminated Each Year
5*	59	0.51%	....	....
6	645	5.53	49.92%	....
7	1,144	9.80	88.54	....
8	1,271	10.89	98.37	....
9	1,199	10.27	92.80	....
10	1,292	11.07	100.00	....
11	1,269	10.87	98.22	1.78%
12	1,237	10.60	95.74	2.48
13	1,113	9.54	86.15	9.59
14	929	7.96	71.90	14.25
15	682	5.84	52.79	19.11
16	420	3.60	32.51	20.28
17	281	2.40	21.75	10.76
18	92	.79	7.12	14.63
19	29	.23	....	....
20	6	.05	....	....
21	6	.05	....	....
Total	11,674			

* Four years, 9 months to 5 years, 9 months on March 1, 1925.

PERCENTAGE OF TOTAL ENROLLMENT

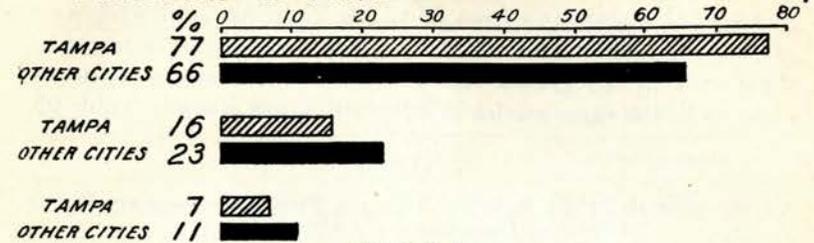


CHART 19

COMPARISON OF HOLDING POWER OF TAMPA SCHOOLS WITH THE MEDIAN OF THIRTY-THREE CITIES WITH POPULATION OVER 100,000

as there are in the largest age group, it is found that 80 per cent of the pupils leave school with less than an eleventh grade education; 64 per cent leave with less than a ninth grade education; 28 per cent, with less than a sixth grade education.

Chart 19 compares Tampa with other cities. It shows that the holding power of the Tampa schools is less than that of the other cities. While the other cities enroll 23 per cent of the total number in the junior high school grades, Tampa enrolls only 16 per cent. While the other cities enroll 11 per cent of the total number of pupils in the senior high school, Tampa enrolls only 7 per cent in those grades.

ACHIEVEMENT IN SCHOOL SUBJECTS

Tests of achievement in school subjects give a third measure of educational results.

Reading.—Much of the instruction in the grades of the public school system can only function to the degree that the children are able to read and interpret the printed page. In order to determine whether or not the children of Tampa are acquiring the ability to interpret reading material, a test was given for the purpose of measuring their ability in silent reading. The test used was the Thorndike-McCall test for the understanding of sentences. This test was applied to the children in the fourth, sixth, seventh, and eighth grades. The Thorndike-McCall test consists of a number of paragraphs graded in difficulty. The first paragraph is read with ease by the average child in all grades but the last paragraph presents difficulties in interpretation to

even the best student in the senior class of the high school. The scores of this scale run from 22 to 89, 22 being the lowest score and 89 the highest possible score. The median scores made by the pupils in the grades tested, together with scores made by children in the same grades in other cities, are given in Table 22.

TABLE 22

ACHIEVEMENT IN SILENT READING IN TAMPA, FLORIDA, SCHOOLS FOR WHITE CHILDREN COMPARED WITH OTHER PLACES

MAY, 1925

Thorndike-McCall Test for Understanding of Sentences

City	Grade			
	4 Senior	6 Senior	7 Senior	8 Senior
TAMPA, FLA.	39.7	50.0	56.0	61.0
Baltimore, Md.	43.3	53.1	58.1	61.2
33 Wisconsin Cities....	40.9	52.6	55.3	58.0
Paterson, N. J.	35.5	49.0	51.7	53.5
St. Paul, Minn.	41.8	53.5	58.0	62.5
Louisville, Ky.	39.1	51.7	59.8	60.7
Hackensack, N. J.	41.4	51.9	56.2	....
STANDARD	41.8	53.7	58.3	59.6

The scores in the table have been corrected to June 1, 1925. Among the cities given in the table the children in the fourth and sixth grades of Tampa rank sixth, in the seventh grade they rank seventh, and in the eighth, third, as compared with the children in the same grades in other cities. When the accomplishments of the children are compared with what is considered standard for those grades, it is shown that Tampa is below standard in grades 4, 6, and 7, and above standard in grade 8.

The significance of this standing may be seen more clearly from an inspection of the scores made by the individual schools. Table 23 gives these scores. Out of the thirteen elementary schools, only three, Gorrie, Seminole, and Mitchell, equal or exceed the standard in the fourth grade and only one, the Seminole, in the sixth grade.

Arithmetic.—The Woody-McCall test of addition, subtraction, multiplication, and division in arithmetic was given to the pupils of the fourth, sixth, seventh, and eighth grades. The results compared to the standards set by the authors of the test are given in Table 24.

TABLE 23

COMPARISON OF ELEMENTARY SCHOOLS FOR WHITE CHILDREN WITH RESPECT TO ACHIEVEMENT IN SILENT READING

TAMPA, FLORIDA—MAY, 1925

Thorndike-McCall Test of Understanding of Sentences

School	Grade 4 Senior		Grade 6 Senior	
	Rank	Mean Score	Rank	Mean Score
Gorrie	1	45.38	2	53.24
Seminole	2	42.67	1	55.41
Mitchell	3	42.59	6	50.80
Madison	4	40.93	9	46.53
Graham	5	40.70	4	51.95
Buffalo	6	40.67	3	53.03
Henderson	7	40.30	5	51.36
Lee	8	39.60	7	49.66
East Tampa	9	38.85	10	46.31
Jackson	10	38.41	11	44.42
Ybor	11	35.99	No Sixth Grade	
Gary	12	35.29	8	47.07
Philip Shore	13	34.85	No Sixth Grade	
TAMPA		39.7		50.0
STANDARD		41.8		53.7

GRADE STANDARDS

Grade	Standard	Grade	Standard
3 Junior	33.7	5 Senior	48.0
3 Senior	37.3	6 Junior	50.9
4 Junior	39.6	6 Senior	53.7
4 Senior	41.8	7 Junior	56.0
5 Junior	44.9	7 Senior	58.3

TABLE 24

ACHIEVEMENT IN THE FUNDAMENTALS OF ARITHMETIC IN THE TAMPA, SCHOOLS FOR WHITE CHILDREN, COMPARED WITH THE STANDARDS

TAMPA, FLORIDA—MAY, 1925

Woody-McCall Mixed Fundamentals in Arithmetic

	Grade			
	4 Senior	6 Senior	7 Senior	8 Senior
TAMPA	16.2	25.4	29.3	31.4
STANDARD	17.0	25.1	27.8	29.0

From the table it will be noted that Tampa exceeds the standards in the sixth, seventh, and eighth grades, but falls below the standard in the fourth grade. Table 25 gives the results by schools in grades 4 and 6.

TABLE 25

COMPARISON OF ELEMENTARY SCHOOLS FOR WHITE CHILDREN WITH RESPECT TO ACHIEVEMENT IN THE FUNDAMENTALS OF ARITHMETIC

TAMPA, FLORIDA—MAY, 1925

Woody-McCall Mixed Fundamentals in Arithmetic

School	Grade 4 Senior		Grade 6 Senior	
	Rank	Mean Score	Rank	Mean Score
Henderson	1	18.51	2	27.70
Gorrie	2	18.40	3	27.22
Ybor	3	17.61	No Sixth Grade	
Philip Shore	4	17.17	No Sixth Grade	
Seminole	5	17.13	4	26.82
Buffalo	6	16.89	8	24.85
Lee	7	16.41	5	26.71
Jackson	8	16.09	11	21.46
Mitchell	9	15.79	1	27.95
Graham	10	15.30	6	25.59
Gary	11	14.22	7	24.97
East Tampa	12	13.71	10	21.91
Madison	13	13.63	9	24.15
TAMPA		16.2		25.4
STANDARD		17.0		25.1

GRADE STANDARDS

Grade	Standard	Grade	Standard
3 Junior	9.2	6 Junior	23.6
3 Senior	11.9	6 Senior	25.1
4 Junior	15.3	7 Junior	26.8
4 Senior	17.0	7 Senior	27.8
5 Junior	19.1	8 Junior	28.3
5 Senior	21.3		

English Composition.—To secure a measure of the ability of Tampa children in writing compositions, the teacher wrote on the board the following topic: "What I should like to do next Saturday." The following instructions were given the children by the teacher: "I have written on the blackboard a topic about which you are to write. You may tell what you would like to do yourself or you may play at make-believe and write as though you were someone else. You have twenty minutes in which to write. See how well you can tell what you would like to do."

The compositions written by the children in grades 5, 7, 10, and 12 were sampled and scored according to the Nassau County Supplement of the Hillegas Composition Scale. The results are given in Table 26.

TABLE 26

COMPOSITIONS WRITTEN BY PUPILS IN TAMPA, FLORIDA, SCHOOLS FOR WHITE CHILDREN COMPARED WITH THOSE WRITTEN BY CHILDREN IN OTHER CITIES

MAY, 1925

Quality of Compositions Measured by Use of the Nassau County Supplement of the Hillegas Composition Scale

City	Grade 5	Grade 7	Grade 10	Grade 12
TAMPA, FLA.	3.8	3.9	4.8	5.5
Hackensack, N. J.	3.2	4.4	6.8	7.3
South River, N. J.	2.6	4.8	5.0	6.3
Chatham, N. J.	2.9	4.0	..	..
Paterson, N. J.	3.4	4.1	5.7	6.6
35 High Schools in 33 States .....	..	..	5.9	6.7
STANDARD	4.0	5.0	6.5	7.2

The children in Tampa are not reaching the standard in any of the grades. When compared with the five cities given in the table, Tampa ranks first in the fifth grade, and fifth in each of the other three grades.

Handwriting.—In order to measure the quality of handwriting adequately, compositions which the children were asked to write were used. In order to secure a fair measure of quality and yet not be compelled to judge all the compositions as to quality of handwriting, a system of random sampling was used. This was done in such a way as to guard against any unfair results in any direction. All the grades from the third to the senior class in the high school were sampled and scaled. The Thorndike Handwriting Scale was used and the opinions of two judges were obtained on each one. The results obtained in the various grades, together with results from other cities, are given in Table 27.

When compared with the standard for each grade, the actual accomplishments are below standard except in the third and eighth grades. The quality of handwriting in the high school is of a poorer quality than that found in the eighth grade. The quality of the handwriting in grades 10 and 11 is on a par with that found in grade 7. The median quality of handwriting for the entire system is 9.6 or a quality which is a standard for

grade 5. Thus 50 per cent of the children are writing a quality of handwriting equal to or better than the standard for the fifth grade. The upper 25 per cent of handwriting is as good or better than 11 which is the standard for the eighth grade, and the lower 25 per cent is below 8 which is the standard for the third grade.

TABLE 27

ACHIEVEMENT IN HANDWRITING IN TAMPA, FLORIDA, SCHOOLS FOR WHITE CHILDREN COMPARED WITH OTHER CITIES

MAY, 1925

Quality of Handwriting Judged by Use of the Thorndike Handwriting Scale

City	Grade										
	3	4	5	6	7	8	9	10	11	12	
TAMPA, FLA.	8.0	8.1	9.6	9.9	10.1	12.5	10.9	10.2	10.0	11.0	
Hackensack, N. J.	8.1	7.7	7.9	9.0	11.8	12.1	12.3	12.8	11.8	12.6	
Paterson, N. J. ....	..	9.1	10.7	11.1	10.4	10.9	...	...	...	...
Newark, N. J. ....	..	9.9	11.5	11.9	12.2	13.2	...	...	...	...
Chatham, N. J. ....	..	9.3	10.3	11.7	12.8	13.8	...	...	...	...
Nassau Co., N. Y. ....	..	9.0	10.0	10.5	11.0	11.0	...	...	...	...
Baltimore, Md. ....	..	8.5	9.3	9.7	10.6	10.6	...	...	...	...
Des Moines, Iowa. ....	..	8.1	8.4	8.9	9.5	10.0	...	...	...	...
STANDARD	7.8	8.6	9.6	9.9	10.5	11.0	...	...	...	...

In comparison with the accomplishments of children in handwriting in eight other cities, Tampa does not stand first in any of the grades. In the fourth grade the rank of Tampa is seventh; in the fifth grade, fifth; in the sixth grade, fifth; in the seventh grade, seventh; and in the eighth grade, third. The accomplishment of the children in grades 9, 10, 11, and 12 are markedly below the accomplishment of the children in the same grades in Hackensack.

Other Tests.—A large number of tests were given in three schools chosen for intensive study, the Gorrie, Lee, and Ybor. These show a similar situation to exist with respect to accomplishment in other school subjects. These results are given in Chart 30, page 215.

SUMMARY

1. Tampa has been less successful than the cities with which it is compared in enrolling boys and girls at an early age, in progressing them through the grades, and in holding them until they reached the junior and senior high school grades.

2. In spite of the fact that the pupils in any grade in the Tampa schools are older and have been in school longer than pupils in the same grades in cities with which comparisons were made, they failed to do as well in all school subjects tested, other than arithmetic. In silent reading, English composition, and handwriting, tested throughout the city, and in other subjects tested in a few schools, the Tampa schools failed to achieve grade standards.

CHAPTER IX

REGULATION OF PROGRESS IN ELEMENTARY SCHOOLS AND IN THE JUNIOR AND SENIOR HIGH SCHOOLS

REGULATION OF PROGRESS IN ELEMENTARY SCHOOLS
EFFECTIVENESS OF PRESENT REGULATIONS OF PROGRESS

A general measure of the efficiency of the regulation of progress in a school system is the relation between age and grade of the pupils in the various grades. The situation in the Tampa schools in May, 1925, is shown in Table 28. The heavy black lines running diagonally across the table include the number of children in each grade who are of normal age for their grades. There were 2,569 pupils in the elementary schools who were of normal age. This is only 30 per cent of the total number. The numbers above the diagonal lines indicate that 678 pupils, or 8 per cent, were under age for their grades. The numbers below the diagonals indicate that 5,362 pupils, or 62 per cent, were over age for their grades. Table 28 follows page 198.

A graphic representation of this table is given in Chart 20 on page 197. The total range of the ages within each grade and the position of the middle 50 per cent of ages is shown in relation to the normal ages for each grade. The difference in ages between the youngest and oldest child of each grade varies from seven and a half years to twelve and a half years. The range of the middle 50 per cent of each grade varies from one and a half years to three years. The failure of the Tampa schools to regulate progress is evident when it permits children of six and eighteen years to be in the same grade. The generally accepted standard of a one-year range in ages for each half grade is exceeded in every case by the middle 50 per cent of ages. This excess is from one half of a year to two years and in every case in extension of this range is toward overageness. The total range of ages exceeds the one year range standard from six and a half years to eleven and a half years.

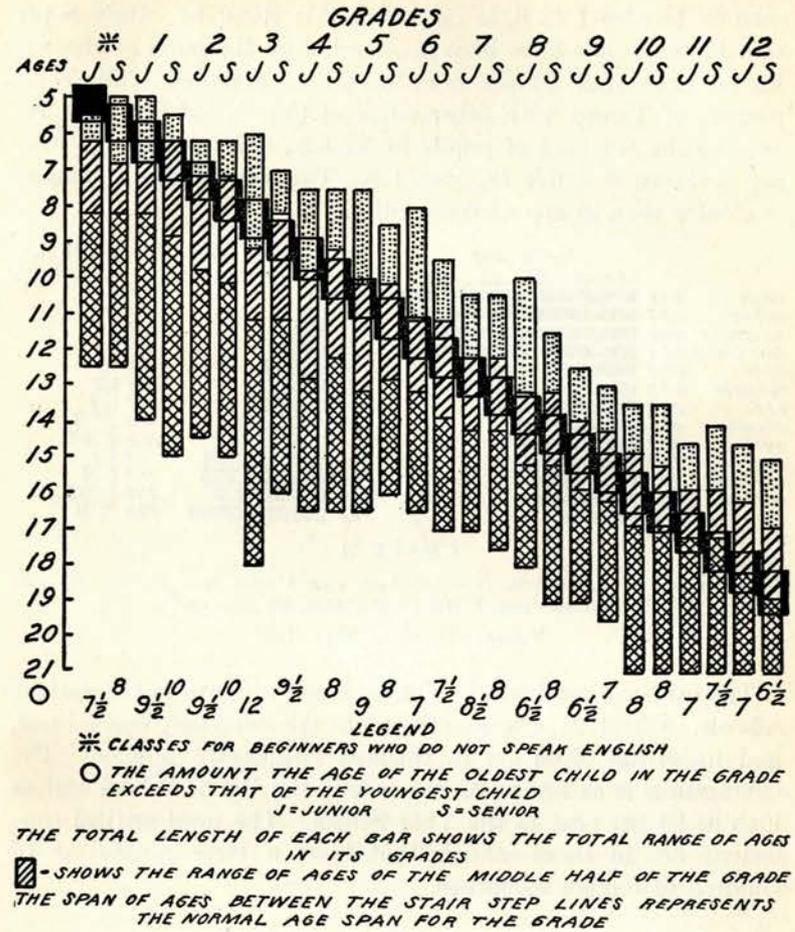


CHART 20

CHART ILLUSTRATING THE GREAT VARIATION IN AGE IN EACH GRADE
Extremes in Age in Each Grade and Extremes in Age in Middle Half of Each Grade Compared with Normal Age Span

Chart 20 and Table 28 clearly indicate the seriousness of the problem of overageness in the Tampa schools. Ideally, where the basis of instruction is a single curriculum, as is the case in Tampa, a normal distribution of progress would be expected. About 20 per cent of the pupils would be accelerated and about 20 per cent retarded. The situation in the Tampa elementary

schools, Grades 1 to 6, is far below this standard. Only 8 per cent of the pupils have been accelerated on the basis of chronological age, while 62 per cent have been retarded. The comparison of Tampa with other cities of the United States in regard to the per cent of pupils under age, normal age, and over age is shown in Table 18, page 186. The overageness in Tampa is greater than in any of these cities.

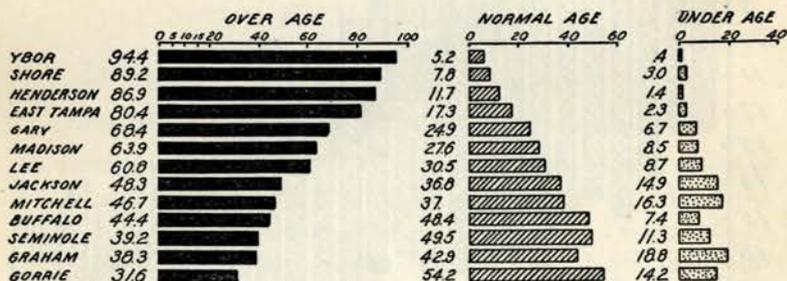


CHART 21

PERCENTAGES OF OVER-AGE, NORMAL-AGE, AND UNDER-AGE PUPILS IN THE SCHOOLS FOR WHITE CHILDREN, BY SCHOOLS

TAMPA, FLORIDA—MAY, 1925

The over-age condition in Tampa is not uniform in the various schools. Chart 21, above, represents the over-age, normal-age, and under-age situation in thirteen elementary schools. The overageness is as low as 32 per cent in the Gorrie School and as high as 94 per cent in the Ybor School. The most critical conditions are in those schools that have a large proportion of children of foreign parentage.

AGE OF ENTRANCE TO GRADE 1 JUNIOR

The condition of overageness is due in part to the late entrance of pupils to grade 1 Junior. Of the 1 Junior pupils starting school in February, 1925, 49 per cent were already over age. Of the 1 Senior pupils in February, 1925, 48.7 per cent had entered 1 Junior over age. Most of these children will continue to be over age throughout their school life. Late entrance affects the overageness of all the grades. The entering age situation is shown in Table 29 and Chart 22. Children entered grade 1 Junior as young as 4 years and 6 months and as old as 13 years

and 6 months. Twenty-six per cent of present grade 1 did not enter the first grade until they were 8 or more years of age.

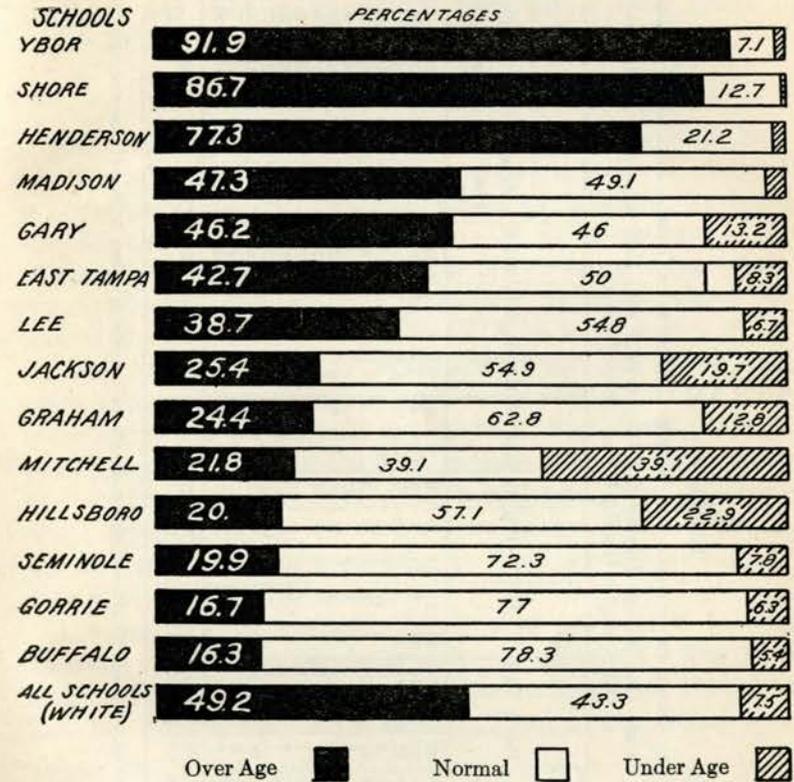


CHART 22

AGE-GRADE RELATIONSHIP OF BEGINNERS

Comparison of Tampa Elementary Schools with Respect to the Percentages of Beginners—Over-Age, Normal-Age, and Under-Age Pupils Entering the 1 Junior Grade During the School Year, 1924-1925

In order to improve and correct this situation, entrance to the first grade should be definitely controlled. Since the Florida compulsory education law requires children to attend school at the age of 7, all pupils in Tampa should be required to be in attendance at school by the time this age has been reached. Furthermore, all parents should be urged to avail themselves of

TABLE 29
AGE OF ENTRANCE TO FIRST GRADE IN SCHOOLS FOR WHITE CHILDREN IN TAMPA, FLORIDA, BY SCHOOLS
Distribution of Children Entering Grade One Junior During the School Year 1924-1925 According to Age at the Beginning of the Semester During Which They Entered

Schools	Totals												Totals	Under-Age		Normal		Over-Age							
	4½*	5	5½	6	6½	7	7½	8	8½	9	9½	10		10½	11	11½	12	12½	13	13½	Number	Per Cent	Number	Per Cent	Number	Per Cent
Ybor	296	1.0	21	7.1	272	91.9
Philip Shore	181	.6	23	12.7	157	86.7
Henderson	137	1.5	29	21.2	106	77.3
Nashboro	55	3.0	27	49.1	26	47.3
Gary	106	13.2	43	40.6	49	46.2
East Tampa	72	8.3	36	50.	30	42.7
Lee	179	6.7	98	54.8	69	38.5
Jackson	71	14	19.7	39	54.9	
Graham	78	10	12.8	49	62.8	
Hillsboro	69	27	39.1	15	21.8	
Mitchell	35	8	22.9	20	57.1	
Seminole	191	15	7.8	138	72.3	
Gorrie	126	8	6.3	87	77.0	
Buffalo	129	7	5.4	101	78.3	
Total number	3	32	94	416	332	229	170	128	81	75	40	38	27	22	9	11	10	5	3	1725	129	7.5	748	43.3	
Total per cent	

* Four years, 3 months to 4 years, 9 months on Sept. 1 or March 1. Ages of children entering in Fall computed as of Sept. 1. Ages of those entering in Spring Semester computed as of March 1.

the opportunity to send their children to grade 1 Junior at the first entering period after the children attain the age of 5 years and 9 months. Only children of exceptional ability, physically, mentally, and socially, should be permitted to enter grade 1 Junior before the age of 5 years and 9 months.

PROGRESS THROUGH THE GRADES

The other major determining factor in overageness is the rate of progress from grade to grade through the school. A study of the progress of the pupils in grades 3 Junior, 3 Senior, 5 Junior, and 5 Senior was made. (Table 30.) About 46 per cent of all of these children have been retarded one or more times. Only 6 per cent have been specially promoted. Approximately 9 per cent of the pupils have been retarded 3 or more times. Forty per cent of the third grade pupils and 52 per cent of the fifth grade pupils have been retarded. The acceleration of the third grade pupils was 5.7 per cent and of the fifth grade 6.6 per cent. Both retardation and acceleration increase from the third grade to the fifth grade, but within this period retardation increases about twice as rapidly as acceleration. Some of the pupils in the fifth grade and some even in the third grade have already been retarded 6, 7, or 8 times.

A comparison of the progress of grades 3 and 5 for the different elementary schools is given in Chart 23. The slow progress ranges from 64.6 per cent in the Henderson School to 32.4 per cent in the Gorrie School. Even in the school with

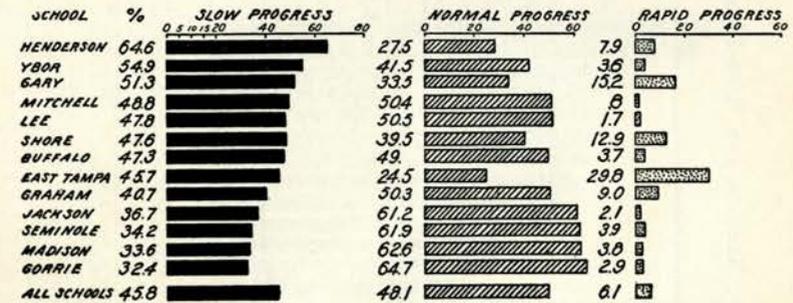


CHART 23

PERCENTAGE OF SLOW-, NORMAL-, AND RAPID-PROGRESS PUPILS IN THE THIRD AND FIFTH GRADES OF SCHOOLS FOR WHITE CHILDREN BY SCHOOLS

TAMPA, FLORIDA—MAY, 1925

least retardation, 1 out of every 3 pupils in the third and fifth grades has been retarded. In the school with the most retardation, 2 out of every 3 in these grades have been retarded. To slow progress, as well as to overageness, the schools with pupils of foreign parentage are the greater contributors.

NON-PROMOTION

The semi-annual increment of retardation is shown by the non-promotions at the end of each half year. In June, 1925, 13.2 per cent of all the children in the elementary schools at the end of the semester were failed. Of those who withdrew before the end of school, 3 out of every 10 were failing. Non-promotion varies in the different schools from 8.7 per cent in the Gorrie School to 18.7 per cent in the East Tampa School. Table 31 and Chart 24 show the variation in rate of non-promotion and in withdrawals from the different elementary schools. The variation indicates a lack of a definite, consistent promotion policy. It is not due to the presence of foreign children in some schools, since schools with foreign children stand both high and low in the percentages of failures. The generally large percentage of failure indicates the lack of adjustment of the schools to the varying needs of the individuals; it causes repeating which is an additional financial burden on the city and a loss of time and interest for the pupils; it trains in the habit of failure by discouraging pupils; it causes them to withdraw from school without having completed even the elementary grades.

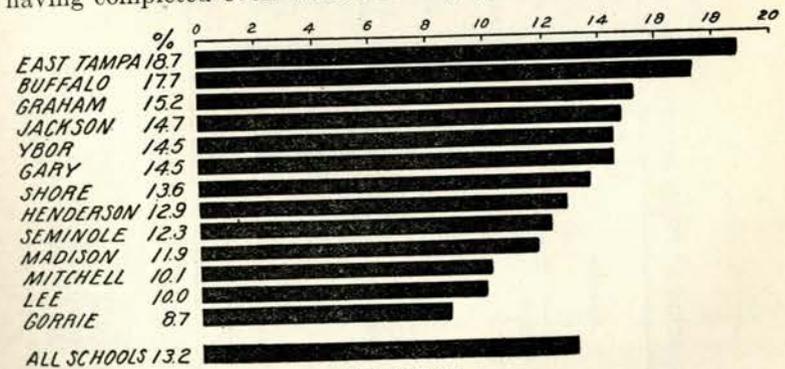


CHART 24
PERCENTAGES OF PUPILS NOT PROMOTED—BY SCHOOLS
TAMPA, FLORIDA—JUNE, 1925

TABLE 30
SLOW-, NORMAL-, AND RAPID-PROGRESS PUPILS IN THE THIRD AND FIFTH GRADES OF SCHOOLS FOR WHITE CHILDREN
TAMPA, FLORIDA—MAY, 1925

	Grade 3				Grade 5				
	Junior		Senior		Junior		Senior		
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	
Rapid Progress	2 Yrs. Gained	11	1.8%	1	1%	..	..	..	..
	1½ Yrs.	7	1.1	7	.8	..	..	..	..
	1 Yr.	36	5.9	20	2.4	44	7.8	17	2.6
	½ Yr.	219	36.0%	562	67.3%	128	22.8%	405	56.0%
Normal Progress	½ Yr. Lost	226	37.2%	93	11.1%	230	41.0%	97	13.4
	1 Yr.	37	6.1	116	13.9	74	13.2	135	18.6
	1½ Yrs.	53	8.7	13	1.6	54	9.6	30	4.1
	2 Yrs.	8	1.3	19	2.3	16	2.8	15	2.1
Slow Progress	2½ Yrs.	7	1.1	2	.2	10	1.8	2	.3
	3 Yrs.	1	.16	2	.2	3	.5	1	.1
	3½ Yrs.	1	.2	..	..	..	..	..	..
	4 Yrs.	1	.2	..	..	..	..	..	..
4½ Yrs.	1	.2	..	..	..	..	..	..
Total	608		836		562		724		
Total Rapid Progress	54	8.9%	28	3.4%	47	8.3%	38	5.2%	
Total Normal Progress	219	36.0	562	67.2	128	22.8	405	56.0	
Total Slow Progress	335	55.1	246	29.4	387	68.9	281	38.8	

TABLE 31
PROMOTION, WITHDRAWAL, AND NON-PROMOTION BY SCHOOLS
Disposition of Pupils Enrolled in the Elementary Schools for White Children During the Semester Ending June, 1925

Schools	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	P	CP	NP	WP	WN	PP	SP	T	Total Pupils	P + CP + NP + PP	Per Cent NP	WP + WN	WN	Col. 12 Col. 14
East Tampa	299	5	71	29	10	5	4	..	423	380	18.7	39	25.6	10.2
Buffalo	585	10	128	62	28	..	5	3	821	723	17.7	90	31.1	12.4
Graham	378	1	68	52	23	..	..	2	524	447	15.2	75	30.6	14.3
Jackson	300	6	53	20	24	..	..	..	403	359	14.7	44	54.5	11.0
Ybor	1071	90	197	7	12	5	5	1	1388	1363	14.5	19	63.2	1.4
Gary	457	2	78	27	8	..	..	8	580	537	14.5	35	22.9	6.5
Philip Shore	600	12	102	48	18	33	..	..	813	747	13.6	66	27.3	8.8
Henderson	724	10	109	50	31	3	13	12	952	846	12.9	81	38.3	8.5
Seminole	593	21	86	53	20	..	2	3	778	700	12.3	73	27.3	10.4
Madison	279	9	40	31	15	8	..	4	386	336	11.9	46	32.6	13.7
Mitchell	310	3	35	34	11	..	..	6	399	348	10.1	45	24.4	12.9
Lee	965	12	109	107	28	2	4	12	1239	1088	10.0	135	20.7	10.8
Gorrie	753	1	72	64	18	..	..	3	911	826	8.7	82	21.9	9.0
TAMPA	7314	182	1148	584	246	56	33	54	9617	8700	13.2	830	29.6	8.6
ELEMENTARY	7314	182	1148	584	246	56	33	54	9617	8700	13.2	830	29.6	8.6

P = Promoted
 CP = Promoted Conditionally
 NP = Not Promoted
 WP = Withdrawn Passing
 WN = Withdrawn Not Passing
 PP = Double Promotion
 SP = Special Promotion within Term
 T = Transferred to Another School
 Column 9 = Total Enrollment
 Column 10 = Number Pupils in School in June P + CP + NP + PP
 Column 11 = Percentages Not Promoted; Column 3 Divided by Column 10
 Column 12 = Total Withdrawn
 Column 13 = Percentage Withdrawn Not Passing
 Column 14 = Percentage of Total Enrollment Withdrawn; Column 12 Divided by Column 9

The comparative percentages of failure by grades are shown by Chart 25 and Table 32. An examination of the chart indicates that there are two points of excessive non-promotion. The 1 Junior grade for the city has a rate of failure of 23 per cent which means that about 1 out of every 4 children who are in the grade at the end of the semester is required to repeat. In addition to this, 1 out of every 6 pupils who enrolled in February withdrew before the end of the semester. One-third of these pupils were failing at the time of withdrawal. The second point of excessive failure is in the 4 Junior, 4 Senior and 5 Junior grades. The great variation between grades in the percentages of failure gives further indication of the need for definite promotion policies.¹ A study to readjust the curriculum between grades and to care for individual differences is also needed.

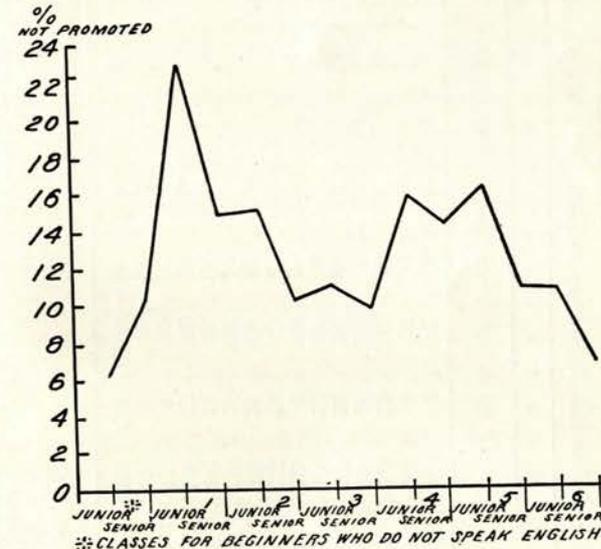


CHART 25
PERCENTAGES OF PUPILS IN SCHOOL IN JUNE NOT PROMOTED—BY GRADES
TAMPA, FLORIDA—JUNE, 1925

Educational Achievement and Non-Promotion.—In June, 1925, Tampa teachers were asked to report their reasons for non-promotions. From these reasons it was possible to get some indica-

¹ As explained later, the percentages of failure would not necessarily be alike in different grades, even under an ideal system.

TABLE 32

PROMOTION, WITHDRAWAL, AND NON-PROMOTION BY GRADES
TAMPA, FLORIDA

Disposition of Pupils Enrolled in the Elementary Schools for White Children During the Semester Ending June, 1925

Grades	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Classes for Beginners Who Do Not Speak English	P	CP	NP	WP	WN	PP	SP	T	Total	P + CP + NP + PP	Per Cent NP	WP + WN	Per Cent age WN	WP + WN Total
1 Junior	104	2	7	5	2	1	..	..	121	114	6.1%	7	28.7	58
1 Senior	218	1	27	6	3	1	..	4	260	247	10.4	9	33.3	35
1 Junior	444	25	140	77	44	..	3	4	737	609	22.8	121	36.4	164
2 Junior	811	20	151	80	21	34	5	7	1129	1016	14.8	101	20.8	88
2 Senior	529	26	99	69	18	5	7	..	753	659	15.0	87	20.7	11.5
3 Junior	814	23	95	58	15	1	7	8	1021	933	10.2	73	20.5	7.1
3 Senior	504	3	64	31	14	2	4	5	627	573	11.1	45	31.1	7.1
4 Junior	732	13	82	49	12	..	4	3	895	827	9.9	61	19.7	6.7
4 Senior	555	21	108	42	24	1	2	3	756	685	15.8	66	36.3	8.7
5 Junior	718	15	123	52	30	..	2	7	945	856	14.3	82	36.6	8.6
5 Senior	492	11	98	28	16	2	1	6	603	603	16.2	44	36.4	6.7
6 Junior	540	12	68	35	16	2	..	7	680	622	10.9	51	31.3	7.5
6 Senior	423	9	52	31	21	5	..	..	541	489	10.7	52	40.4	9.6
TAMPA ELEMENTARY	7314	182	1148	584	246	56	33	54	9617	8700	13.2	830	32.2	8.6

P = Promoted
 CP = Promoted Conditionally
 NP = Not Promoted
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 SP = Special Promotion During Term
 T = Transferred to Another School
 Column 9 = Total Enrollment
 Column 10 = Number Pupils in School in June, P + CP + NP + PP
 Column 11 = Percentage Not Promoted; Column 3 Divided by Column 10
 Column 12 = Total Withdrawn
 Column 13 = Percentage Withdrawn Not Passing
 Column 14 = Percentage of Total Enrollment Withdrawn; Column 12 Divided by Column 9

tion of promotion policies acceptable to Tampa teachers. The tests given in May, 1925, made it possible to study the effectiveness with which these policies were used.

Table 33 shows the amount of June, 1925, non-promotion ascribed to various causes by the teachers of 3 schools. At least 74 per cent of the causes given in the Gorrie School, 84 per cent in the Ybor School, and 81 per cent in the Lee School imply that the pupils were failed because of lack of achievement. All the reasons given except non-promotion and failure to take examinations are obviously explanations for failure to do school work. In many cases poor attendance is given to indicate failure to attain educational standards.

TABLE 33
 CAUSES OF NON-PROMOTION, JUNE, 1925, IN ELEMENTARY SCHOOLS FOR WHITE CHILDREN AS LISTED BY TEACHERS OF THREE SCHOOLS
 TAMPA, FLORIDA

Causes Given by Teachers	Percentage of Non-Promotion Due to Each Cause		
	Gorrie	Lee	Ybor
Lack of Ability, Preparation.....	26.7%	28.5%	27.5%
Poor Attendance	16.0	11.9	18.4
Late Entrance	16.0	12.8	2.0
Lack of Interest, Effort	14.7	15.6	10.5
Poor Health	13.3	14.7	11.1
Lack of Intelligence	4.0	1.8	10.5
Too Young for Grade .....	..	6.4	..
Lack of English Ability .....	..	4.6	13.0
No Examination .....	..	3.7	..
Lack of Arithmetic Ability .....	..	..	3.0
Other Causes	9.3	..	4.0

Grade 5 Senior in the Lee School was chosen for intensive study to determine whether teachers under existing conditions are able to interpret accurately this policy. Table 34 gives the reasons for failing 17 pupils in this grade in June, 1925. This table shows additional information given by the teachers in May. Every reason given implies that the pupil concerned failed to achieve in his school work sufficiently to justify promotion.

Chart 26 shows the scholarship of these 17 non-promoted pupils in comparison with their promoted classmates, as they were measured by the Stanford Achievement Test.² Pupils who

²This is a combination of tests in the following: Understanding of words (reading), understanding of sentences (reading), understanding of paragraphs (reading), arithmetic computation, reasoning in arithmetic, history, literature, nature study and science, language usage, and spelling.

TABLE 34

TEACHERS' REASONS FOR FAILING TO PROMOTE SEVENTEEN PUPILS FROM GRADE 5 SENIOR OF THE ROBERT E. LEE SCHOOL IN JUNE, 1925

Pupil	Causes of Failure Given by Teacher	Pupils Whom Teachers Had Previously Designated as Discipline Cases*
1	Ill health	xx
2	Weak in certain subjects	..
3	Weak; lazy	xx
4	Weak; lazy	..
5	Weak; mentally deficient	..
6	Weak; lazy	xx
7	Weak in arithmetic and geography	..
8	Would not study; said he had to work	xx
9	Never studied; entered late	xx
10	Should be in Grade 4; not capable	..
11	Work poor requiring English; foreign	..
12	Work poor requiring English; foreign	..
13	Work of grade too hard	xx
14	Non-attendance	xx
15	Non-attendance; indifference	..
16	Could not do the work	..
17	Could not do the work	..

Note: Pupils marked xx were listed by the teachers in May as the pupils who were serious discipline cases.

were failed are often much better prepared educationally than pupils who were promoted. Six pupils, or 35 per cent of the failures, were above the lowest quarter of the whole group in achievement. While there were 11 pupils in the lowest quarter who were failed, there were also 18 promoted pupils who were as low or lower in educational achievement. The 3 pupils who were lowest in achievement were among those promoted.

The same general lack of relation between failure and achievement is maintained in the various subjects of the curriculum. Chart 27 gives this picture in reading, arithmetic, nature study and science, history and literature, language, and spelling, the composite of which was given in Chart 26. The non-promoted pupils range in every subject above many pupils who were considered educationally ready for the next grade. A pupil's position in the subjects is no indication of whether he should be promoted or not, if this study is a fair sample of the practice of promotion in Tampa.

The one, Pupil 7, failed because of specific weakness in geography and arithmetic, stands equal or above 30 other pupils

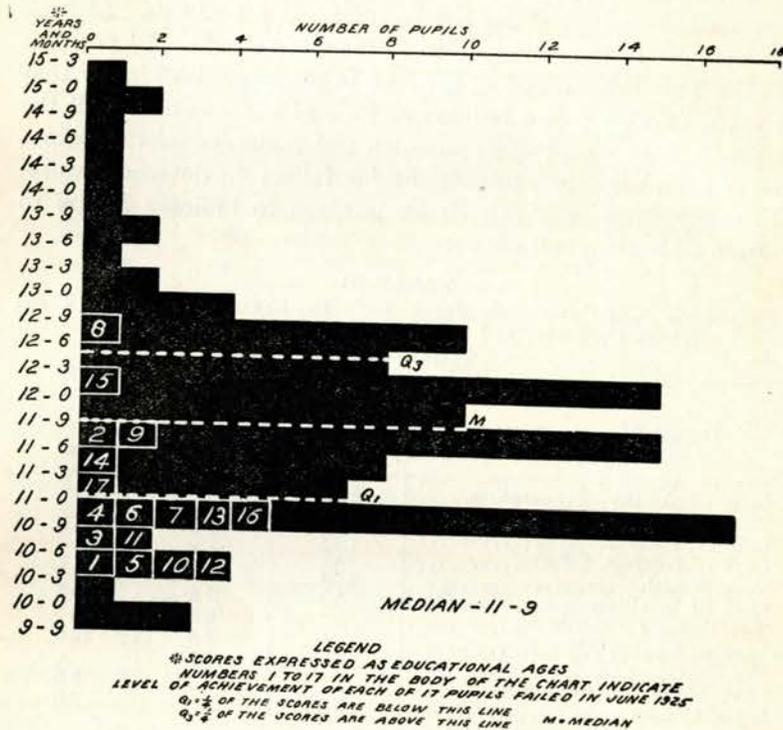


CHART 26

RELATIVE ACHIEVEMENT IN SCHOOL SUBJECTS OF PROMOTED AND NON-PROMOTED PUPILS AS MEASURED BY THE STANFORD ACHIEVEMENT TEST

TAMPA, FLORIDA—MAY, 1925

Distribution of the Scores of the Five Senior Grades of the Lee School

in geography and above 23 other pupils in arithmetic. In geography, 20 of the pupils below Pupil 7 were promoted and in arithmetic 16 of these pupils were promoted.

A study of all of the achievement test scores of each of these non-promoted pupils strengthens the conclusion that non-promotion is often unrelated to achievement. Several of these case studies are offered as illustrations in Chart 28. Pupil 2 is of Spanish parentage; above the average height for his age; 11 years, 7 months old at the time of the tests. Although he skipped grade 4 Junior his school progress has been retarded with non-promotion in grades 1 Junior, 1 Senior, 3 Senior and 5 Senior. He has symptoms of eye trouble and chronic difficulty in breathing. The reason for failing him for the second time in 5 Senior is given that he was weak in certain subjects. Chart A shows that he is equal to or better than 44 per cent of his class in achievement. His profile in Chart 28 shows that he is definitely weak in language usage only. Pupil 2 stands 4 months below the median of the grade in chronological age, equal in mental age to the grade median, and 2 months below the grade median in educational age. This pupil should be promoted and given special training in language.

Pupil 9 is of Spanish parentage; of average height for his age; and 14 years and 7 months old at the time of the test. He repeated grades 1 Senior and 2 Junior and is now repeating grade 5 Senior for the third time. He is rated as a serious discipline problem and as one of the poorest workers in the class. His third non-promotion from grade 5 Senior is given as "late entrance" and "failure to study." Charts 26 and 29 show that, although he is mentally lower than most of his grade, he is, nevertheless, better than 44 per cent of his group educationally. His profile in Chart 28 shows that he is 2 years and 8 months above the grade median in chronological age, 1 year and 7 months below the grade median in mental age and only 3 months below the grade median educationally. His language usage score is the only very low score in his profile. Promotion to a special class with a changed curriculum would meet the needs of this pupil better.

Pupil 15 is an American girl of average height and weight for her age and 13 years and 5 months old at the time of the testing. She repeated grade 4 Junior. She has been absent 18 days during

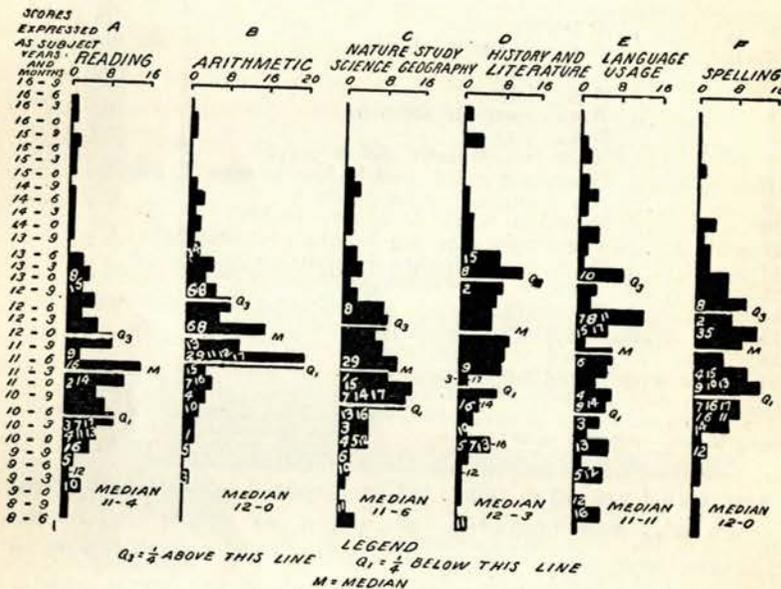


CHART 27

RELATIVE ACHIEVEMENT IN VARIOUS SCHOOL SUBJECTS OF PROMOTED AND NON-PROMOTED PUPILS AS MEASURED BY THE COMPONENT TESTS OF THE STANFORD ACHIEVEMENT TEST *

TAMPA, FLORIDA—MAY, 1925

Distribution of the Scores of the Five Senior Grades of the Lee School

* Numbers 1 to 17 in the body of the charts indicate level of achievement of each of the 17 pupils failed in June, 1925.

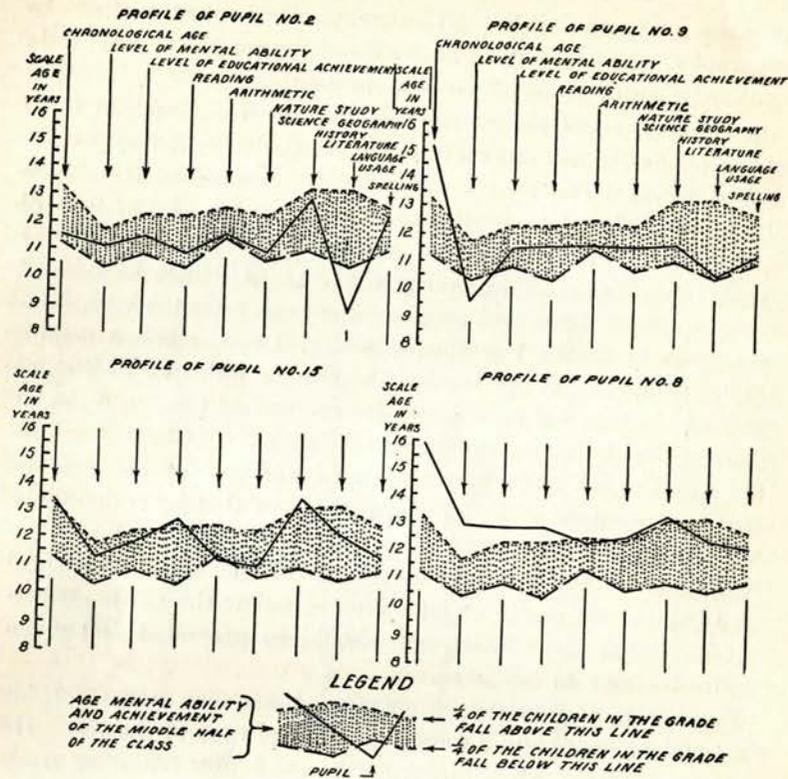


CHART 28

ACHIEVEMENTS OF NON-PROMOTED PUPILS IN RELATION TO MIDDLE HALF OF CLASS—LEE SCHOOL—GRADE 5A

TAMPA, FLORIDA

the semester and is listed as one of the poorest workers. Educationally she is better than 50 per cent of her grade, as shown in Chart 26. She was failed for indifference and non-attendance. Her profile on Chart 28 shows that in chronological age she is 1½ years above the median, that she did not take the intelligence test, that she is 3 months above the median of the grade in educational achievement. Her lowest rating in any subject is in nature study and science where she is only 2 months below the median for the grade. Non-promotion would punish this pupil but would not help her educationally.

Pupil 8 is a boy of Cuban parentage; below average height for his age; 15 years and 11 months old at the time of the tests. His progress has been normal with no non-promotions up to this time. He entered school at the age of 10. He has been absent 16 days during the semester and is listed as one of the serious discipline cases. The reason given for his non-promotion to the sixth grade is that he would not study and that he had to work at home. Yet, as shown in Chart 26, his educational achievement is higher than 75 per cent of the grade. In mental ability as shown in a later chart, he is surpassed by only 6 of the 68 pupils who took the intelligence test. He was failed because he did not study. What incentive was there for study? He was already surpassing more than 50 per cent of the pupils in the next higher grade, the 6 Junior. Moreover, his educational age, his mental age, and his chronological age were all higher than the median of the 6 Senior grade, which is a full year ahead of his present grade in school.

Mental Ability and Non-Promotion.—The inaccuracy of the diagnosis of educational achievement as made by the teacher points to the need for more adequate methods of measuring achievement. Many standard tests are available for this purpose. Tests of achievement more adequate than those now used may be devised by the teachers themselves. The establishment of more definite promotion policies recommended later in this section will aid materially in such work.

The usefulness of intelligence tests in the work of the classroom is interestingly illustrated by these same cases of non-promotion. Table 34 shows that in 3 cases, Pupils 3, 4, and 6, the teachers did not know whether failure was due to lack of ability or to laziness. Both "weak" and "lazy" were entered as causes of failure. McCall Multi-Mental Scale scores are available on two of these 3 pupils, Pupils 3 and 4. Chart 29 shows that compared with the others in the class these two pupils are not by any means the weakest in the class. Only a few more than half are developed beyond Pupil 4, mentally, and only three-fourths of the class are developed more than Pupil 6. A knowledge of the intelligence rating of these pupils would have been useful to the teacher.

A teacher could attack the problem of awakening the interest of Pupil 4 with a great deal more interest if she knew that he

was not mentally deficient. On the other hand, a mental test of Pupil 5, which would confirm the teacher's judgment that he was mentally deficient, would probably lead to a more adequate classification of the pupil and would relieve the teacher.

So far as determining promotions is concerned, the mental test in the elementary school is useful only in that it gives some indication as to whether a pupil can make up deficiencies if allowed to go ahead. Its greater usefulness would come as an aid to diagnosis early in the term when there is yet time to make adjustments that promise to avoid the occurrence of failure.

Curriculum Adjustment and Non-Promotion.—Part of the difficulty in progressing children through the grades is overemphasis on certain subjects of the curriculum. The more formal subjects of arithmetic, language usage and spelling have received greater emphasis than the less formal subjects of history and literature, nature study and science. Chart 30 shows the relation of the

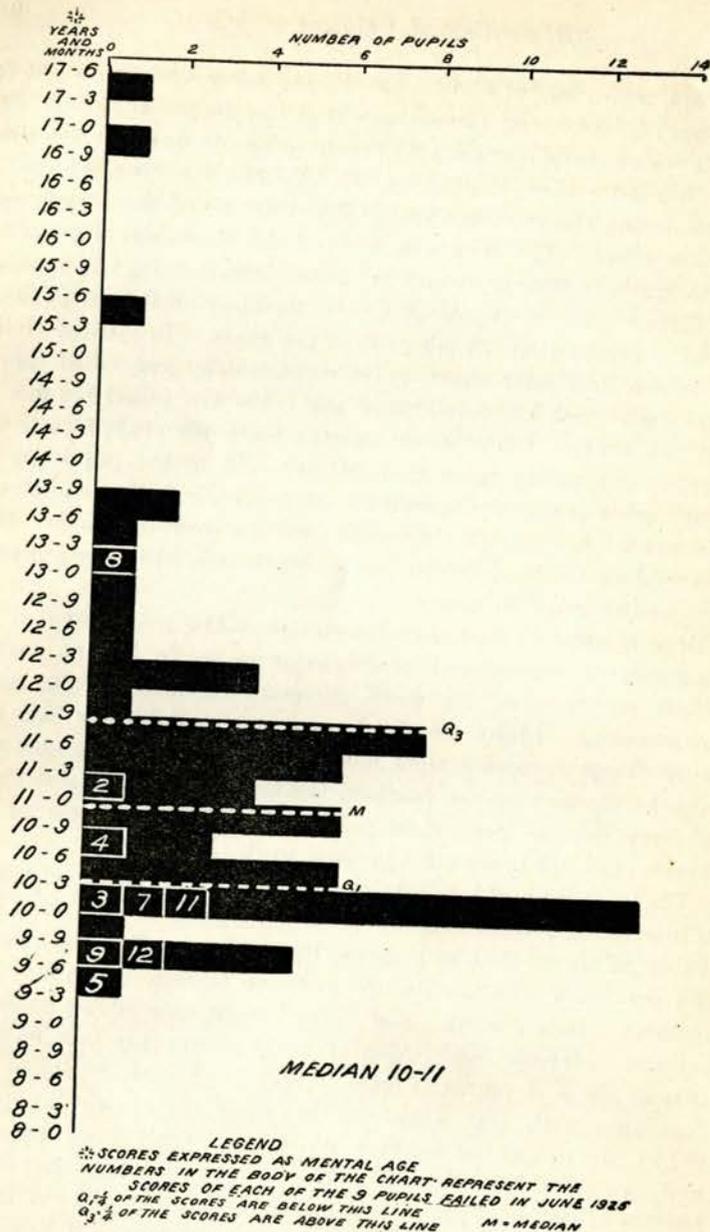


CHART 29

RELATIVE MENTAL DEVELOPMENT OF PROMOTED AND NON-PROMOTED PUPILS AS MEASURED BY THE MCCALL MULTI-MENTAL SCALE

TAMPA, FLORIDA—MAY, 1925

Distribution of the Scores of the Five Senior Grades of the Lee School

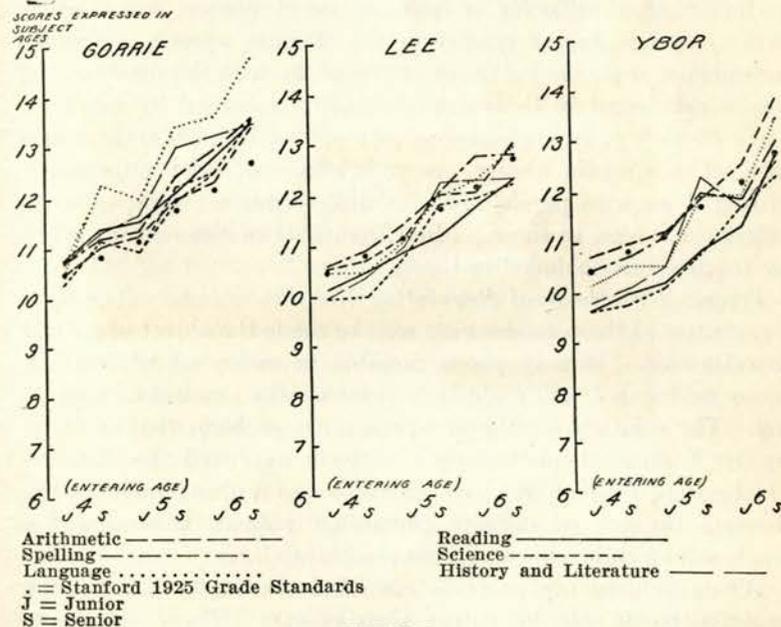


CHART 30

COMPARISON OF GRADES 4 JUNIOR TO 6 SENIOR OF THREE SCHOOLS AS TO STANDING IN VARIOUS SUBJECTS AS MEASURED BY THE STANFORD ACHIEVEMENT TEST

TAMPA, FLORIDA—MAY, 1925

median scores in the different subjects for the Ybor, Lee, and Gorrie Schools. The comparison in the Ybor School will illustrate the general situation in all the schools. The children scored higher in arithmetic than in any other subject, which shows that greater emphasis has been placed on the teaching of arithmetic. In every grade it exceeds the results in nature study and science from 10 to 18 months. In the same way it exceeds the achievement in history and literature, except for one grade, by 8 to 11 months. Spelling and formal language usage also surpass the less formal subjects. It may be noted that in the Ybor School the subject of reading, which is the best index of the pupil's language ability, received nearly the lowest scores in every grade.

The unusual difficulty of certain grades that sometimes results from lack of proper attention to the adjustment of the curriculum will also unduly retard progress. Chart 30 shows that pupils have had particular difficulty in passing the 1 Junior, 4 Junior, 4 Senior, and 5 Junior grades in the Tampa schools. Further indications of poor adjustment of school work to the needs of the pupils are found in the causes of failure assigned by teachers. Lack of ability, lack of intelligence, lack of English ability, and lack of arithmetic ability are indications of poor adjustment of school work to pupils' needs. Lack of interest may, to some extent, be added to these. More than half of the reasons given by teachers are included in these.

Proposed Methods of Regulating Non-Promotions.—The subject matter of these grades may well be made the object of special investigation. It may prove possible to make adjustments in these grades that will materially decrease the amount of repeating. The solution for the non-promotion problem that is faced by the Tampa schools will come through improved classification of children, through removal of causes of failure, and finally, through the use of definite promotion policies governing the treatment of children who fail to reach standards.

When children are properly classified the work they will be expected to do will be within their powers. Those who have failed in the past because they were unable to meet standards which were beyond them will not be subjects for non-promotion. Needed changes in classification in Tampa schools are discussed in the next chapter.

A properly organized school system will still further reduce the number of failures by eliminating many conditions which force boys and girls to work below capacity. Results from adequate physical examinations will be available. Information on home life and out-of-school interests will be available or obtainable through the attendance service, or through the visiting teacher. Diagnostic test results will be provided. These data will make possible the prevention of many cases of failure. If special medical attention is needed, steps will be taken to see that it is obtained. If there is a lack in home environment or a lack in interest, if possible, it will be supplied. If lack of success now is due to some failure earlier in the child's school life, the needed special instruction will be provided.

However adequate the provisions for preventing failure may be, there will be pupils who will fail to attain the standards set for them. Not all of such children need necessarily repeat the grade. Some of them, perhaps, most of them, may find it more profitable to go on with their class. Some of them may be able to go on successfully with a lower ability group. Others may be able to master the work of the next grade if special instruction is given by the new teacher or by a coaching teacher.

The basis for determining whether or not a pupil shall fail is his own welfare. No child should be required to repeat a grade unless it is assured that he will benefit more by repeating than by taking the advanced work. The acceptance of this principle implies that the school accepts as an ideal the maximum development of each child. It requires the reformulation of the indefinite standards for promotion which have resulted in the conditions described earlier in this chapter.

Repeating a grade would seem to be justified when a pupil is unable to master the succeeding grade fundamentals. Even under these circumstances repeating would be justified only when the comparatively small amount of subject matter required cannot be obtained from special instruction given by the new teacher or by a coaching teacher while the pupil carries at least the fundamental work of the following grade. Repeating would be justified also if promotion means the losing of something intrinsically valuable, which cannot be secured in a higher grade. The subject matter that would be lost by going on would need to be exceedingly important, however. It would need to be of

sufficient importance to compensate for the loss to the boy or girl that would result from repeating. Apart from the discouragement that might arise from repeating, it should be held in mind that to many children repeating a lower grade results in sacrificing the opportunity to experience one of the higher school grades. Children who withdraw from school as soon as the law permits or economic pressure requires leave school in Tampa in many cases with no better than a fourth or fifth grade education and in large numbers with no more than a sixth or seventh grade education. One can seriously doubt whether the 8 or 10 years they have spent in school trying to do work beyond their capacity have been very satisfactory.

In order to interpret these principles, committees of teachers representing each grade working with the supervisory staff should formulate conditions under which repeating a given grade would generally be desirable. The results of their findings should be made available throughout the system, used, and improved from time to time. In case children are so classified that the work expected of them from grade to grade is adjusted to their abilities, there will doubtless be different elements required for mastery in the different sections. The first task of such committees should be to determine the elements, the mastery of which is required for success in the succeeding grade, and methods by which degree of mastery can be measured. Such tests should be applied during the term so that data on each child showing his degree of mastery will be available. From these data it can be determined whether repeating is required or whether special instruction given by the class teacher or a coaching teacher would be sufficient to promise success.

The second task of the failure committees should be to catalogue the specific elements in the term's work not required for further mastery of subject matter. It may then be determined which of these elements are of sufficient intrinsic value to justify requiring a pupil who has failed to master them to repeat the grade. In making this determination, the good to come from mastery must be balanced against the possibility that repeating may mean loss of educational opportunities on higher grade levels.³

³ Such a promotion policy, as is outlined above, is sometimes objected to because of the tendency of teachers to emphasize in their instruction the elements upon which passing is based at the expense of other subjects. In other words,

It might well prove that in some grades continued absence accompanied by low mastery of school work would be the only just cause for requiring a pupil to repeat the particular units of work represented by those grades. Such a conclusion, if it were reached after careful study of conditions, would not necessarily indicate that the work of such grades was of less importance than that of other grades. It would simply mean that after a pupil has lived a half-year in that grade he has received the maximum of good out of it. It would mean that repeating the grade would seldom add more to the pupil's development than a higher grade.

ACCELERATION

The small percentage of children who have been given an opportunity to gain time in their progress through school is an indication of the failure of the Tampa schools to adjust their program to the needs of bright children.

An examination of Chart 23 on page 201 shows the lack of any definite policy with respect to accelerating pupils. Schools vary greatly among themselves in the degree to which acceleration is used. In the school which has followed the practice of accelerating pupils most freely, 3 out of every 10 children in the third and fifth grades have received an extra promotion at some time in their school life. In the school that has followed the practice least freely, only 1 child in 100 in these grades has ever received an extra promotion. The variation among schools is even greater than in non-promotion practices.

On the whole, the practice of accelerating pupils has been followed less than would be expected where the educational opportunities have not been adjusted to the different ability levels within a grade. If the elementary school does not provide the richer opportunities that brighter children need, the least it can do is to accelerate the bright pupil sufficiently to keep him working on a level that will really challenge his abilities.

It is recommended, however, that a curriculum adjusted to the needs of such children be provided. When this is done only special cases should be accelerated. A pupil should be given

some cities fail children on the basis of attainment in all subjects in order to encourage teachers to emphasize all subjects. This would seem to be a very shortsighted method of supervision. Doubtless the acceptance of such a policy, as has been outlined, demands more work on the part of supervisory officers in order that a narrow, inadequate curriculum will not result.

special promotions if the classification fails to meet his needs. This will occur occasionally even in the best adjusted school system, because of peculiar needs or exceedingly high ability of an occasional pupil. On the whole, it would seem to be more desirable to accelerate through school the pupil who, in all probability, will be limited to a number of years in school that will not permit him to finish college. For such a pupil enrichment will come from the higher grades which he will reach if accelerated. His case is different from that of the pupil who will finish a given educational level whether he is accelerated or not. Pupils for whom a professional career is planned may well be accelerated in order that they may finish a long period of training at an earlier age. This would be particularly true where there are economic considerations involved. Pupils who are over age for their grades because of failure to enter school at the normal entrance age, or illness, or retardation may well be accelerated to their own age groups.

SUMMARY

1. *Effectiveness of Present Regulation of Progress.*—The lack of proper regulation of progress of children through the schools has resulted in the large percentage of over-age pupils found in each grade.

2. *Age of Entrance to First Grade.*—The provisions for enrolling boys and girls in school before they become over age for the first grade are inadequate. Parents should be urged to enroll their children in school at the first entering date after the children attain the age of 5 years and 9 months. The attendance service should be adequate to obtain the attendance of all boys and girls before they become 7 years of age.

3. *Progress Through the Grades.*—The amount of retardation in progressing through the grades is excessive, while the amount of acceleration is less than may well be expected, particularly of a school system such as Tampa that provides the same type of work for all pupils.

a. *Non-Promotion:*

- (1) The large amount of retardation results from the high rate of non-promotion. In June, 1925, the rate of non-promotion in the elementary schools ex-

ceeded 13 per cent. The non-promotion rate is high even in the schools that make the best showing.

- (2) The unusually great variation in rate of non-promotion among schools and among grades in the same school indicates a lack of definite promotion policy in the Tampa schools.
- (3) *Achievement and Non-Promotion:* An investigation of the causes of non-promotion as assigned by teachers shows a universal stress on achievement in school subjects as a basis for promotion. However, an investigation of the achievement in school subjects of pupils who failed to be promoted in June indicates that in many instances pupils who fail of promotion at present are better prepared for promotion than many who are promoted. This indicates the need for more adequate measures of achievement.
- (4) *Mental Ability and Non-Promotion:* In assigning reasons for failure of pupils, teachers were often unable to tell whether the cause was lack of ability to do school work or lack of inclination to do school work. This indicates the need for the use of tests of mental ability in such a way that teachers may more accurately determine procedure with respect to individual pupils.
- (5) *Curriculum Adjustment and Non-Promotion:* The emphasis on formal subjects of the curriculum and unusual amounts of non-promotion in certain grades give specific points for immediate attack on the non-promotion problem.
- (6) *Proposed Methods of Regulating Non-Promotions:*
 - (a) Pupils should be so classified that the work they are expected to do will be within their powers.
 - (b) Conditions that force pupils to work below capacity should be removed. Needed medical attention should be obtained; adjustments should be made to provide for lack in home environment or lack of interest; special instruc-

tion to supply deficiencies in information or skills should be provided.

- (c) In determining whether a pupil who, in spite of all efforts, has failed to reach the accepted standards should be promoted, his own welfare alone should be the guide. A pupil's welfare justifies non-promotion if he has failed to master the elements required in order to be able to master the work of the succeeding grades to the degree that the needed instruction cannot be given him while he progressed with his class. A pupil's welfare justifies non-promotion if promotion means the losing of something more valuable than that which he would lose by repeating.
- (d) Committees of teachers of each grade should be formed for interpreting the above principles. They should determine especially contribution of each grade necessary to successful work in the next grade and methods of measuring the required mastery, and what elements of the work of the grade not required for mastery of succeeding grades are of sufficient value to justify non-promotion of pupils failing in attainment with respect to them.

b. Acceleration:

- (1) The small percentage of accelerated pupils in the Tampa elementary schools is explained by the fact that in most of the Tampa schools extra promotions are granted in rare instances only.
- (2) The need for the establishment of definite policies governing extra promotions is indicated by the great variation in practice among the schools.
- (3) The following considerations are proposed for determining definite promotion policies:
 - (a) Where the opportunities for enrichment of the curriculum are meager, bright pupils should be accelerated sufficiently in the elementary

schools to keep them working up to their abilities.

- (b) When adequate classification makes possible a differentiation of curriculum to fit the needs of bright pupils, only those should be accelerated for whom there is a definite reason for accelerating.
- (c) Some bright pupils who should be accelerated even after improved classification of pupils has been adopted are: pupils whom the classification fails to care for; pupils who will in all probability not finish junior high school, high school, or college if they are not permitted to finish young; pupils who are planning a professional career that will demand a long period of training; pupils who, due to late entrance to school, illness, or retardation, are over age for their grades.

REGULATION OF PROGRESS IN THE JUNIOR AND SENIOR HIGH SCHOOLS

EFFECTIVENESS OF PRESENT REGULATION OF PROGRESS

One measure of the efficiency of the regulation of progress in the junior and senior high schools is the relation between the age and grade of the pupils. The situation in the junior and senior high schools of Tampa in May, 1925, is shown in Table 35. There were 965, or 35.9 per cent of the pupils, of normal age for their grade. Twelve hundred and thirty-two, or 45.9 per cent, were over age for their grade, while 489, or 18.2 per cent, were under age for their grade. This situation is better than that of the elementary schools. The underageness in the secondary schools was 18 per cent compared to 8 per cent in the elementary schools. The normal age was 36 per cent compared to 30 per cent and the reduction in overageness was from 62 per cent in the elementary school to 46 per cent in the secondary schools. This apparently improved condition in the secondary schools is due to the elimination from school of large numbers of the over-age pupils before they reach the junior and senior high schools. The normal-age pupils tend to continue through the high school.

Pupils who are much over age have little chance at present of receiving a junior or senior high school education. Table 35 shows the number of pupils under age, normal age and over age by grades. Sixty per cent of the over-age pupils of the elementary schools were more than one year over age, while only 40 per cent of the over-age pupils in the junior and senior high schools were more than one year over age. One of every 3 over-age pupils in the elementary schools was 3 years or more over age. In the junior and senior high schools only 1 of every 7 over-age pupils was 3 or more years over age. In the eleventh and twelfth grades, only 3 pupils were 3 or more years over age. This is a clear indication that most of the over-age pupils have not survived to the eleventh grade of the high school.

TABLE 35

DISTRIBUTION OF PUPILS ENROLLED IN MAY, 1925, IN JUNIOR AND SENIOR HIGH SCHOOLS FOR WHITE CHILDREN SHOWING UNDER-AGE, NORMAL-AGE AND OVER-AGE PUPILS BY GRADES TAMPA, FLORIDA

Grade	Under Age		Normal Age	Over Age				
	More Than One Year	One Year or Less		One Year or Less	Two Years	Three Years	Four Years	More Than Four Years
7 Junior	6	42	103	99	75	50	9	5
7 Senior	8	47	163	97	49	21	3	2
8 Junior	6	24	85	90	73	15	5	1
8 Senior	3	39	101	81	55	14	1	1
9 Junior	3	28	80	58	28	12	2	..
9 Senior	8	36	107	69	24	6	2	1
10 Junior	2	20	45	36	17	6	2	2
10 Senior	4	74	91	68	22	1	2	1
11 Junior	1	14	31	28	3	..	1	..
11 Senior	4	36	75	28	3	..	1	..
12 Junior	4	22	35	15	7	..	1	..
12 Senior	13	45	49	31	5	4	..	..
Total	62	427	965	700	361	129	29	13
Per Cent	2.3%	15.9%	35.9%	26.1%	13.4%	4.8%	1.1%	.5%

The comparison of the age grade situation in the high school grades is given in Chart 31. The proportion of overageness decreases and the proportion of underageness increases through the junior and senior high schools. A comparison of the junior and senior high schools shows that about 1 out of every 2 pupils in the former is over age, while only 1 out of 3 is over age in the

latter. In the junior high schools only 18.2 per cent are under age for their grade, while 28.1 per cent of the senior high school pupils are under age.

The change in the age-grade situation between the elementary and the secondary schools is shown graphically in Chart 20. The middle 50 per cent decreases in the range of ages in each grade. From the seventh grade it becomes less over age for the grade until in the last three grades it extends to the under-age side of the normal-age span.

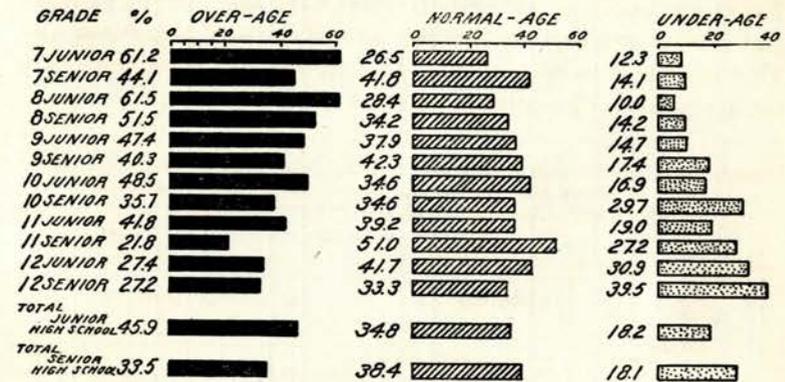


CHART 31

PERCENTAGES OF OVER-AGE, NORMAL-AGE, AND UNDER-AGE PUPILS IN EACH OF THE JUNIOR AND SENIOR HIGH SCHOOL GRADES TAMPA, FLORIDA

FAILURES IN JUNIOR HIGH SCHOOLS

A second measure of the efficiency of the regulation of progress through a school is the rate of promotion at the end of each grade. In the junior and senior high schools as at present organized, the promotion or non-promotion depends upon the pupil's ability to pass the various subjects which he may have selected to study or which were compulsory for all the pupils in the grade. All studies on failures in the junior high schools of Tampa are, by necessity, studies of failures in the various subjects and may not mean non-promotion into the next higher grade. In the Woodrow Wilson Junior High School an average of 16 per cent of the pupils in each subject at the end of the semester were failed. In the George Washington Junior High

TABLE 36

PROMOTION, WITHDRAWAL, AND FAILURE BY SUBJECTS IN THE GEORGE WASHINGTON JUNIOR HIGH SCHOOL
TAMPA, FLORIDA

Disposition of Pupils Enrolled During the Semester Ending June, 1925

Grade	Subject	1	2	3	4	5	6	7	8	9	10	11	12
		P	CP	NP	WP	WN	T	Total	P + CP + NP	Percent- age NP	WP + WN	Percent- age WN of All W	Percent- age WP + WN
7 Junior	History	224	..	107	29	8	..	368	331	32.3%	37	21.6%	
	English	266	..	120	27	11	..	424	386	30.9	38	28.9	
	Arithmetic	268	..	103	34	19	..	424	371	27.8	53	35.8	
	Geography	242	..	77	38	14	..	371	319	24.1	52	26.9	
	Physiology	297	..	90	34	7	1	429	387	23.3	41	16.7	
	Total	1297	..	497	162	59	1	2016	1794	27.7%	221	26.7%	11.0%
7 Senior	Geography	282	..	41	24	8	1	356	323	12.7%	32	25.0%	
	History	328	..	37	30	5	..	400	365	10.1	35	14.2	
	English	280	..	20	23	3	1	327	300	6.6	26	11.5	
	Physiology	310	..	22	20	11	..	363	332	6.6	31	35.5	
	Arithmetic	304	..	18	22	6	3	353	322	5.6	28	21.4	
	Total	1504	..	138	119	33	5	1799	1642	8.4%	152	21.7%	8.5%
8 Junior	Arithmetic	177	4	58	28	15	4	286	239	24.3%	43	34.9%	
	English	226	1	71	28	18	2	346	298	23.8	46	39.1	
	Agriculture	209	2	51	22	9	2	295	262	19.5	31	29.0	
	History	190	2	38	12	15	2	259	230	16.5	27	55.6	
	Total	802	9	218	90	57	10	1186	1029	21.1%	147	38.8%	12.4%
8 Senior	English	207	..	42	20	4	..	273	249	16.9%	24	16.7%	
	Latin	157	1	27	13	9	1	208	185	14.6	22	40.9	
	Arithmetic	232	1	38	22	5	2	310	281	13.5	27	18.5	
	Algebra	233	3	29	26	4	..	295	265	10.9	30	13.3	
	Total	829	15	136	81	22	3	1086	980	13.9%	103	21.4%	9.5%

9 Junior	Latin	47	1	10	4	3	..	65	58	17.2%	7	42.9%	
	Agriculture	24	..	3	3	2	..	33	27	11.1	6	33.3	
	Spanish	59	1	6	3	3	..	72	66	9.1	6	50.0	
	Science	131	3	12	9	7	4	166	146	8.2	16	43.8	
	Algebra	153	1	10	13	3	..	180	164	6.1	16	23.1	
	English	135	..	5	14	4	..	158	140	3.6	18	22.2	
	Total	549	6	46	47	22	4	674	601	7.6%	69	31.9%	10.2%
9 Senior	Spanish	43	..	7	1	3	..	54	50	14.0%	4	75.0%	
	Latin	85	2	10	3	1	1	102	97	10.3	4	25.0	
	Algebra	168	..	7	7	3	..	180	175	4.0	5	60.0	
	English	182	..	4	7	3	..	196	186	2.2	10	30.0	
	Science	179	2	2	6	3	..	192	183	1.1	9	33.3	
	Total	657	4	30	19	13	1	724	691	4.3%	32	40.6%	4.4%
	GRAND TOTAL	5638	34	1065	518	206	24	7485	6737	15.8%	724	28.4%	9.6%

P = Promoted
 CP = Promoted Conditionally
 NP = Not Promoted
 WP = Withdrawn Passing
 WN = Withdrawn Not Passing
 T = Transferred to Another School

Column 7 = Total Enrollment

Column 8 = Number Pupils in School in June, P + CP + NP

Column 9 = Percentage Failing; Column 3 Divided by Column 8

Column 10 = Total Number Withdrawn

Column 11 = Percentage Withdrawn Failing; Column 11 Divided by Column 10

Column 12 = Percentage of Total Enrollment Withdrawn; Column 10 Divided by Column 7

Column 7 = Total Enrollment
 Column 8 = Number Pupils in School in June, P + CP + NP
 Column 9 = Percentage Failing; Column 3 Divided by Column 8
 Column 10 = Total Number Withdrawn
 Column 11 = Percentage Withdrawn Failing; Column 11 Divided by Column 10
 Column 12 = Percentage of Total Enrollment Withdrawn; Column 10 Divided by Column 7

TABLE 37

PROMOTION, WITHDRAWAL, AND FAILURE BY SUBJECTS IN THE WOODROW WILSON JUNIOR HIGH SCHOOL
TAMPA, FLORIDA

Disposition of Pupils Enrolled During the Semester Ending June, 1925

Grade	Subject	1	2	3	4	5	6	7	8	9	10	11	12
		P	CP	NP	WP	WN	T	Total	P + CP + NP	Percentage NP	WP + WN	Percentage WN of All W	Percentage WP + WN of Total
7 Junior	Arithmetic	90	1	54	1	18	..	164	145	37.9%	19	94.7%	
	English	107	1	37	15	6	..	166	145	25.5	21	28.6	
	History	120	..	30	9	11	2	173	150	20.0	20	55.0	
	Physiology	122	..	27	10	3	3	162	149	19.4	13	23.1	
	Geography	118	..	27	9	8	3	165	145	18.6	17	47.0	
	Total	557	2	175	44	46	5	830	734	23.8%	90	51.1%	10.8%
7 Senior	History	116	3	39	11	12	2	183	158	24.7%	23	52.2%	
	Arithmetic	121	2	38	13	15	..	179	161	23.6	18	38.4	
	Geography	136	..	28	9	3	1	177	164	17.1	12	25.0	
	English	135	..	27	11	8	1	182	162	16.7	19	42.1	
	Physiology	159	..	11	8	..	..	180	170	6.5	10	20.0	
	Total	667	5	143	52	30	4	901	815	17.5%	82	36.6%	9.1%
8 Junior	History	86	..	16	7	..	..	109	102	15.6%	7	0.0%	
	Arithmetic	83	1	15	2	3	1	105	99	15.1	5	60.0	
	Agriculture	93	4	11	4	2	..	114	108	10.2	6	33.3	
	English	90	1	7	4	..	..	108	104	6.7	4	0.0	
	Total	358	6	49	17	5	1	436	413	11.9%	22	22.7%	5.0%
8 Senior	Algebra	82	..	16	15	9	..	122	98	16.3%	24	37.5%	
	Arithmetic	73	1	14	19	7	..	108	88	13.9	20	3.0	
	Latin	63	2	9	7	1	1	89	74	12.2	14	50.0	
	English	72	2	7	13	2	2	97	81	8.6	15	13.3	
	Spanish	26	..	12	2	..	2	34	28	7.1	14	50.0	
	Total	316	5	48	56	21	4	450	369	13.0%	77	27.2%	17.1%

9 Junior	Latin	49	..	13	5	3	..	70	62	21.0%	8	37.5%	
	Spanish	23	..	6	3	..	..	32	29	20.7	3	0.0	
	English	67	..	10	7	2	..	86	77	13.0	9	22.2	
	Algebra	56	5	4	1	3	..	67	63	11.1	4	75.0	
	Science	61	..	4	3	4	..	77	70	5.7	7	57.1	
	Total	256	5	40	19	12	..	332	301	13.3%	31	38.7%	9.3%
9 Senior	Latin	39	..	5	2	1	..	47	44	11.6%	3	33.3%	
	Algebra	92	2	9	4	3	..	110	103	8.7	7	42.8	
	Science	91	..	7	6	..	..	105	98	7.1	7	14.2	
	Spanish	26	..	2	3	..	..	31	28	7.1	3	0.0	
	English	105	..	4	7	3	..	119	109	3.7	10	30.0	
	Total	353	2	27	22	8	..	412	382	7.1%	30	26.0%	7.3%
	GRAND TOTAL	2507	25	482	210	122	14	3361	3014	16.0%	332	36.7%	9.8%

P = Promoted

CP = Promoted Conditionally

NP = Not Promoted

WP = Withdrawn Passing

WN = Withdrawn Not Passing

T = Transferred to Another School

Column 7 = Total Enrollment

Column 8 = Number Pupils in School in June, P + CP + NP

Column 9 = Percentage Failing; Column 3 Divided by Column 8

Column 10 = Total Number Withdrawn

Column 11 = Percentage Withdrawn Failing; Column 11 Divided by Column 10

Column 12 = Percentage of Total Enrollment Withdrawn; Column 10 Divided by Column 7

School 15.8 per cent were failed. Besides those who failed at the end of the term, 9.8 per cent of the 332 subjects carried by pupils in the Woodrow Wilson Junior High School were dropped during the half year. In the George Washington Junior High School 724 subjects, or 9.6 per cent, were dropped. In 28.4 per cent of the subjects dropped in the George Washington school during the

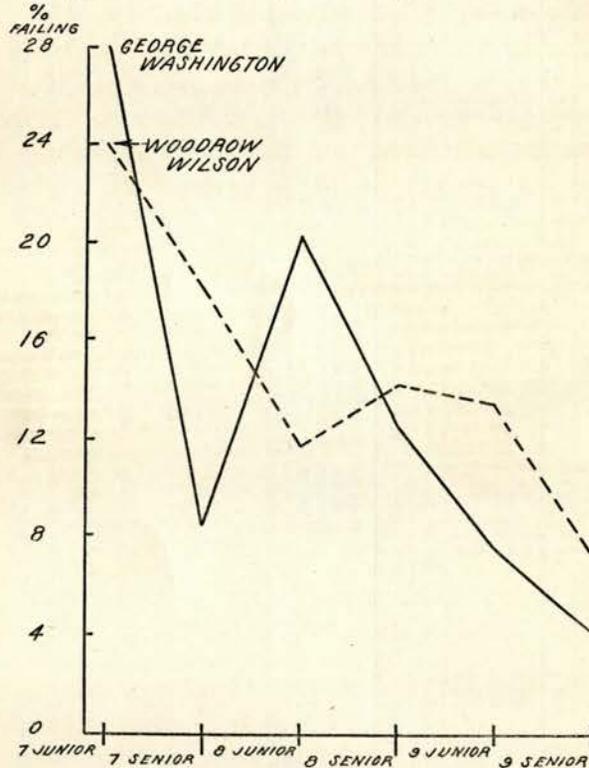


CHART 32

COMPARISON OF SUBJECT FAILURES BY GRADES OF GEORGE WASHINGTON JUNIOR HIGH SCHOOL AND WOODROW WILSON JUNIOR HIGH SCHOOL
TAMPA, FLORIDA—JUNE, 1925

term, pupils were failing; in the Woodrow Wilson school, 36.7 per cent were failing. Tables 36 and 37 show the failures and withdrawals in the various subjects in the two junior high schools. Obviously, there is either a serious lack in instruction or a poor adjustment of educational opportunities to the needs and abilities of pupils.

A comparison of the percentages of failure in the two schools in the various grades is shown in Chart 32. There is no uniformity between the two schools or within either school. The only tendency seems to be to fail fewer pupils in the subjects of the ninth grade. In nearly every case there is a higher percentage of failures in the junior section of each grade than in the senior section. About one out of every four of all the subjects that were still being studied in June resulted in failure in the seven junior grades in each of the schools. In the George Washington school, 1 out of every 5 studied was failed in grade 8 Junior.

There is the same great variation in the individual subject failures in the two schools. This is shown in Chart 33. A

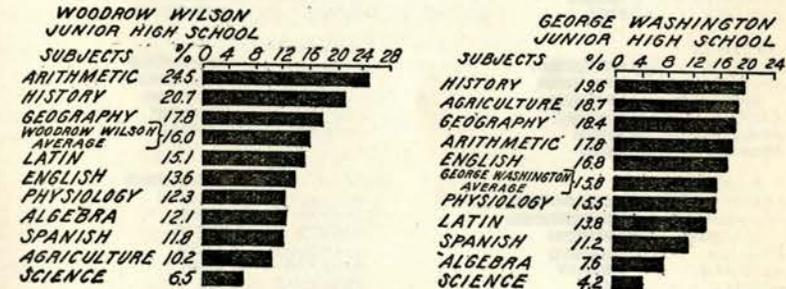


CHART 33

SUBJECT FAILURES IN JUNIOR HIGH SCHOOLS
TAMPA, FLORIDA—JUNE, 1925

Percentage of Pupils in School in June Failed in Various Subjects

striking difference between the schools is given in Agriculture, in which 18.7 per cent fail in the George Washington, while only 10.2 per cent fail in the Woodrow Wilson. Algebra, science, and Spanish stand relatively low in each school in the percentages of failures. This may be partially due to the fact that they are upper grade subjects and that many pupils have been dropped before reaching these grades.

A further analysis of failure within each grade is shown by Chart 34. Although pupils take the same studies with little or no election in the early grades of the junior high school, nevertheless, the most striking differences exist in the percentages of failures in these grades. In the Woodrow Wilson, grade 7 Junior,

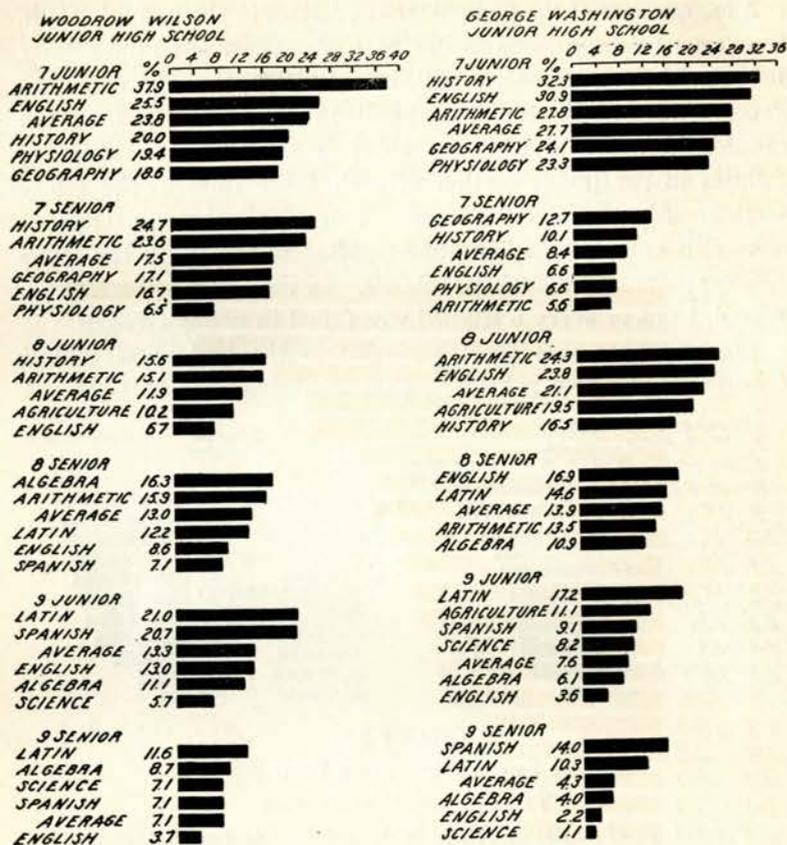


CHART 34

SUBJECT FAILURES IN JUNIOR HIGH SCHOOLS BY GRADES

TAMPA, FLORIDA—JUNE, 1925

Percentage of Pupils in School in June Failing in Various Subjects

about 2 out of every 5 fail in arithmetic and 1 out of every 4 fails in English. In the George Washington, grade 7 Junior almost 1 out of every 3 fails in history and in English. In grade 7 Senior in the Woodrow Wilson, 24.7 per cent fail history, 17.1 per cent fail geography and only 6.5 per cent fail physiology. In grade 8 Senior, algebra and arithmetic are at the top of the percentages of failure in the Woodrow Wilson school and at the bottom of the percentages of failure in the George Washington.

The same lack of uniformity is evident when the failures meted

out by each teacher are analyzed. This is shown in Chart 35 which gives the failures of all the pupils under the teaching of each teacher regardless of grade or subject. In the Woodrow Wilson school the variation in percentages of failure as meted out by individual teachers ranges from 5 per cent up to the astounding amount of 34 per cent of the pupils who finished the year's work. If the conditions for the term considered are re-

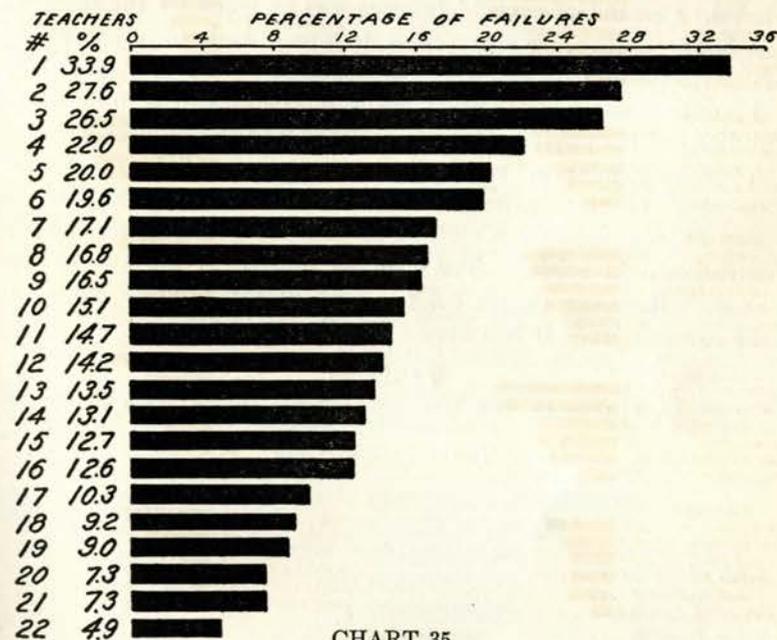


CHART 35

PERCENTAGE OF PUPILS IN SCHOOL IN JUNE FAILED BY VARIOUS TEACHERS OF WOODROW WILSON JUNIOR HIGH SCHOOL

TAMPA, FLORIDA

peated each term, definite steps should be taken to set up a standard of successful achievement that will not require 1 out of every 3 pupils either to repeat a subject or to fall by the wayside.

Further light on the failure situation is given by an analysis of causes. Each teacher in the junior high schools assigned a cause to each failure under her teaching. The result is shown in Table 38. In the opinion of the teachers, one-fourth of all the failures in the Woodrow Wilson school were due to "lack of interest"

in the subject. This does not mean lack of interest in all subjects or in school, but a lack of interest or effort in the particular subject in which the child failed. It indicates very clearly that the teachers realize that the material presented to the pupils did not cause them to become sufficiently interested. It points out plainly the need for a changed curriculum for many of the pupils or a different emphasis in the teaching of the present material. One out of every 4 failures was assigned by the teachers to "poor ability," which seems to mean lack of preparation, poor foundation for the work, and lack of ability in the subject. It points again to the need for curriculum adjustment to meet the abilities of the pupils. One out of every 5 of the failures was due to "poor attendance," rather than failure due to "absence due to sickness" or "late entrance." The junior high schools have a very definite need for a method or policy which requires regular attendance in school. The lack of ability in the use of the English language causes 8.5 per cent of the failures but after the seventh grade it is a very minor factor in failure.

TABLE 38
CAUSES OF FAILURE IN THE WOODROW WILSON JUNIOR HIGH SCHOOL AS
ASSIGNED BY TEACHERS
TAMPA, FLORIDA—1925

Cause of Failure	Percentage of All Failures Ascribed to This Cause
Lack of Interest	24.9%
Poor Ability	24.8
Poor Attendance	21.4
Poor English	8.5
Lack of Intelligence	6.6
Poor Health	5.8
Outside Life	2.5
Late Entrance	2.3
Other Causes	3.2

Table 39 shows the percentages of failure due to the various causes in each of the grades of the Woodrow Wilson Junior High School. Lack of interest as a cause for failure increases from a percentage of 22.9 in grade 7 Junior to a percentage of 44.4 in grade 9 Senior. On the other hand, poor ability as a cause for failure decreases from a percentage of 29.1 in grade 7 Junior to a percentage of 14.8 in grade 9 Senior. The indication is that the pupils of poor ability have been dropped from school and

TABLE 39
CAUSES OF FAILURES IN THE WOODROW WILSON JUNIOR HIGH SCHOOL AS
ASSIGNED BY TEACHERS
TAMPA, FLORIDA—JUNE, 1925

Grade	Lack of Interest	Poor Ability	Poor Attendance	Poor English	All Others
7 Junior	22.9%	29.1%	21.7%	10.3%	16.0%
7 Senior	20.9	18.2	22.4	11.9	26.6
8 Junior	20.4	20.4	18.4	2.0	28.8
8 Senior	25.0	16.7	22.9	6.2	29.2
9 Junior	40.0	17.5	20.0	2.5	20.0
9 Senior	44.4	14.8	18.5	3.7	18.6
Total	24.9%	24.8%	21.4%	8.5%	20.4%

that the increasing lack of interest becomes the largest factor in failure in the upper grades. Poor attendance as a cause for failure is a uniform problem for each of the grades in the school.

FAILURES IN THE HILLSBORO HIGH SCHOOL

The same situation in lack of uniformity exists in the failure policy of the Hillsboro High School as shown by Table 40 and Chart 36. Of all the pupils enrolled in the various subjects in

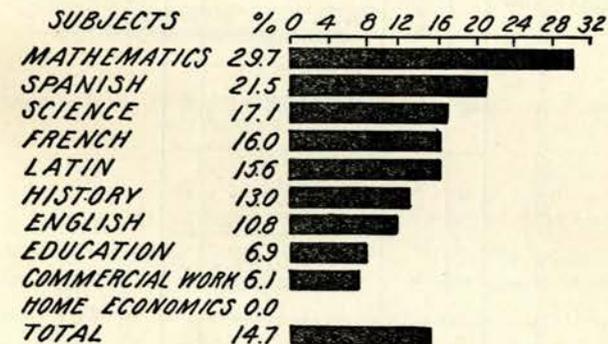


CHART 36
SUBJECT FAILURES IN HILLSBORO SENIOR HIGH SCHOOL
TAMPA, FLORIDA—JUNE, 1925
Percentage of Pupils in School in June Failing in Various Subjects

June, 1925, 1 out of 7 was failed. The variation in failure is from 29.7 per cent in all of the classes in mathematics to no failures in home economics. Of the 251 withdrawals from sub-

TABLE 40
PROMOTION, WITHDRAWAL, AND FAILURE BY SUBJECTS IN THE SENIOR HIGH SCHOOL
TAMPA, FLORIDA—JUNE, 1925

Subjects	1	2	3	4	5	6	7	8	9	10	11	12
	P	CP	NP	WP	WN	T	Total	PC+CP + NP	Percent- age NP	WP + WN	Percent- age WN of AUW	Percent- age WP + WN
Latin	281	24	52	13	6	..3	352	333	15.6%	19	46.2%	
English	783	..	98	27	20	..2	955	905	10.8	47	42.6	
Spanish	212	..	58	13	9	..2	294	270	21.5	22	40.9	
French	110	..	21	10	2	..4	143	131	16.0	12	16.7	
Mathematics	342	3	146	18	28	..3	541	491	29.7	46	60.9	
Science	241	1	50	12	17	..1	324	292	17.1	29	58.6	
History	622	..	93	17	10	..1	743	715	13.0	27	37.0	
Commercial	399	..	26	29	14	..	468	423	6.1	43	32.6	
Home Economics	113	..	..	..	..	..	118	113	6.9	5	100.0	
Education	54	..	4	..	..	..	59	58	6.9	1	100.0	
Total	3,157	28	548	144	107	13	3,997	3,783	14.7%	251	42.6%	6.3%

P = Promoted
CP = Promoted Conditionally
NP = Not Promoted
WP = Withdrawn Not Passing
WN = Withdrawn Not Passing
T = Transferred to Another School

Column 7 = Total Number Pupils Enrolled in Subjects
Column 8 = Total Number Taking Subject in June, P + CP + NP
Column 9 = Percentage Failing; Column 3 Divided by Column 8
Column 10 = Total Number Withdrawn
Column 11 = Percentage Withdrawn Failing; Column 11 Divided by Column 10
Column 12 = Percentage of Total Enrollment Withdrawn; Column 10 Divided by Column 7

jects during the term, 42.6 per cent of the pupils were doing failing work at the time of withdrawal. There is no justification for such a great variation in the percentages of failure in the different subjects.

The great variation within the same grade between the different subjects is shown in Chart 37. Fifty per cent of the pupils who survived until June were failed in 10 Junior algebra, and 39 per cent were failed in 10 Senior algebra. In the elementary grades and in the junior high schools the standard tests have shown that the pupils were surpassing the grade standards of the

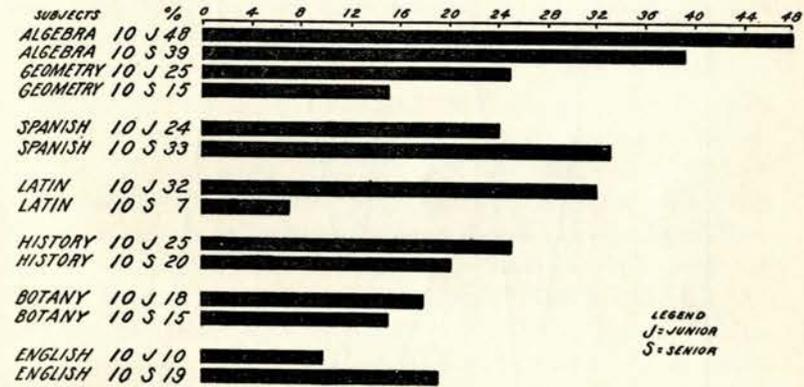


CHART 37

PERCENTAGE OF PUPILS IN SCHOOL IN JUNE FAILED IN VARIOUS
TENTH GRADE SUBJECTS
TAMPA, FLORIDA

country as a whole in their work in arithmetic. Yet arithmetic has the greatest percentage of failure. No plausible reason can be given for the enormous amount of retardation, disappointment at failure, or withdrawal from school caused by this lack of understanding of promotion principles. About one out of every four subjects studied in the tenth grade results in failure. Geometry in 10 Junior, Spanish in 10 Senior, Latin in 10 Junior, and history in 10 Junior all have percentages of failure that cannot be justified for any public high school.

The lack of uniformity of policy exists within the same subject matter as well as between subjects. Chart 38 shows the comparisons of the percentages of failure in grades 10 to 12 in English, Latin, history, and science. Extreme differences are at once

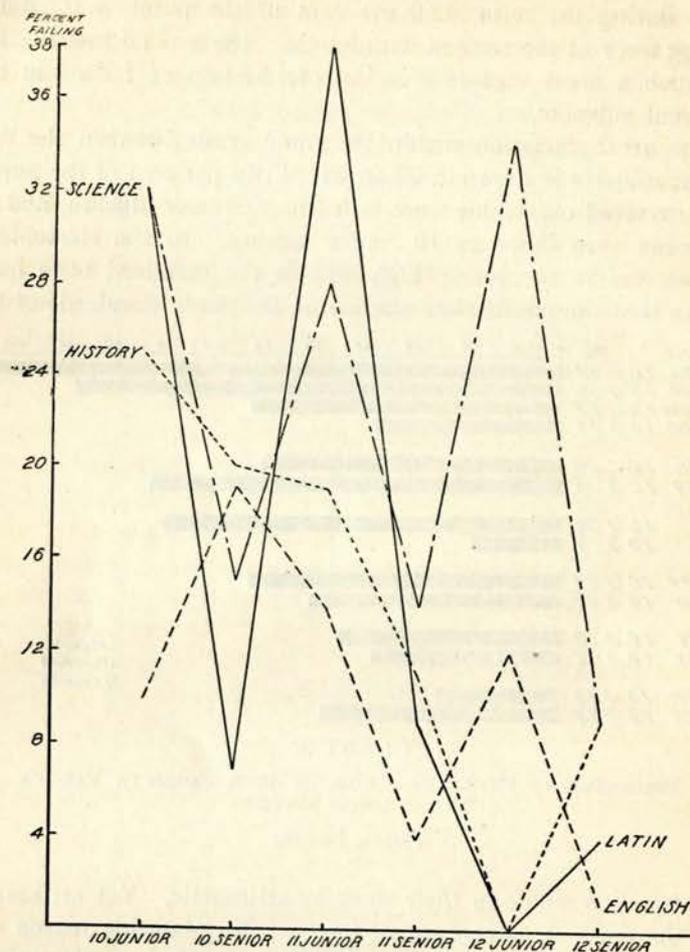


CHART 38

COMPARISON OF PERCENTAGES OF FAILURES IN LATIN, ENGLISH, HISTORY, AND SCIENCE IN HILLSBORO SENIOR HIGH SCHOOL

TAMPA, FLORIDA—1925

apparent in these charts. It is impossible to see any policy of failure in these subjects except that very few pupils are failed in grade 12 Senior. Perhaps it is the survival of only the very brightest pupils that causes this low per cent of failure.

The percentage of failure varies even more among teachers of the same subjects than among grades or subjects. The English

teachers vary in the percentages of failure from 1.8 to 21.8. In history the variations were from 3.6 per cent to 23 per cent. In Latin from .8 per cent of the pupils to 64 per cent. In mathematics the proportion of failure ranges from 1 out of every 7 under one teacher to about 1 out of every 2 under another teacher.

The teachers of the high school assigned reasons for the failure of the pupils in their subjects. Of all the reasons reported by the teachers in giving causes of failure, lack of interest and effort accounts for 1 out of every 3 failures. About 3 out of every 10 pupils failed for the term because they failed in the final examination. According to the teachers, outside work, poor attendance, lack of intelligence, and poor health are only responsible for about one-fourth of the failures. This indicates, among other things, lack of adjustment of the school opportunities to pupil needs. The failure of the schools to adjust their opportunities and methods to the pupils is shown in another way. There is lack of articulation between the elementary schools and the junior high schools and the same lack between the junior high schools and the senior high school. This is apparent from the fact that the degree of failure is greatest in grades 7 Junior and 10 Junior. One out of every 4 subjects studied in grades 7 Junior and 10 Junior is failed.

REDUCING FAILURE IN JUNIOR AND SENIOR HIGH SCHOOLS

The most obvious method of reducing failure is to adjust the educational opportunities to pupil needs. The need for such adjustment is revealed over and over by the failure data. Here, also, as in the case of elementary pupils, the provisions for medical inspection, contact with the home, and understanding of the pupils will forestall many other cases of failure as well as give increased returns in the guidance of the individual pupil. But the present lack in these respects is not the only shortcoming. There is need for a better understanding of the functions of failure and for an agreement as to its use. The wide variation in practices where variation would not be demanded by the facts is an indication of this need. Pupils should on the whole take courses which they are able to master in the regular time allotted. The standards set will be within their reach. To the degree that

they do not attain these standards they will be failed. The percentage of failures will increase if the physical condition or mental attitude of pupils is neglected. It will increase as a result of poor teaching. It will increase to the degree that standards are set beyond the capacity of the groups to be served. That school in which each pupil's welfare is someone's particular interest, in which there is good teaching, in which courses and standards are adjusted to the needs of the pupils, and in which all teachers have a clear understanding of these standards, will have a minimum of failure.

The standards set for granting credit for any subject must be determined in the light of the purposes of the course. Here, as in the case of the elementary grades, two types of returns may be expected. These are: (1) The mastery of skills or knowledge required in order to pursue the subject in succeeding terms and (2) skills, knowledge, attitudes, or growth, valuable in themselves, apart from later work in the subject.

In the elementary schools these two sets of values in all subjects must be weighed against each other to determine whether a pupil should be promoted. This would likewise be true for the junior high schools under the grade promotion plan, and the suggestion for elementary schools would apply. For subject promotions the problem is simplified, since each subject can be considered for itself, and the amount of retardation resulting from failure in any one subject is not so great. Under the subject promotion plan, subjects group themselves with respect to these values in such a way as to make possible the setting up of definite policies governing credit and repeating.

High school subjects may be grouped for convenience in applying definite policies such as the following:

1. Courses for which credit is granted for attendance and helpful participation, such as physical training and, perhaps, group civics. With respect to repeating, these may be divided into those which would promise more to a repeater than some new course and those that give a great deal of their worth the first time to even the poorest participants.
2. Courses for which credit is granted upon attainment of standards defining skills, knowledges, or attitudes valuable

in themselves. Repeating any subject in this group would be permitted only when mastery of such a subject were required for college entrance, or where the repeating would promise greater return than some new subject to be taken in lieu of it.

3. Courses for which credit is granted upon attainment of ability to carry the next unit of work successfully. Repeating would be required of failures if the necessary skill or knowledge would not otherwise be readily obtainable. In some cases, as in first semester algebra, no repeating should be required for failing the term's work, but credit granted on successful completion of the course that follows, just as is the case with annual promotions.
4. Combination of (2) and (3), where mastery would be required for the sake of the term's work, itself, as well as for the use in the next course. To determine desirability of failing, the relative importance of each value must be weighed as in the case of grade promotions.

As in the case of the elementary schools, it is recommended that committees of teachers attack the problem of interpreting these principles in terms of each grade and subject. The values to be expected from each course should be classified somewhat as suggested above, standards of attainment set, and objective measures of these standards developed and used. These objective measures should take the form of easily administered tests and rating scales. With the use of such devices teachers may express common agreement as to the purposes of courses and the standards for granting credit. Policies in respect to repeating different subjects should be established and applied in the making of pupil programs. Such work should result in promotion policies that will be both more satisfactory to the teacher and more satisfactory in their results on the progress of pupils.

ACCELERATION

That which has been said with respect to acceleration in the elementary schools applies equally well to the junior and senior high schools. The only difference is that in the junior and senior high schools provisions for meeting the needs of individual

pupils are already available to a much greater degree than in the elementary schools. The differentiation between those who should be permitted to finish high school at a younger age and those who should be given the opportunity to take a richer program of activities needs, therefore, to be made at once.

SUMMARY

1. *Effectiveness of Present Regulation of Progress.*

The rapid decrease in the percentage of over-age pupils in the junior and senior high schools and the decrease in grade enrollments shows that the combined effect of the provisions for regulating progress in the elementary and high schools in Tampa is to deny a large percentage of Tampa boys and girls school opportunities in the higher grades.

2. *Failures in Junior High Schools.*

a. The large percentage of failure in both the Woodrow Wilson and the George Washington Junior High Schools, together with the larger percentage of those pupils withdrawing from school who were doing failing work at the time of withdrawal, is an indication that there is inadequate adjustment of educational opportunities to pupil needs and abilities.

b. The great variation in failure practice between the two junior high schools in operation in June, 1925, and the unusual variations in the same school between grades, subjects, teachers, and classes of the same teacher indicates the same lack of settled policy as was found in elementary schools.

c. The high percentage of failure in the seventh grade indicates lack of articulation with the elementary schools.

d. An analysis of the causes of failure as assigned by teachers gives further indication of a lack of adjustment between school opportunities and the needs and abilities of pupils.

e. A need for better attendance service is indicated.

3. *Failures in the Hillsboro High School.*

a. The same lack of a definite policy with respect to failure is found in the Hillsboro High School as in the other schools. Extreme variations in percentages of pupils failed are found among the failures given by teachers of the same subject as well as among failures given by teachers of different subjects.

b. The high percentage of failure in tenth grade subjects shows that the Hillsboro High School has failed to adjust itself to the junior high school graduates just as the junior high school has failed to adjust itself to the pupils from the elementary schools.

4. *Reducing Failure in Junior and Senior High Schools.* The following suggestions are given for reducing failure:

a. Educational opportunities should be adjusted to the needs of the pupils to be served.

b. Conditions that force pupils to work below capacity should be removed. This requires individual inspection and follow-up knowledge of home conditions, special instruction to make up deficiencies. Someone should be responsible for understanding each pupil.

c. Standards set for granting credit for any course must be set in the light of the purposes of the course.

d. Repeating a course for failure should be determined by the need for the material of the course in further work, or the credit for meeting requirements.

e. Committees of teachers and supervisory officers classify the courses offered according to conditions for granting credit, conditions under which repeating is required and conditions under which repeating may or may not be permitted.

f. These committees should devise tests and rating scales for measuring the attainment of the purposes for which courses are given.

5. *Acceleration.*

As soon as possible committees should formulate policies and regulations governing acceleration of pupils, along the lines suggested under this heading for elementary schools.

CHAPTER X

THE CLASSIFICATION OF CHILDREN IN THE
ELEMENTARY SCHOOLS AND JUNIOR AND
SENIOR HIGH SCHOOLS

CLASSIFICATION OF CHILDREN IN THE ELEMENTARY SCHOOLS

PRESENT CLASSIFICATION

Failure to regulate progress properly in the Tampa schools during past years has resulted in the present undesirable classification of children. Sixty-two per cent are over age for their grade from 1 to 9 years. One out of 2 entered school from 1 to 7 years after the beginning age. Fifty per cent have repeated one or more grades. About 12 per cent failed last June and are repeating this year if they are in school. Three out of every 10 who withdrew during the year were failing. No uniformity in promotion policy exists among schools or among grades within schools. One out of every 4 children drops out of school with only a fifth grade education or less. An effort has been made to solve the problem of the children of foreign parentage by the establishment of chart classes but the present scheme falls far short of providing for it adequately.

The results of the intelligence tests in the various schools for the 4 Senior and 6 Senior grades are shown in Table 41. These are compared with the average chronological ages for these grades. They show the diversity of the problem of meeting the needs of pupils in different schools.

A comparison of the mental ability of 350 first and second grade pupils in the Gorrie, Lee, and Ybor Schools in Chart 39 shows that approximately 17 per cent of the pupils were not sufficiently developed for first grade work. Sixty-six per cent of the first grade pupils were mentally ready for the second grade. The distribution of scores in the table shows clearly the variation in mental ability of the children of the same grade.

The overlapping in mental ability is also shown in Chart 40.

TABLE 41

COMPARISON OF ELEMENTARY SCHOOLS FOR WHITE CHILDREN WITH RESPECT TO MEDIAN CHRONOLOGICAL AND MENTAL AGES OF CHILDREN IN CERTAIN GRADES

TAMPA, FLORIDA—MAY, 1925

School	Grade 4 Senior		Grade 6 Senior	
	Chronological Ages	Mental Ages*	Chronological Ages	Mental Ages*
	Years Months	Years Months	Years Months	Years Months
Gorrie	10—0	10—11	12—0	12—6
Seminole	10—0	10—6	12—2	11—9
Graham	10—0	10—6	12—4	12—1
Buffalo	10—9	10—5	12—3	12—1
Henderson	12—11	10—5	13—9	11—2
Madison	11—3	10—5	13—0	10—2
Mitchell	10—3	10—5	12—7	12—2
Jackson	10—3	10—4	13—0	11—8
Lee	10—9	10—4	13—0	11—5
East Tampa	11—9	10—0	13—2	11—8
Philip Shore	12—6	9—7	No Grade	No Grade
Gary	11—9	9—6	12—9	11—1
Ybor	12—6	9—5	No Grade	No Grade
Age-Grade Standard in May	10—0	10—0	12—0	12—0
Stanford Standards in May	10—9	10—9	12—7	12—7

* McCall Multi-Mental Scale, May, 1925.

There are children in the 4 Junior class whose mental ability surpasses the mental ability of over 50 per cent of the 6 Senior class. On the other hand, there are children in the 6 Senior class whose mental ability is below the mental ability of over 50 per cent of grade 4 Junior. Moreover, the ranges of mental ability within each half year is more than twice the difference between the averages of grades 4 Junior and 6 Senior. The need for homogeneous grouping of the children according to ability within each grade is apparent.

The distribution of scores in the Stanford Achievement Test in Table 42 shows the overlapping between grades and the wide variation within grades in educational achievement. The difference between the average scores on this test in 4 Junior and 6 Senior is 31 points. The variation within each grade is from 40 to 60 points. This overlapping is more apparent in Chart 41. The overlapping in achievement between grades is less than the overlapping in mental ability. Nevertheless, this overlapping

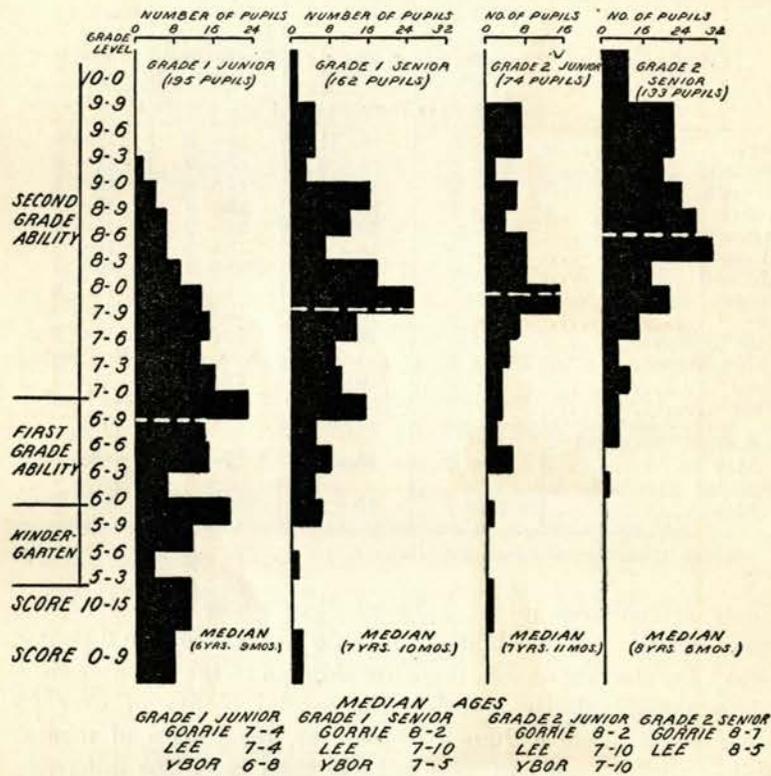


CHART 39

DISTRIBUTION OF PUPILS IN GRADES 1 AND 2 IN MENTAL ABILITY AS MEASURED BY THE PINTNER-CUNNINGHAM PRIMARY MENTAL TEST, GORRIE, LEE, AND YBOR SCHOOLS—TAMPA, FLORIDA—MAY, 1925

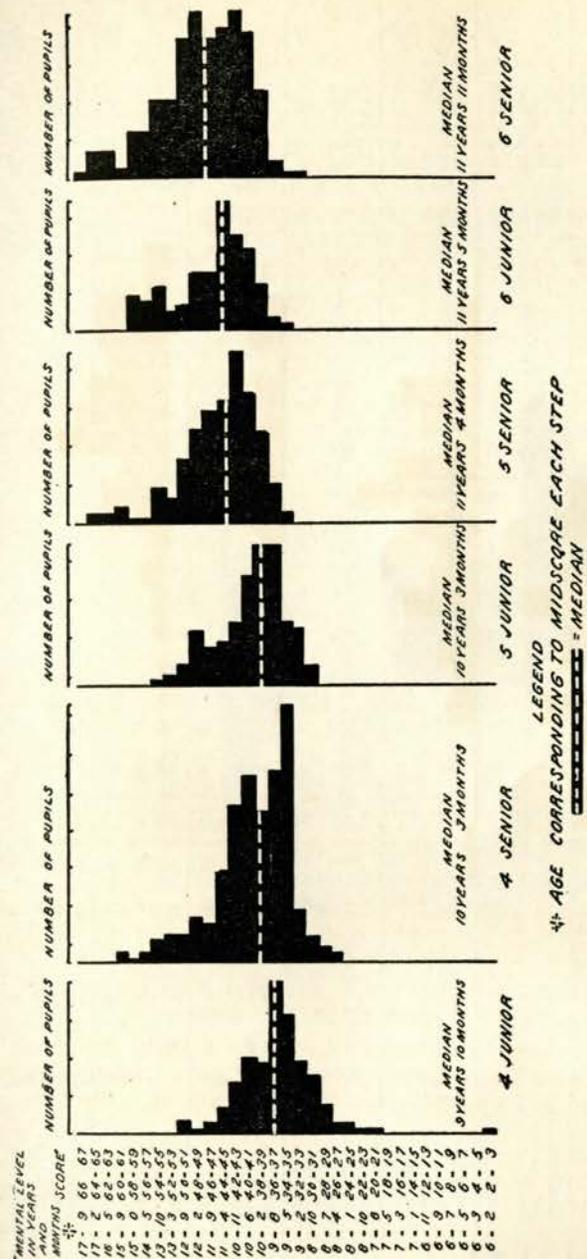


CHART 40

COMPARISON OF LEVEL OF MENTAL DEVELOPMENT IN DIFFERENT GRADES AS MEASURED BY THE MC CALL MULTI-MENTAL SCALE, TAMPA, FLORIDA—MAY, 1925

Distribution of Scores Made by the Fourth, Fifth, and Sixth Grades of the Gorrie, Lee, and Ybor Elementary Schools

clearly demonstrates the need for classification among grades according to both the level of mental ability and educational achievement, and the grouping within grades according to brightness and educational ability.

The significance of all of these facts is more striking when they are interpreted in terms of the individual boys and girls. Illustration 2 pictures a 5 Senior class of interesting youngsters in one of the Tampa schools. As one looks at them, as he usually looks at such a group, they are just a group of fine looking boys and girls more or less over-awed by the fact that they are being photographed. If one raises the question whether they should all be grouped in one class, he at once begins to look for differences in the children. If he had available the kinds of information that a school should have upon each of its charges, he would be able to discover great differences in ability, in educational achievement, in social maturity, and the like. These differences would be greater than would be realized by those most intimately associated with these children, if they did not have such information available. He would find some children in this class reaching up in abilities, achievements, age, and social development to classes two or three years ahead, and some reaching down in these respects to classes two or more years below.

A description of one of the boys in terms of ability and achievement will serve to illustrate how much some of these children are misplaced. John is a bright, healthy-looking boy, but he would not attract particular attention from a casual observer. He is young for his grade by half a year. He is as tall as the average child a grade and a half in advance. He is eight pounds over weight for his height. These things are of secondary importance, however. The intelligence test shows that he has a mental ability of twelve and a half years. He was ten and a half when the picture was taken. The Stanford Achievement Tests gave him a standing equal to the average eighth grade child in reading, arithmetic, science, history, language, and spelling.

This fall John is in the 6 Junior class in spite of the fact that 6 Junior work has little challenge for him. If he is compelled to work at the rate of the rest of the class there is danger that he will form poor work habits. He has already gone so far beyond his group that it would probably be impractical to attempt to care for his needs by giving him additional projects or readings

ILLUSTRATION 1

A CLASS OF BEGINNERS WHO DO NOT SPEAK ENGLISH
TAMPA, FLORIDA—MAY, 1925



Three-fourths of the boys and girls in this group were over age for the first grade when they began their year of pre-first-grade work. Some of them are as old as fifth and sixth grade children. When they enter the first grade in January, 1926, all but one or two will be over age for their grade. Much of this overageness is due to the lack of adequate attendance service in Tampa.

ILLUSTRATION 2

A FIVE SENIOR CLASS—TAMPA, FLORIDA—MAY, 1925



It can be noted that these boys and girls vary considerably in height and age. The variation with respect to achievement in school subjects, mental abilities and aptitudes, is just as great. Some of these boys and girls have been failed several times. Some of them can do work comparable to the work done by boys and girls two years ahead of them in school.

ILLUSTRATION 3

A FOUR SENIOR CLASS—TAMPA, FLORIDA—MAY, 1925



The small girls at the left are normal in height and age for a 4 Senior class.

or even by placing him in a bright sixth grade class. Promoting him to junior high school, which has a richer program of studies, would probably be the best way to correct this difficult situation.

This situation has developed because the school has failed to give him the more extended educational opportunities which he needs. Had John been given additional subjects and permitted to spend less time on the average curriculum he would not now be greatly out of place.

Illustration 3 shows a 4 Senior class. The little girls at the left of the picture indicate the average size and age for a 4 Senior class. Note how many taller and older children there are. From this class a different type of poor classification will be illustrated. Mary is three years over age for her class. She has repeated grades 4 Junior and 4 Senior. Her teacher promoted her in June, 1925, because of her size and age, although her work was not satisfactory. The McCall Multi-Mental Scale confirmed the teacher's judgment as to her low ability to do ordinary school work. Her ability in this respect was that of the average child four years younger. On the subject tests she showed third grade ability. These results indicate the need for further investigation. She should be given an individual examination by a trained specialist, and if her ability is found to be what the group tests indicate, she needs to be placed in a special class where she can receive the best training possible. She is entirely out of place in her present class, socially, physically, and mentally. There are, undoubtedly, enough pupils of this type in each of the large elementary schools to justify the organization of special rooms with teachers specially trained to teach backward pupils.

Illustration 4 shows a 4 Senior class. One of the boys in this class is 16 years old. He has already repeated the third and fourth grades. He was not promoted in June. The kind of an education which is the best for the little girls in this picture is certainly not the kind that this boy needs. On the mechanical aptitude test he showed that he has mechanical ability which is four years ahead of his academic ability. He has been denied this kind of training in school. Contact with shop work in the junior high school or the vocational school would give him practical training in a field in which he is able to excel—and would stimulate his interest in the other classes if the material was selected to meet his needs.

Illustration 5 shows 19 boys, all but one of whom are 15 years of age or older and all are enrolled in one elementary school in Tampa. All of these boys are of ninth or tenth grade age. Eleven of them were in the sixth grade and the rest were scattered down through the grades. One of these boys was in the 5 Junior class last year and his tests show his class work to be a year lower in grade. He has a speech defect that makes it more difficult for him in class. Yet in the mechanical aptitude tests he scored higher than 80 per cent of the boys of his own age. He evidently knows a good deal about Ford cars and understands the common tools of a number of trades. This ability needs opportunity for exercise and development. A good industrial arts course in the junior high school or a course in the vocational school would provide it. Another one of these boys was failed this spring because he was not present to take the examinations. His tests show that his class work is up to grade and he is especially strong in arithmetic. His mechanical ability is a little above the average for his age. He should not be held back another year but should be given an opportunity to work with boys of his own age in a special course provided in the junior high school. A third boy shown in the picture is in the fourth grade and has the knowledge and intelligence of a ten-year-old child, although he is five years older. He scored only 2 out of a possible 120 on the mechanical aptitude tests. It would be unsafe to place this boy in a class which works where there is dangerous machinery such as that found in a machine shop or a mill room. He would be almost certain to have an accident sooner or later for he does not distinguish between tools or see their relationship. He should have thorough mental and physical examinations to determine his emotional stability, his intelligence, and his physical needs, and should receive special treatment in the school to meet his special requirements. Ten out of sixteen of this group of boys scored better than the average for their age on the mechanical aptitude tests. With only one exception, all would do fairly well in some kind of manual activity.

These illustrations show the value of having available all the related information about each child when classification of the children is made for the year's work. They also show in detail what the data previously presented show in general, that is, that there is need for an improved classification of the elementary

ILLUSTRATION 4
A FOUR SENIOR CLASS
TAMPA, FLORIDA—MAY, 1925



Note the extremes in size and age in this class. Are the educational needs of the big boys in this class the same as those of the little boys and girls? With the large schools Tampa has, such classification is not necessary. One of these large boys is 16 years old, and very apt mechanically. He was failed in June.

ILLUSTRATION 5
BOYS OF NINTH AND TENTH GRADE AGE BELOW THE SEVENTH GRADE
TAMPA, FLORIDA



A proper junior high school opportunity should be provided for such boys. Some of them are unusually apt along mechanical lines. Other tests or opportunities would doubtless reveal other unusual abilities in one or more of these boys. There are nearly 500 such boys and girls in Grades One to Six in Tampa.

ILLUSTRATION 6

MECHANICAL INFORMATION OF A FIFTEEN-YEAR-OLD BOY IN THE 6 JUNIOR GRADE IN TAMPA *

		<p>1 <input type="checkbox"/></p> <p>2 <input type="checkbox"/></p> <p>3 <input type="checkbox"/></p> <p>4 <input type="checkbox"/></p> <p>5 <input checked="" type="checkbox"/> P</p>
		<p>1 <input type="checkbox"/></p> <p>2 <input type="checkbox"/></p> <p>3 <input type="checkbox"/></p> <p>4 <input type="checkbox"/></p> <p>5 <input type="checkbox"/></p>
		<p>1 <input type="checkbox"/></p> <p>2 <input type="checkbox"/></p> <p>3 <input type="checkbox"/></p> <p>4 <input type="checkbox"/></p> <p>5 <input type="checkbox"/></p>

Joseph, one of the 19 over-age boys shown in Illustration 5, has mechanical ability excelled by only 14 per cent of boys of his age. His school life, which has made no appeal to his special abilities, has been very unsatisfactory.

Some of the Test Elements to which Joseph gave correct answers are given above. He was asked to match each of the mechanical parts in Part 1, at the left, with a related part in Part 2. For example, Number 5 in the top square at the left is related to P in the top square at the right.

* From Stenquist Mechanical Aptitude Tests. Copyright 1921 by World Book Company, Yonkers-on-Hudson, New York.

schools. The excessive amount of overageness, the large percentage of retarded pupil progress, the large overlapping between grades in the level of mental ability and educational achievement, all point to the need for careful reclassification based on all the information which bears on the individual pupil requirements.

PROPOSED RECLASSIFICATION OF THE ELEMENTARY SCHOOLS

The method of reclassification of a school system is determined by the conditions which control the teaching after the reclassification has been made. If all children are expected to master the same curriculum, regardless of their ability, the usual way to provide for individual differences is by acceleration and retardation. Those who are above the average in brightness are accelerated by special promotion, and the slower pupils retarded by failure, which gives them more time to cover the required work. This is the plan which has been used in Tampa with the unsatisfactory results to which reference has already been made. It is possible to reorganize the school on the basis of individual instruction and permit each pupil to cover the required curriculum at his own rate. This involves changes that are of questionable value for Tampa and does not provide for an enriched program for the more able pupils. Either method would enable the pupils of more than usual ability to finish the elementary school in less than the usual number of years. Such acceleration has its disadvantages for the bright pupils, for it pushes them out of their own chronological and social age groups and as a result frequently handicaps them physically and socially. It may also be seriously asked whether a child, because he is bright, is to be deprived of the opportunity of having a full year to a grade with educational opportunities fitted to his needs. These are some of the fundamental objections to the single curriculum plan.

It is possible to maintain the general social and physical age groups and still provide for differences in mental and educational ability by grouping the children within each grade according to their brightness and providing a different curriculum for the different groups. This means that the brighter pupils will be required to spend less time on the so-called minimum essentials and may use the surplus time on foreign languages, science, music, art, literature, or meeting special needs, or the develop-

ment of other special interests. This plan requires that the material for the slower group be limited to their present and probable future needs and that it be centered around material and activities that have a real interest for them. This permits the pupils of each group to receive the material and the emphasis most needed by that group. It would enable the children of foreign parentage to receive special time and material for the improvement of oral English. This plan might be for every special group which it seemed wise to set up.

Regrading and Ability Grouping.—It would hardly be wise to attempt to reclassify all the schools of the city on a new basis at the same time. This would involve an extended study of all of the elementary children which would require a considerable time for a research department already established. The survey staff has recommended such a department but it could hardly be expected to reorganize all the schools immediately for Tampa. As an indication of what might well be done and of the methods to be employed, pupils in three elementary schools, Gorrie, Lee, and Ybor, were thoroughly tested and a reclassification of the pupils in grades 4 to 6 proposed. The results of this work including the proposed classification of more than a thousand boys and girls have been turned over to the school authorities and are not reproduced here. The treatment given here covers only the reasons for choosing the Gorrie, Lee, and Ybor schools, the differences in the educational problems faced in three schools, the basis for reclassification, and a tabulation of proposed changes. From this information school authorities should be able to estimate the probable effect of an attempt to reclassify the pupils in any other school.

The Gorrie, Lee, and Ybor schools were chosen because each represents a distinct educational problem. The pupils in the Ybor School come almost entirely from the Latin-American homes. Those in the Gorrie School come from American homes. The Lee School draws almost equally from the two types of homes. Tables 43, 44, and 45 which give the age-grade distributions for these three schools show how widely the educational problems in these three schools differ. The problem of reclassification and the educational adjustments needed are much more apparent in the schools drawing from the non-English-speaking homes. Nearly all of the pupils in the Ybor School are over age, while,

TABLE 43
AGE-GRADE TABLE SHOWING THE DISTRIBUTION OF PUPILS ENROLLED IN
MAY, 1925, IN GORRIE SCHOOL

TAMPA, FLORIDA
Ages Computed as of March 1, 1925

Years of Age	Grades												Total	
	1		2		3		4		5		6			
	Junior	Senior												
5½*		1											1	
6	5	3	2	1									11	
6½	11	41	1	6									59	
7	10	30	14	12	1								67	
7½	3	7	6	44	5	3							68	
8	2	11	9	29	6	6	1	1					65	
8½		1	5	14	11	35	7	11					84	
9				4	14	29	7	12	4	2			73	
9½				3	3	20	6	36	4	5	2		79	
10				2	3	10	5	27	10	14	1		72	
10½				2			4	7	16	13	37	4	7	90
11						4	7	11	10	19	7	10		63
11½						1	1	6	6	5	7	28		55
12				1		1	1	5	10	6	23	47		47
12½						2	1	1	1	1	16	21		21
13						1	1	2			4	1	5	12
13½											1	1	3	11
14											2	2	2	5
14½											1	1	1	2
15													1	2
15½														0
16													1	1
16½														
Total.	31	94	38	118	44	112	43	124	57	99	32	96	888	
Normal Age	16	71	20	73	17	64	13	63	23	56	14	51	481	
Over Age	15	19	15	26	21	39	22	37	26	22	11	28	281	
Under Age	..	4	3	19	6	9	8	24	8	21	7	17	126	
Per Cent Normal Age	%	%	%	%	%	%	%	%	%	%	%	%	%	
	51.6	75.5	52.6	61.9	38.6	57.1	30.2	50.8	40.4	56.6	43.7	53.1	54.2	
Per Cent Over Age														
	48.3	20.2	39.4	22.0	47.7	34.8	51.2	29.8	45.6	22.2	34.4	29.2	31.6	
Per Cent Under Age	...	4.3	8.0	16.1	13.6	8.0	18.6	19.4	14.0	21.2	21.9	17.7	14.2	

* Represents 5 years, 3 months to 5 years, 9 months.

TABLE 44
AGE-GRADE TABLE SHOWING THE DISTRIBUTION OF PUPILS ENROLLED IN
MAY, 1925, IN ROBERT E. LEE SCHOOL

TAMPA, FLORIDA
Ages Computed as of March 1, 1925

Years of Age	Grades												Total	
	1		2		3		4		5		6			
	Junior	Senior												
4½*														
5														
5½	2	1												3
6	15	3												18
6½	22	25	6	4										57
7	7	21	18	11				1						58
7½	12	18	24	19				4						78
8	3	18	10	20				9						62
8½	3	7	12	18				26						76
9		7	2	15	7	17	3	11	1					63
9½		3	10	10	8	18	2	18	2					72
10		3	4	11	6	14	8	18	5	5	2			76
10½		1	2	4	3	7	12	11	14	10	6	5		73
11				4	5	3	13	16	11	16	9	11		91
11½		1		1	1	5	14	13	10	23	13	15		95
12				4	3	4	7	9	5	15	16	15		78
12½				1	1	2	4	8	14	11	9	10		60
13				1	1	3	5	6	5	9	6	13		44
13½						3	2	3	10	10	14	14		47
14						3	2	2	3	10	4	9		34
14½						3	3	2	3	10	4	8		22
15						1	1	1	3	4	4	2		11
15½								1	1	3	4	1		8
16									1	1	1	3		4
16½														
17														
Total	64	108	88	125	40	116	76	122	82	120	81	109	1131	
Normal Age	37	46	42	39	..	43	5	36	19	26	22	30	345	
Over Age	25	58	40	71	40	59	69	66	58	88	51	63	688	
Under Age	2	4	6	15	..	14	2	20	5	6	8	16	98	
Per Cent Normal Age	%	%	%	%	%	%	%	%	%	%	%	%	%	
	57.8	42.6	47.7	31.2	..	37.1	6.6	29.5	23.2	21.7	27.2	27.5	30.5	
Per Cent Over Age														
	39.1	53.7	45.5	56.8	100.	50.9	90.8	54.1	70.7	73.3	63.0	57.8	60.8	
Per Cent Under Age														
	3.1	3.7	6.8	12.0	..	12.0	2.6	16.4	6.1	5.0	9.8	14.7	8.7	

* Represents 4 years, 3 months to 4 years, 9 months.

TABLE 45
AGE-GRADE TABLE SHOWING THE DISTRIBUTION OF PUPILS ENROLLED IN
MAY, 1925, IN YBOR SCHOOL

TAMPA, FLORIDA
Ages Computed as of March 1, 1925

Years of Age	Classes for Non-English-Speaking Beginners		Grades										Total	
	Junior	Senior	1		2		3		4		5			
			Junior	Senior										
5½**	4													4
6	11	5	2	2										20
6½	14	7	5	1	1									28
7	12	11	12	4	6									45
7½	19	24	35	10	7	2								97
8	9	19	20	14	7	2								71
8½	10	15	16	32	19	14	5	2						113
9	7	5	16	21	14	13	1	4	1	1				83
9½	3	2	12	18	29	26	13	12	4	2				121
10	1	3	6	7	14	8	8	11	9	4	1			72
10½		4	11	10	22	24	16	19	15	7	4			132
11			6	3	10	19	10	7	10	12	3	2		82
11½			2	3	7	11	10	15	17	8	8	2		83
12			1	2	1	10	4	10	14	9	8	2		69
12½	1	1	2	4	4	10	10	14	12	21	16	4		99
13			2	4	2	4	2	7	19	6	21	13		80
13½			2	2	1	3	3	7	10	5	10	7		47
14			1	2	2	1	4	4	7	3	14	1		39
14½				2		4	4	7	4	4	5	2		26
15				2	1	3	3	3	3	3	8	1		18
15½						2	2	1	1	1				8
16											3	1		5
16½											1			1
Total	91	96	151	141	144	145	90	128	121	88	102	41		1338
Normal Age	4	5	7	5	13	4	5	6	5	6	5	2		67
Over Age	87	91	144	134	130	141	85	122	116	81	97	39		1267
Under Age	..	..	..	2	1	..	..	..	..	1	..	..		4
Per Cent Normal Age	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	4.4	5.2	4.6	3.5	9.0	2.8	5.6	4.7	4.1	6.8	4.9	4.9		5.0
Per Cent Over Age	95.6	94.8	95.4	95.0	90.3	97.2	94.4	95.3	95.9	92.0	95.1	95.1		94.7
Per Cent Age Under	..	..	..	1.4	.7	..	..	..	..	1.1	..	..		.3

* There were no children enrolled in the sixth grade in the Ybor school.
** Represents 5 years, 3 months to 5 years, 9 months.

TABLE 46
NUMBER OF PUPILS THREE OR MORE YEARS OVER AGE IN THE GORRIE,
LEE, AND YBOR SCHOOLS
TAMPA, FLORIDA—MAY, 1925

Grades	Gorrie	Lee	Ybor
1 Junior .....	..	..	33
1 Senior .....	..	2	32
2 Junior .....	..	9	25
2 Senior .....	..	8	37
3 Junior	1	10	27
3 Senior	3	8	48
4 Junior	3	11	39
4 Senior	2	7	17
5 Junior .....	..	10	30
5 Senior	2	10	4
6 Junior .....	..	2	No Pupils
6 Senior	1	7	No Pupils
Total Grades 1-3.....	4	37	202
Total Grades 4-6.....	8	47	90
Total Grades 1-6.....	12	84	292
Per Cent Three or More Years Over Age, Grades 1-6.....	1.4%	7.4%	21.8%

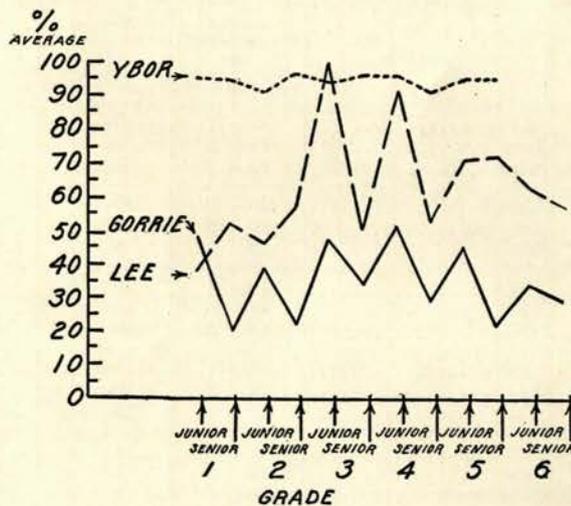


CHART 42
COMPARISON OF PERCENTAGES OF OVERAGENESS IN YBOR, LEE, AND GORRIE
SCHOOLS

TAMPA, FLORIDA—MAY, 1925

in the Gorrie School, less than a third are over age. The Lee School stands midway between these schools in this respect. (See Chart 42.) An inspection of these tables reveals the fact that the difference is not simply in percentage of children over age. There are even greater differences in the degree of overageness of the pupils who are over age. This is shown interestingly in Table 46 which indicates that in the Ybor School, in proportion to its size, there are three times as many children three or more years over age as in the Lee School and sixteen times as many as in the Gorrie School.

Table 47 shows other differences in these schools. It indicates that whereas the age of the pupils in a given grade increases as the percentage of pupils of foreign parentage increases, the level of mental development and of educational achievement decreases. The lower mental development results may be due to the fact that the test of mental development required the use of the

TABLE 47

COMPARISON OF THREE ELEMENTARY SCHOOLS FOR WHITE CHILDREN WITH RESPECT TO AVERAGE CHRONOLOGICAL, MENTAL, AND EDUCATIONAL DEVELOPMENT BY GRADES
TAMPA, FLORIDA—MAY, 1925

Grade	Schools	Median Chronological Age	Median Mental Age *	Median Educational Age **
		Years Months	Years Months	Years Months
4 Junior	Gorrie	10—1	9—8	10—7
	Lee	11—5	9—5	10—2
	Ybor	12—3	9—7	10—2
4 Senior	Gorrie	10—0	10—11	11—3
	Lee	10—9	10—4	10—8
	Ybor	12—6	9—5	10—6
5 Junior	Gorrie	10—11	10—1	11—5
	Lee	11—8	10—3	11—1
	Ybor	13—3	10—2	10—9
5 Senior	Gorrie	10—11	11—6	11—11
	Lee	12—2	10—8	11—9
	Ybor	13—1	10—11	11—8
6 Junior	Gorrie	11—8	11—4	12—8
	Lee	12—2	11—4	12—1
	Henderson	13—7	11—2	11—11
6 Senior	Gorrie	12—0	12—6	13—6
	Lee	13—0	11—5	12—7
	Henderson	13—9	11—2	12—11

* McCall Multi-Mental Scale.

** Stanford Achievement Test, 1925 Standards.

English language. The actual mental levels are doubtless higher in the Ybor and Lee Schools. In all probability, however, these mental levels represent fairly accurately the ability of these pupils to do school work that requires the use of English. Whatever the answer to this may be, Table 47 clearly indicates that Tampa has need for a different type of school opportunity for children of foreign parentage.

The data collected as a basis for reclassification include the chronological age, height, weight, progress record, teacher's rating, intelligence scores, subject achievement scores, attendance record, conduct and effort, and class photograph for each pupil. This material for each pupil has been collected on charts as illustrated by Chart 28. All of the elements on these individual profiles were considered in the reclassification, according to the following rules:

(1) If a pupil's achievement age is 2 years or more above that of the class into which he is to be promoted, he should receive special promotion. (2) If he is 1 year above the class to which he is to be promoted and he is 1 or more years over age, he should receive special promotion. (3) If his health is poor and the special promotion is likely to impair his health, the child should be held to the bright section of the class to which he is regularly passed. (4) His size may be a deciding factor also. If he is undersized so that he would be at a decided disadvantage in the class ahead, it may prove best to keep him with his present class in the bright section. (5) Any child who is 13 years or more of age and who is 2 or more years over age for his grade should be specially promoted. This is done in order that he may receive some instruction in all the material of the elementary school before the compulsory age limit is passed. (6) If the mental age and achievement age are low, the child should be placed in the slow-moving group of the higher class. (7) If the child will be 14 or more at the beginning of the next term, he should be placed in the junior high school to receive the benefit of the secondary school social organization. Some of the pupils in this group will have a mental ability and an educational achievement age which will require that they be placed in special classes or be provided special courses. (8) The classification or grouping within each grade is made on the basis of brightness or educational quotient. The intelligence quotient is a measure of bright-

ness determined by use of an intelligence test. The educational quotient is a measure of brightness determined by use of tests of school work. The average of these two is used since it is more reliable than either one alone. This is modified by the quality of the work done as indicated by the teacher's judgment and the general level of achievement compared to the grade norm. That is, if the teacher noted that the child was an earnest worker and did satisfactory work, he might be advanced to the middle ability group even though he was somewhat low in the other measures.

The amount of shifting of pupils that would be involved in the reclassification of the fourth, fifth, and the sixth grades of the Gorrie, Lee, and Ybor schools is shown in Tables 48, 49, 50, and 51. The vertical columns give the last year's classification and the horizontal rows the new grouping. In the Gorrie School the last year's 4 Junior class would be placed as follows: 9 in the 4 Senior "above average" section, 16 in the 4 Senior "average" section, 5 in the 4 Senior "below average" section, 3 in the 4 Junior "average" section, 2 in the 5 Senior "average" group, 3 in the 5 Senior "below average" group, and 2 in the junior high school 7 Junior

TABLE 48

CHANGES IN CLASSIFICATION THAT WOULD RESULT IF 371 CHILDREN IN GORRIE SCHOOL WERE RECLASSIFIED ACCORDING TO THE RECLASSIFICATION PROPOSALS TAMPA, FLORIDA—MAY, 1925

Proposed Classification		Grade in Which Pupil Was Enrolled in May, 1925					Total	Grade Total
Grades	Section	4 Junior	4 Senior	5 Junior	5 Senior	6 Junior		
4 Senior	Above Average..	9					9	
	Average	16					16	
	Below Average..	5					5	
							30	
5 Junior	Above Average..		22				23	
	Average	3	38				41	
	Below Average..		10				10	
							74	
5 Senior	Above Average..		4	8			12	
	Average	2	8	15			25	
	Below Average..	3	1	3			7	
							44	
6 Junior	Above Average..		8	1	11		20	
	Average		4	1	33		38	
	Below Average..		1	1	3		5	
							63	
6 Senior	Above Average..			2	13		15	
	Average				17	6	23	
	Below Average..				2	4	6	
							44	
7 Junior	Above Average..				4	7	11	
	Average		2		3	9	14	
	Below Average..	2	2	3	6	11	22	
							47	
Totals		40	99	34	92	37	..	
							302	

Note: Pupils between the black lines running diagonally across the table are regular promotions. Those below are skipped one or more half years.

TABLE 49

CHANGES IN CLASSIFICATION THAT WOULD RESULT IF 386 PUPILS IN THE LEE SCHOOL WERE RECLASSIFIED ACCORDING TO THE RECLASSIFICATION PROPOSALS TAMPA, FLORIDA—MAY, 1925

Proposed Classification		Grade in Which Pupil Was Enrolled in May, 1925					Total	Grade Total
Grades	Section	4 Junior	4 Senior	5 Junior	5 Senior	6 Junior		
4 Senior	Above Average..	7					7	
	Average	23					23	
	Below Average..	10					10	
							40	
5 Junior	Above Average..		19				19	
	Average	1	29				30	
	Below Average..	10	30				40	
							89	
5 Senior	Above Average..		4	9			13	
	Average	5		14			19	
	Below Average..	10		4			14	
							46	
6 Junior	Above Average..		5		11		16	
	Average			7	40		47	
	Below Average..	1	7	13	12		33	
							96	
6 Senior	Above Average..				5	4	9	
	Average				5	8	13	
	Below Average..				3	4	7	
							44	
7 Junior	Above Average..				5	8	13	
	Average				7	3	10	
	Below Average..	3	7	13	19	6	48	
							71	
Totals		70	101	69	113	33	..	
							386	

Note: Pupils between the black lines running diagonally across the table are regular promotions. Those below are skipped one or more half years.

TABLE 50

CHANGES IN CLASSIFICATION THAT WOULD RESULT IF 350 PUPILS IN THE YBOR SCHOOL WERE RECLASSIFIED ACCORDING TO THE RECLASSIFICATION PROPOSALS TAMPA, FLORIDA—MAY, 1925

Proposed Classification		Grade in Which Pupil Was Enrolled in May, 1925					Total	Grade Total
Grades	Section	4 Junior	4 Senior	5 Junior	5 Senior	6 Junior		
4 Senior	Above Average..	9					9	
	Average	29	1				30	
	Below Average..	7					7	
							46	
5 Junior	Above Average..	1	4				5	
	Average	3	16				19	
	Below Average..	21	4				25	
							49	
5 Senior	Above Average..			3			3	
	Average		3	13			16	
	Below Average..		18	4			22	
							41	
6 Junior	Above Average..				4		4	
	Average			1	7		8	
	Below Average..	7	12	2	4		25	
							37	
6 Senior	Above Average..			2	2		4	
	Average			3		5	8	
	Below Average..	16		21	10		52	
							59	
7 Junior	Above Average..				1	5	6	
	Average			2	4	9	15	
	Special or Below Average..	15	18	41	5	18	97	
							118	
Totals		108	76	92	37	37	..	
							350	

Note: Pupils between the black lines running diagonally across the table are regular promotions. Those below are skipped one or more half years.

TABLE 51

COMPARISON OF AGE RANGES OF GRADES IN GROUPS AFTER THE PROPOSED RECLASSIFICATION COMPARED WITH THE AGE RANGES IN THESE GRADES
TAMPA, FLORIDA—MAY, 1925

Age Range of Grades Four, Five, and Six That Would Result Under the Proposed Reclassification

Grade	Section	Lee School	Gorrie School
		Years	Years
7 Junior	Above Average	10½-13	10 -12
	Average	13½-14	11 -14
	Below Average	13 -15½	11½-16
6 Senior	Above Average	10½-12½	10 -11½
	Average	10 -12½	9½-12½
	Below Average	11½-13½	12 -12½
6 Junior	Above Average	9½-12	8 -11
	Average	8 -12½	9½-12
	Below Average	11½-13½	11½-12½
5 Senior	Above Average	9 -11½	9 -10
	Average	9 -11½	9½-11
	Below Average	11 -13½	11½-12½
5 Junior	Above Average	8 -10	8½-10½
	Average	9 -11	9 -11½
	Below Average	10 -13	10 -11
4 Senior	Above Average	8½-10	8 -10½
	Average	9½-11	9 -10½
	Below Average	11 -11½	10½-11
Average Range		2.1 Years	1.9 Years

AGE RANGE FOR THE ABOVE CLASSES IN MAY, 1925

6 Junior	10 -15½	9½-14
5 Senior	8 -16½	9 -16½
5 Junior	8 -15½	9 -13½
4 Senior	8 -16	8 -14
4 Junior	8½-16	8 -13½
Average Range		7.4 Years
		5.6 Years

"below average" group. The same relative distribution was made of each of last year's grades as shown by Table 48. A total of 118 (which is 39 per cent of the total number) in the Gorrie School would be specially promoted, and 47 of these would be advanced to the junior high school. In the Lee School, the number for whom special promotion is suggested is 162 (42 per cent of the total) and 71 of these, or 18 per cent, would be advanced to the junior high school. The number is relatively larger in the Ybor School. Two hundred forty-eight would be especially promoted (70 per cent) and 118 of these would be moved up to the junior high school. A total of 236 from these 3 schools who are now held in the elementary schools would be sent to the junior high schools.

Table 51 shows the improvement in the age ranges made possible if the new classification were adopted. The average difference in ages between the oldest and youngest in each of the five classes of the Lee School was 7.4 years. The new grouping reduces the average age range to 2.1 years. In the Gorrie School the age range would be reduced from 5.6 years to 1.9 years.

Special Classes.—There are many children in the Tampa schools who need special treatment other than that provided by the general reclassification suggested. Special provision should be made for the following groups: pupils with an English language handicap, pupils who are definitely sub-normal mentally, pupils who are especially bright, pupils with physical handicaps such as speech, eye and ear defects, pupils who need special help in one or more subjects to prevent non-promotion, and winter-resident pupils.

An indication of the situation in Tampa at the present time is the number of children in each grade who are under age, normal age, and over age. Table 52 shows that there are 55 children in the elementary schools more than 1 year under age for their grade. About 17 per cent are 2 years over age, 11 per cent are 3 years over age, 6 per cent are 4 years over age, and 4 per cent are 5 years or more over age. A total of 10 per cent are 4 or more years over age. This means that at least 873 pupils in the elementary schools have need of individual examinations to determine their special difficulties and the desirable placement in special classes.

The schools in which this excessive overageness exists are easily located in Tables 53, 54, and 55. The Ybor, Henderson, Philip Shore, Lee, Gary, East Tampa, and Madison schools have enough pupils 4 or more years over age to form special classes. With the exception of the East Tampa and Madison, each of these schools has a large enough number of these pupils to form special classes for grades 1 to 3 and for grades 4 to 6. In Table 54 it is shown that there are enough pupils 5 or more years over age to form special classes in Ybor, Henderson, Philip Shore, Gary, and Lee schools. Table 55 shows that the Ybor School has 53 pupils 6 or more years over age, the Philip Shore has 22 such pupils, and the Henderson 24 such pupils.

A distribution of the number of pupils who are fourteen and fifteen years of age and who are still in the elementary schools

TABLE 52

DISTRIBUTION OF PUPILS ENROLLED IN ELEMENTARY SCHOOLS FOR WHITE CHILDREN SHOWING UNDER-AGE, NORMAL-AGE AND OVER-AGE PUPILS BY GRADES
TAMPA, FLORIDA—MAY, 1925

Grades	Under Age		Normal Age	Over Age				
	More than One Year	One Year or Less		One Year or Less	Two Years	Three Years	Four Years	More than Four Years
1 Junior	..	34	228	196	90	48	27	29
1 Senior	..	49	425	251	150	73	39	37
2 Junior	3	35	198	189	113	76	40	26
2 Senior	5	82	297	228	138	93	46	45
3 Junior	2	22	136	150	136	70	46	51
3 Senior	6	74	274	175	123	84	55	53
4 Junior	3	27	107	161	139	102	77	47
4 Senior	9	103	274	183	125	102	56	35
5 Junior	4	27	101	137	117	93	51	36
5 Senior	6	73	223	186	135	73	25	5
6 Junior	10	35	103	116	105	71	24	3
6 Senior	7	62	203	137	73	51	14	6
Total	55	623	2,569	2,109	1,444	936	500	373
Per Cent	6%	7.3%	29.8%	24.5%	16.8%	10.9%	5.8%	4.3%

TABLE 53

COMPARISON OF SCHOOLS FOR WHITE CHILDREN WITH RESPECT TO NUMBER OF PUPILS FOUR YEARS OR MORE OVER AGE IN THE VARIOUS GRADES
TAMPA, FLORIDA—MAY, 1925

Schools	Grades												Total
	1		2		3		4		5		6		
	Junior	Senior											
Graham	..	1	1	1	..	..	..	1	1	..	1	..	6
Jackson	..	2	..	..	..	..	3	..	3	..	..	..	10
Mitchell	..	..	3	2	..	1	..	1	3	..	1	..	11
Gorrie...	..	..	..	1	1	3	3	2	..	..	..	1	13
Seminole	..	..	2	1	2	3	..	3	..	2	..	..	13
Buffalo	..	..	..	1	2	1	1	4	1	1	1	3	15
Madison East	..	2	..	1	4	..	7	6	7	2	5	..	34
Tampa	2	..	1	4	3	1	12	5	4	..	1	4	37
Gary...	3	4	2	3	4	4	5	11	3	1	2	3	45
Lee....	..	2	2	9	10	9	11	7	10	10	2	7	79
Philip Shore	4	18	12	15	29	19	22	13	9	2	5	..	148
Henderson...	11	15	19	16	13	20	21	22	15	6	10	1	169
Ybor...	33	32	25	37	27	48	39	17	30	4	..	..	292
Total.	53	76	67	91	97	109	124	91	86	31	27	20	872

TABLE 54

COMPARISON OF SCHOOLS FOR WHITE CHILDREN WITH RESPECT TO NUMBER OF PUPILS FIVE YEARS OR MORE OVER AGE IN THE VARIOUS GRADES
TAMPA, FLORIDA—MAY, 1925

Schools	Grades												Total
	1		2		3		4		5		6		
	Junior	Senior											
Madison East	..	1	..	..	2	..	1	2	5	1	..	..	12
Tampa	..	..	..	2	2	..	6	2	2	..	..	1	15
Gary...	2	2	..	2	3	1	4	5	1	..	..	..	20
Lee....	..	..	..	4	6	4	4	3	4	2	..	1	28
Philip Shore	1	12	7	8	12	8	9	3	2	..	2	..	64
Henderson...	9	3	9	10	9	11	11	9	6	2	1	..	80
Ybor...	16	19	8	16	9	26	10	9	11	1	..	..	129
Total.	28	27	24	42	47	50	45	33	31	6	3	2	348

TABLE 55

COMPARISON OF SCHOOLS FOR WHITE CHILDREN WITH RESPECT TO NUMBER OF PUPILS SIX YEARS OR MORE OVER AGE IN THE VARIOUS GRADES
TAMPA, FLORIDA—MAY, 1925

Schools	Grades												Total
	1		2		3		4		5		6		
	Junior	Senior											
Philip Shore	..	7	3	1	..	4	3	3	1	22
Henderson...	3	3	4	4	2	6	2	1	1	26
Ybor...	8	14	3	2	8	13	..	2	3	53
Total.	11	24	10	7	10	23	5	6	5	101

is shown in Table 56. More than 70 pupils are still in grades 1 to 3 who are fourteen years of age or older. Many of these pupils are probably sub-normal in mental ability and, if so, should be withdrawn from the regular classes where they have been a problem. They should be placed in special classes where the material of instruction is adjusted to their ability and needs. The Ybor, Henderson, and Philip Shore schools have enough of these pupils for special classes. There are nearly four hundred pupils in grades 4 to 6 who are fourteen years or more of age. According to the criteria set up in the suggested reclassification, they should all be specially promoted to the junior high schools. This requires that proper curricular provision be made for them.

The formation of special classes for the children with English

that many pupils were failing each term because they were weak in only one subject of the curriculum. The individual pupil's difficulties should be diagnosed; he should receive the remedial training to overcome these difficulties so that he may continue with his class to the next grade. Under the present conditions the best way to secure this individual help would be by the addition of a special help teacher. This teacher is not intended as an instructor for discipline cases. It is her duty to make diagnoses of pupils assigned to her by the principal to determine their subject difficulties. Her task is to correct particular difficulties and to return the pupils to the regular class as soon as possible. The special help teacher should be closely in touch with the Research Director of the Schools in the collection of data about the pupils and its interpretation.

When an effective attendance department has been established there will undoubtedly be a sufficient number of truants to require special provision. This provision may be a special class in each school, a special day school, or a home for incorrigibles. The pupils who are serious discipline cases should be placed in these classes where every attempt could be made to determine the cause of the difficulty, to remedy it, and to return the pupils to the regular school organization. These pupils should not be turned out of school as potential criminals.

Regulation of Classification.—A number of methods have been suggested to adjust the school organization to meet more adequately the needs of the individual pupils. In the proposed reclassification of the three experimental schools, the pupils were placed in the various grades in accordance with the level of their educational achievement. This was varied according to the chronological age, the level of mental, physical, and social maturity. The pupils were further sectioned on the basis of their ability to progress as indicated by their brightness. Each grade will ordinarily be divided into three or more groups, the above average, the average, and the below average. For some pupils a finer adjustment to special needs is necessary and wherever the number is sufficient, special classes have been recommended.

Regardless of how well the adjustment has been made to place the pupils in the most desirable classification, there will be need for continual readjustment. To maintain a satisfactory classification, the following methods are suggested. Pupils entering the

first grade should be sectioned according to the results of intelligence tests and the judgment of the kindergarten teachers. The ordinary promotion plan is to promote from the "above average" of a given grade to the "above average" section of the next grade. Similarly, promotion is made from the "average" to the "average" section and from the "below average" to the "below average" section. At the period of promotion all of the information which indicates the pupils' needs should be assembled and considered in readjusting the classification. This information includes all records of physical examinations, health, mental ability, educational achievement, social development and characteristics, home environment, home duties, school history and progress, and all other pertinent material.

During the year, readjustments must be made to prevent pupils from falling behind their classes. The pupils failing in particular subject matter may be sent to the special-help teacher. If this adjustment is not sufficient, the pupils may be transferred to a slower-moving section. Thus, a pupil in an "above average" section would be changed to an "average" section if he did not maintain his "above average" relative position. Similarly, an "average" section pupil might be changed to the "below average" section. In a similar way, pupils who are exceeding the work of the section in which they are placed should be advanced to the more rapidly moving section of the same grade. This would mean that a pupil would be changed from the "below average" to the "average" section and from the "average" to the "above average" section. If a pupil in the "above average" section is achieving beyond the provisions of the grade, it is clear that the classification failed to place this pupil properly. He should, therefore, be advanced to the grade for which he is prepared, as measured by the criteria for classification. In all such readjustments, the welfare of the pupil should be the paramount consideration. This will sometimes demand the violation of such regulations as the above.

When a pupil enters from a school outside of Tampa, the school principal should see that he is given the examinations mentioned above, which are necessary to determine his placement in grade and section. The need for a definite policy in regard to these new pupils is very apparent from a study of the late entrants in the fall of 1924. Most of the pupils enrolled in grades

DISTRIBUTION BY DATE OF ENTRANCE OF PUPILS ENTERING ELEMENTARY SCHOOLS FOR WHITE CHILDREN AFTER THE BEGINNING OF THE FALL TERM OF THE SCHOOL YEAR 1924-1925, BY SCHOOLS—TAMPA, FLORIDA

Schools	Grades	Enrollment	Date of Late Entrance					Reasons for Late Entrance			Total Late Entrants
			October	November	December	January	February	Moved to Tampa	Tourist	All Others	
Buffalo	4 Senior... 6 Senior...	101 68	4 2	3 ..	2 1	4 3	.. ..	4 6	6 ..	3 ..	13 6
East Tampa	4 Senior... 6 Senior...	33 27	.. 1	1 ..	.. ..	1 ..	.. ..	.. ..	1 ..	.. 2	1 2
Gary	4 Senior... 6 Senior...	74 32	2 3	1 ..	2 ..	.. ..	.. ..	4 4	.. ..	1 3	5 3
Corrie	4 Senior... 6 Senior...	133 120	14 8	4 4	2 3	4 9	.. ..	13 15	7 6	4 3	24 24
Graham	4 Senior... 6 Senior...	42 53	1 3	2 ..	.. ..	.. ..	.. ..	1 3	1 ..	1 ..	1 5
Henderson	4 Senior... 6 Senior...	24 59	1 ..	1 ..	3 ..	.. ..	.. ..	1 ..	4 ..	1 ..	2 4
Jackson	4 Senior... 6 Senior...	42 23	3 ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	3 ..	3 0
Lee	4 Senior... 6 Senior...	126 131	9 4	6 5	2 ..	6 5	1 ..	19 12	3 ..	1 3	23 15
Madison	4 Senior... 6 Senior...	41 43	4 ..	2 2	5 ..	2 ..	.. ..	9 2	3 ..	1 ..	13 2
Seminole	4 Senior... 6 Senior...	115 34	5 3	5 ..	4 ..	4 2	.. ..	2 5	8 ..	.. ..	18 5
Phillip Shore	4 Senior...	89	2	1	..	..	..	..	..	3	3
Ybor	4 Senior...	96	2	1	..	..	3	1	..	5	6
Total	4 Senior... and 6 Senior...	1,406	71	38	25	40	4	97	39	42	178
Per Cent of Late Entrance.		....	39.9%	21.3%	14.0%	22.5%	2.3%	54.5%	21.9%	23.6%	100.0%

4 Senior and 6 Senior were studied as to the time of their enrollment for the school year. Table 57 shows the number of pupils by schools and grades who entered school late and the reason for late entrance. One hundred seventy-eight pupils of the 1,406 considered entered one or more months after the beginning of the school term. If this percentage of 12.6 was the same for the 8,609 pupils in the elementary school, there would be 1,092 pupils entering school after the regular entering period. About 1 out of every 7 of these pupils breaks into the school term in December and 1 out of every 5 as late as January. The special-help teachers would be very useful in properly dealing with these persons.

SUMMARY OF CLASSIFICATION FOR ELEMENTARY SCHOOLS

1. *Present Classification.*—The great range of ages within a grade, the prevalence of non-promotion, late entrance to the first grade, the great overlapping in abilities and achievement between grades, and the obviously improper classification of individual boys and girls, all indicate the need for a thorough overhauling of the present classification of pupils in the Tampa schools and the setting up of regulations that will keep such an extreme situation from recurring.

2. *Proposed Reclassification of the Elementary Schools.*—

a. It is recommended that Tampa adopt the plan of grouping pupils in each grade level in each school according to ability or to special needs as the case may be. This implies that the work required of each group be adjusted to the needs of the group.

b. *Regrading and Homogeneous Grouping:*

(1) It is recommended that a few schools be thoroughly reclassified at the beginning, and the plan extended as rapidly as possible. Rules are proposed for guiding such classification.

(2) The effectiveness of these proposed rules as a basis for reclassification has been clearly demonstrated in their application to a thousand pupils in the Corrie, Lee, and Ybor schools. The application of these rules would give special promotion to 39 per cent of the pupils in grades 4 Junior to 6 Junior

in the Gorrie School; 40 per cent of the students in the 4 Junior to 6 Junior in Lee School; and 70 per cent of the pupils in those same grades in the Ybor School.

- (3) The above reclassification would reduce the average range of ages in a given grade in the Lee School from 7.4 years to 2.1 years; and in the Gorrie School from 5.6 years to 1.9 years.

3. *Special Classes.*

- a. Pupils of extremely high or low ability and pupils with special handicaps should be dealt with in special classes.
- b. There are at least 873 pupils in the elementary schools of Tampa who should be given individual examinations to determine whether they are so defective mentally as to demand treatment in special classes.
- c. Many of the fourteen- and fifteen-year-old boys and girls which the proposed reclassification would place in junior high schools should be put in special classes in the junior high schools. There are over four hundred such boys and girls in the Tampa elementary schools.
- d. Retarded pupils with English language difficulty might well be grouped for special instruction part of the time.
- e. Classes should be provided for children suffering from physical handicaps that make the regular school work of little use or positively detrimental to them.

4. *Regulation of Classification.*

- a. Pupils entering the first grade should be sectioned according to intelligence tests and the judgment of kindergarten teachers.
- b. At each promotion time, all available information which indicates pupil needs should be assembled for use in making any desirable readjustments in classification.
- c. During the term, readjustments should be made. Shifting from one section to another may occasionally be desirable. Special demotion is sometimes required.
- d. Pupils entering from outside schools should be thoroughly tested before their classification is considered completed. This is a particularly serious problem in Tampa.

CLASSIFICATION OF PUPILS IN JUNIOR AND SENIOR HIGH SCHOOLS

As in the case of the elementary schools, the problem of meeting individual differences in the junior and senior high schools is a problem of providing educational opportunities gauged to the abilities and needs of boys and girls. To meet these needs a much greater variety of educational opportunities must be offered in these schools than in the elementary school. The boy or girl who is to enter college must be provided in these six years with a fitting curriculum. On the other extreme, the pupil who, for economic or other reasons, must leave school as soon as the law permits must be cared for with a curriculum that will best fit him for his life. Talents and aptitudes must be discovered and developed. Guidance must be given by teachers personally and through courses provided for that purpose.

The failure of the junior and senior high schools of Tampa to meet the needs of the pupils they should serve may be indicated in a variety of ways by conditions which have developed in part as a result of this failure. The large amount of failure referred to in the section on non-promotion is one indication of this. The frequency with which the lack of interest and lack of ability were given by the teachers as causes for failure is another. One of the most striking indications is the lack of holding power of the junior and senior high schools. This is shown by Chart 19, page 189. In spite of the fact that the Tampa senior high school draws from a larger territory than the elementary schools, the survey staff finds the percentage of pupils in junior and senior high schools considerably less than that found in many cities. If it were compared to the cities that meet this problem most adequately, the contrast in holding power would be even greater. It is interesting to note that the pupils which the senior high school has failed to hold are not only the children with the least ability to do school work but also children of average or better ability. The school has been largely gauged to the abilities of the superior children. This is indicated by Chart 43 which shows how far the senior class exceeds the ninth grade class in brightness.

An examination of the results of tests given in the junior and senior high schools throws further light upon the lack of proper adjustment as well as upon the need for it. The distribution of

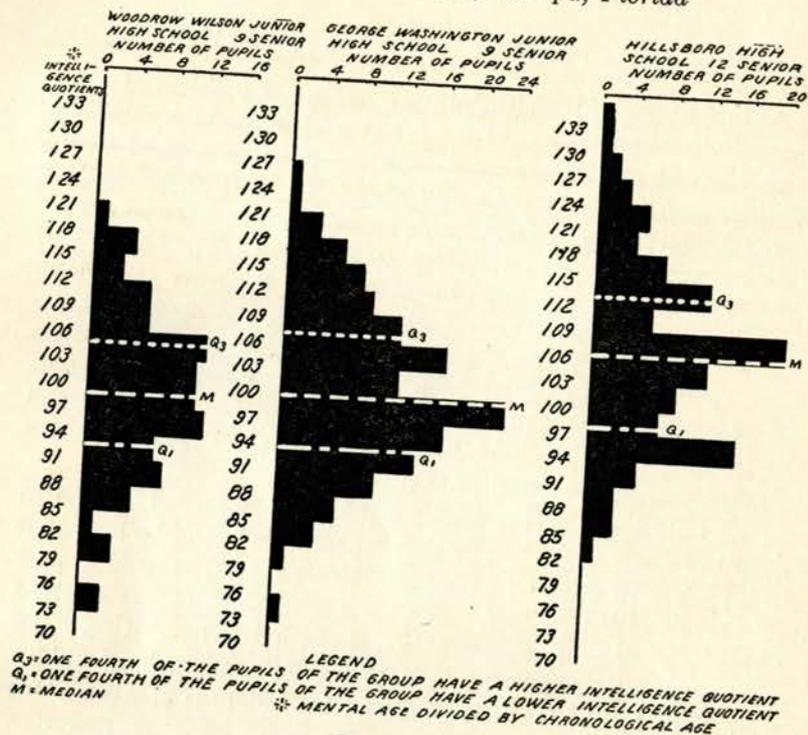


CHART 43

DISTRIBUTION OF INTELLIGENCE QUOTIENTS OF GRADES 9 AND 12
 TAMPA, FLORIDA—MAY, 1925

Relative Brightness of Pupils in 9 Senior and 12 Senior Grades of the Tampa Junior and Senior High Schools as Measured by the Otis Self-Administering Test of Mental Ability

scores on the McCall Multi-Mental Scale shows differences in the level of mental development in the grades of the junior high schools ranging from seven to eleven years. This wide range in the level of mental ability is shown in Table 58. At the present time all groups of pupils are required to cover too nearly the same type and quantity of curriculum material and are promoted or failed on the same standards.

The situation in arithmetic is very similar to that of the intelligence scores. The distribution of scores in the Woody-McCall Mixed Fundamentals Test, as shown in Table 59, indicates the same wide differences in achievement within the same grade. There are pupils in the seventh and eighth grades who

TABLE 58

DISTRIBUTION OF JUNIOR HIGH SCHOOL PUPILS WITH RESPECT TO LEVEL OF MENTAL DEVELOPMENT AS MEASURED BY THE McCALL MULTI-MENTAL SCALE

TAMPA, FLORIDA—MAY, 1925

Level of Mental Ability	Score	Number of Pupils Receiving Each Score			
		7 Senior		8 Senior	
		Woodrow Wilson	George Washington	Woodrow Wilson	George Washington
Years Month					
9—4*	33-34	1	1	..	..
9—7	35-36	2	3	..	..
10—0	37-38	1	2	..	..
10—4	39-40	4	5	..	..
10—8	41-42	6	23	4	4
11—2	43-44	13	20	3	5
11—6	45-46	12	34	1	13
12—0	47-48	15	45	2	14
12—6	49-50	17	42	7	29
13—0	51-52	9	23	8	30
13—7	53-54	5	36	4	28
14—2	55-56	3	20	6	21
14—8	57-58	5	13	8	25
15—5	59-60	5	12	2	10
16—1	61-62	4	10	2	13
16—10	63-64	3	9	2	8
17—6	65-66	1	4	..	14
18—0	67-68	1	2	1	5
18—6	69-70	1	2	2	2
19—0	71-72	..	1	..	2
19—5	73-74	1	1	..	..
19—10	75-76	..	..	1	2
20—3	77-78	..	..	..	3
20—8	79-80	..	..	..	1
Total Pupils		108	316	53	230
Median Mental Age		12-2	12-7	13-6	13-8

* Age corresponding to mid-point of step.

are below the standard for the sixth grade. On the other hand, over 50 per cent of the 7 Senior pupils surpass the standard for the end of the eighth grade. The median of the 8 Senior grades in both of the junior high schools surpasses the standard for the grade by more than two years. There were eleven pupils in this grade who received the maximum possible score on the test. This indicates that the test did not measure the upper range of ability in arithmetic of these classes. In spite of the high level of attainment of the pupils in arithmetic, about one out of every four in the Woodrow Wilson School was failed in this subject. The proportion of pupils in the George Washington School who were

failed in arithmetic was about one out of every five. The very apparent conflict between the ability of these pupils, as shown on the standardized tests, and the large proportion of failures calls for readjustment of the present practice to better meet the needs and abilities of the pupils.

The wide range in chronological ages, in the levels of mental ability, in the degree of brightness, in the levels of educational achievement, and in the types of pupils, all demonstrate the need for better classification of the junior and senior high pupils.

TABLE 59
DISTRIBUTION OF JUNIOR HIGH SCHOOL PUPILS WITH RESPECT TO ACHIEVEMENT IN THE FUNDAMENTAL PROCESSES OF ARITHMETIC
TAMPA, FLORIDA—MAY, 1925

Score	Number of Pupils Receiving Each Score			
	7 Senior		8 Senior	
	Woodrow Wilson	George Washington	Woodrow Wilson	George Washington
16	..	..	1	..
17	..	..	..	..
18	1	1	..	..
19	..	1	..	..
20	..	1	..	1
21	2	4	..	..
22	1	5	..	..
23	6	10	..	1
24	7	14	3	1
25	8	16	1	3
26	13	22	2	7
27	13	33	3	17
28	17	38	5	12
29	22	37	13	31
30	15	49	11	30
31	18	40	13	44
32	15	23	16	33
33	15	16	14	24
34	2	5	1	22
35	..	..	4	7
Total	147	315	88	236
Median Score	29.3	29.3	31.4	31.3

GRADE STANDARDS

Grade	Standard
5 Junior	19.1
5 Senior	21.3
6 Junior	23.6
6 Senior	25.1
7 Junior	26.8
7 Senior	27.8
8 Junior	28.3

Much of this improved classification will come through the development of a variety of curricula recommended elsewhere in this report. Opportunities for children of a variety of abilities, aptitudes, and interests should be provided. For example, the large number of over-age pupils who, it was suggested, should be gathered in from the fourth, fifth, and sixth grades to the junior high schools will require special adjustment to curriculum material and methods in that school organization. There are between four and five hundred of these pupils who should be given opportunities that can best be provided in the junior high schools. It may be advisable for many of these pupils to spend as much as half of their time in industrial arts or home economics. Some of them will not be able to profit by any of the curricula now organized. Many of them will be able to take at least some courses with the regular junior high school students.

The ability, achievement, and other records in the elementary schools should be used to the fullest degree for guidance in the placement of pupils. The disregard of the six years of experience of the elementary schools with boys and girls is poor economy, yet this experience has not been used by the junior high schools in dealing with their pupils. The senior high school has almost as completely disregarded the experience of its contributing schools. Even the meager records available from these schools have not been obtained.

The information collected by the elementary school will become more and more valuable as the system of classification and record keeping advances in these schools. Such information should be supplemented by tests of mental and other abilities given by the junior high schools. With a combination of data from these sources available, each child must become a subject of study. Without such individual attention most of the vast possibilities for adjustment to individual differences that come from having large groups of children together amount to nothing. To make adjustment to individual differences an easy matter, schools must be large, but they must also have the organization, administrative assistance, and guidance that will make a school with a thousand children a school with a thousand individual pupils, each a problem in himself worthy of the closest attention.

Each of the junior high schools and the senior high school should make provisions for more adequate classification of their

beginners and then for the placing of responsibility that will insure corrections in classification as time goes on.

The organization of the schools will be an important factor. Subject promotions facilitate adjustments of individual programs. The grouping of different classes in the same subject in the same hours, where this is possible, facilitates shifting of pupils from one section to another. The use of a long school day with more, rather than fewer periods, makes individual adjustment easier. Variation in number of recitations per week for sections of different ability frees the time of pupil and teacher for other courses.

This work should go hand in hand with the expansion of curriculum opportunities recommended elsewhere. It will provide a number of interesting and important problems which might well be worked out through committees of teachers under the administrative direction of the principals and supervisor of high schools but with the closest cooperation of the office of the director of research.

SUMMARY OF CLASSIFICATION FOR HIGH SCHOOLS

1. There is need for better adjustment of educational opportunities to pupil needs. This is indicated by the large amount of non-promotion, the lack of holding power of the schools, and the elimination of not only pupils with the least ability to do school work but also of large numbers of pupils with average and better than average ability.

2. There is need for a better classification of pupils so that educational opportunities provided may serve more adequately. This is indicated by the wide range in chronological ages, and in the levels of mental ability and educational achievement.

3. A greater variety of curricula is needed in the junior and senior high schools.

4. Ability and achievement records from contributing schools should be used in classifying beginners. Such information should be supplemented by tests of mental and other abilities.

5. Each pupil should receive individual attention if the vast possibilities of large schools are to be realized. Proper reclassification cannot be left to chance.

6. The schools should be organized in such a way as to facilitate adjustment of individual pupil programs.

CHAPTER XI

CLASSIFICATION AND PROGRESS IN SCHOOLS FOR COLORED CHILDREN IN DISTRICT NO. 4

OVERAGENESS

Table 60 shows the position by grades and ages of the children enrolled in May, 1925, in the elementary schools for colored children of District No. 4. The number of children above the heavy black lines that run diagonally across the page represent the children who are under age. Table 60 shows that there are 54 pupils, or 4.1 per cent of the entire enrollment, so placed in the schools. The numbers between the heavy lines represent the pupils who are of normal age for their grades. Table 60 shows 157, or 12.1 per cent, of the children to be of normal age. The numbers below the heavy lines represent the children who are over age. Table 60 shows 1,084, or 83.8 per cent, of the enrollment to be so placed.

The above facts are shown in another way by Table 61 which shows the number of children in these schools who are less than 2 years over age as well as those who are more than 2 years over age. It should be noted that this table shows that there are a large number of children in each grade from the first to the eighth who are more than 2 years over age for the grade in which they are placed. The largest percentage of overageness is found in the fourth and fifth grades where this percentage reaches 42 per cent and 46 per cent, respectively. The fact that only 25 per cent of the pupils in the eighth grade are more than two years over age is due to the elimination from school. This is proved by the fact that the total enrollment in the eighth grade is but two-thirds that in the seventh grade and only slightly more than one-third of the largest age group.

Table 62 shows a comparison between the cities of Baltimore, St. Louis, and Tampa with reference to the overageness of the pupils in the schools for colored pupils of these cities. The table

TABLE 60
AGE-GRADE TABLE SHOWING DISTRIBUTION OF PUPILS ENROLLED IN THE SCHOOLS FOR COLORED CHILDREN
TAMPA, FLORIDA—MAY, 1925
Ages Computed as of March 1, 1925

Years of Age	Grades														Total		
	1		2		3		4		5		6		7			8	
	Junior	Senior	Junior	Senior	Junior	Senior	Junior	Senior	Junior	Senior	Junior	Senior	Junior	Senior		Junior	Senior
4½*																	9
5	8	6															20
5½	10	9	1														18
6	15	3															87
6½	30	41	1	1													75
7	28	32	6	8	4												36
7½	8	9	6	10	1	1											42
8	3	8	7	13	6	4											44
8½	4	6	6	6	6	4	1										42
9	2	1	5	3	10	4	1										26
9½	3	6	9	3	22	2	8										78
10	3	2	11	1	17	3	8	1									66
10½	5	3	4	4	17	3	8	2	11	1							52
11																	66
11½																	67
12																	95
12½																	82
13	1	1	4	4	12	1	8	1	10	5	18	1	14	17	74		74
13½																	80
14																	51
14½																	54
15																	37
15½																	37
16																	34

16½																		8
17																		6
17½																		5
18																		4
Total..	121	128	69	50	146	24	136	41	184	6	141	3	93		91	61	1,294	
Normal Age...	25	44	7	18	7	..	10	..	10	1	14	..	5		6	4	157	
Over Age...	93	69	61	28	139	22	119	41	165	5	112	3	87		88	56	1,084	
Under Age...	3	15	1	4	...	2	7	..	3	..	15	..	1		2	1	54	
Per Cent Normal Age...	20.7%	34.4%	10.1%	36.0%	4.8%	0%	7.3%	0%	8.7%	16.7%	9.9%	0%	5.4%		6.6%	6.6%	12.1%	
Per Cent Over Age...	76.8%	53.9%	88.4%	56.0%	96.9%	91.7%	87.5%	100%	89.7%	83.3%	79.4%	100%	93.5%		91.2%	91.8%	83.8%	
Per Cent Under Age...	2.6%	11.7%	1.4%	8.0%	0%	8.3%	5.2%	0%	1.6%	0%	10.6%	0%	1.1%		2.2%	1.6%	4.1%	

* Represents 4 years, 3 months to 4 years, 9 months.

shows the number of pupils who are more than 3 years over age in these cities. It shows that while 3 per cent of the pupils in St. Louis who are enrolled in the first grade are more than 3 years over age and that 6 per cent of the enrollment in the correspond-

TABLE 61
OVER-AGE PUPILS ENROLLED IN THE SCHOOLS FOR COLORED CHILDREN
TAMPA, FLORIDA—MAY, 1925

Grades	Less Than Two Years Over Age			More Than Two Years Over Age		
	Boys	Girls	Total	Boys	Girls	Total
First	24	24	48	23	12	35
Second	44	29	73	38	23	61
Third	22	31	53	40	30	70
Fourth	46	56	102	28	62	90
Fifth	23	36	59	39	28	67
Sixth	18	40	58	11	13	24
Seventh	15	29	44	14	21	35
Eighth	10	24	34	3	12	15
Total	202	269	471	196	201	397

ing grade in Baltimore are in a similar situation, 7.6 per cent of the pupils in this grade in the Tampa schools are more than 3 years over age.

Similarly, in every grade the percentage of pupils 3 or more years over age in Tampa exceeds that percentage in Baltimore and St. Louis. For the eight grades of the elementary school the percentage in Tampa is 13.3; in Baltimore, 9.3; and in St. Louis, 4.7.

DISTRIBUTION OF THE PUPILS THROUGH THE SCHOOLS BY AGES

Table 63 shows the distribution of the pupils of the colored schools of Tampa by ages as compared with those of Baltimore. This table shows that from the ages of 7 to 12, inclusive, the schools of Baltimore hold a larger percentage of the pupils than Tampa. It is of interest that for the 3 years from 13 to 15 Tampa has a larger percentage of her pupils enrolled than Baltimore.

Table 64 shows the number of pupils in Tampa of thirteen, fourteen, and fifteen years of age and the location of these pupils in the grades of the schools. It should be noted that children of these ages are found in practically every grade of the system

TABLE 62
NUMBER AND PER CENT OF PUPILS IN EACH GRADE OF THE ELEMENTARY
SCHOOLS FOR COLORED CHILDREN WHO ARE THREE OR MORE YEARS
OVER AGE COMPARED WITH SUCH CHILDREN IN BALTIMORE,
MARYLAND, AND ST. LOUIS, MISSOURI

TAMPA, FLORIDA

		Grades								Total
		1	2	3	4	5	6	7	8	
Boys	No.	8	28	25	10	6	2	1	1	81
	Per cent...	7.5	27.3	36.2	11.7	16.6	5.4	3.7	6.6	14.3
Girls	No.	7	12	17	35	14	3	8	3	89
	Per cent...	7.7	13.2	18.6	25.0	16.0	5.0	12.5	5.0	12.4
Total	No.	15	40	42	45	20	5	9	4	170
	Per cent...	7.6	20.3	26.2	20.0	13.6	5.2	9.9	6.5	13.3

BALTIMORE, MARYLAND

		Grades								Total
		1	2	3	4	5	6	7	8	
Boys	No.	82	152	171	138	55	17	5	..	620
	Per cent...	6.1	13.5	18.4	19.3	10.4	5.2	3.1	..	11.7
Girls	No.	62	96	117	93	52	13	9	..	442
	Per cent...	4.5	8.7	12.2	10.6	7.6	2.6	2.7	..	7.2
Total	No.	144	248	288	231	107	30	14	..	1062
	Per cent...	5.2	11.1	15.2	14.5	8.8	3.6	2.8	..	9.3

ST. LOUIS, MISSOURI

		Grades								Total
		1	2	3	4	5	6	7	8	
Boys	No.	23	50	47	62	18	13	4	1	218
	Per cent...	3.0	6.8	10.2	12.0	5.5	4.2	2.8	.6	5.5
Girls	No.	21	32	26	42	31	14	2	..	168
	Per cent...	3.0	4.3	5.5	8.3	7.5	3.4	.8	..	3.9
Total	No.	44	82	73	104	49	27	6	1	386
	Per cent...	3.0	5.5	7.8	10.1	6.7	3.8	1.3	..	4.7

from the first to the eighth. This condition has a bad effect upon the schools. No school can successfully deal with pupils of these ages in classes with those of eight and nine years. Not only is the teaching problem from the educational point of view serious but other dangers are increased.

TABLE 63

DISTRIBUTION OF PUPILS BY AGES

SCHOOLS FOR COLORED CHILDREN OF TAMPA, FLORIDA, COMPARED WITH THOSE OF BALTIMORE, MARYLAND

Age	Percentage in Each Age Group	
	Tampa	Baltimore
5	2.3%	.8%
6	8.3	4.8
7	8.5	9.3
8	6.5	11.3
9	8.0	10.5
10	8.0	11.8
11	10.3	11.5
12	10.8	11.3
13	13.0	10.3
14	10.0	7.8
15	7.0	4.8
16	3.8	3.0
17	1.3	1.3
18	.8	.8

TEST RESULTS

A study of the educational achievement and mental development of the children in two grades of these schools was made to determine how well the pupils were classified. The best test of the classification of pupils is not the chronological age but the educational achievement and mental age. In a school which has but a single curriculum, children may be chronologically over age who are not mentally or educationally misplaced. The Thorndike-McCall test of understanding of sentences, and the Woody-McCall test of the fundamental operations of arithmetic were given to the pupils in grades 4 Senior and 6 Senior. Such tests give a basis for judgment as to the advancement of pupils as compared with that of other children in the schools throughout the country. The McCall Multi-Mental Scale was also used in these grades.

The reading test scores of 83 pupils in grade 6 Senior and of 77

pupils in grade 4 Senior are given in Table 65. Of the 77 pupils in grade 4 Senior, 65, or 84 per cent of the group, were below the standard for the grade to which they were assigned, while only 12, or 16 per cent, reached or exceeded the standard for their grade. Of these 12, one pupil tested above any child in the sixth grade. The median score is two full years below standard. This shows not only a failure to reach standards, but extremely poor classification of pupils. Of the 83 pupils in grade 6 Senior, 23 pupils showed a reading ability below grade 3 Senior standard. Only 12 reached or exceeded the standard for their grade. The median score is a year and a fourth below standard.

TABLE 64

DISTRIBUTION BY GRADES OF ALL THIRTEEN-, FOURTEEN-, AND FIFTEEN-YEAR-OLD BOYS AND GIRLS ENROLLED IN THE SCHOOLS FOR COLORED CHILDREN

TAMPA, FLORIDA—MAY, 1925

BOYS

Ages	Grades								Total
	1	2	3	4	5	6	7	8	
13	1	11	13	18	16	8	4	..	71
14	..	3	9	6	13	10	7	1	49
15	..	..	3	3	5	9	8	5	33
Total	1	14	25	27	34	27	19	6	153

GIRLS

Ages	Grades								Total
	1	2	3	4	5	6	7	8	
13	1	4	9	27	20	33	10	3	107
14	..	5	6	21	14	17	12	7	82
15	..	..	2	7	11	10	17	11	58
Total	1	9	17	55	45	60	39	21	247

TOTALS OF BOYS AND GIRLS

Ages	Grades								Total
	1	2	3	4	5	6	7	8	
13	2	15	22	45	36	41	14	3	178
14	..	8	15	27	27	27	19	8	131
15	..	..	5	10	16	19	25	16	91
Total	2	23	42	82	79	87	58	28	400

TABLE 65

DISTRIBUTION OF PUPILS IN THE FOURTH AND SIXTH GRADES OF SCHOOLS FOR COLORED CHILDREN WITH RESPECT TO THE GRADE STANDARDS ATTAINED IN SILENT READING ABILITY

TAMPA, FLORIDA—MAY, 1925

Thorndike-McCall Test of Understanding of Sentences

Grade Standard	Number of Pupils in Each Grade Reading Up to Indicated Grade Standard	
	Grade 4 Senior	Grade 6 Senior
2 Junior *	3	1
2 Senior	18	5
3 Junior	33	17
3 Senior	5	2
4 Junior	6	19
4 Senior	4	9
5 Junior	5	15
5 Senior	1	3
6 Junior	1	10
6 Senior	..	1
7 Junior	..	1
7 Senior	..	..
8 Junior	..	..
8 Senior	1	..
Total	77	83
Mean Score—TAMPA	36.6	41.8
STANDARD	41.8	53.7

* Three children in Grade 4 Senior read up to standard for the 2 Junior Grade but not up to standard for 2 Senior Grade. Eighteen read up to standard for the 2 Senior Grade but not up to standard for the 3 Junior Grade, etc.

The results of tests in arithmetic given to 65 pupils in grade 4 Senior and to 44 pupils in grade 6 Senior are shown in Table 66. Both the great spread in achievement and the low achievement found in the case of reading are repeated for arithmetic. The pupils in grade 4 Senior attained a median for problems solved correctly of 13 problems while the standard for the grade was 17.0 problems. This is practically three-fourths of a year below standard. The results in grade 6 Senior showed a median of 18 problems solved correctly as against a standard median of 25.1 problems. This is slightly more than a year and a half below standard.

Table 67 gives the results from the McCall Multi-Mental Scale which was given to 81 pupils of grade 6 Senior and 87 pupils of grade 4 Senior. Excluding one exceptionally low case and two

at the upper end of the scale, the range in mental ages for grade 6 Senior is from 8 years and 3 months to 12 years and 8 months, with a median age of 10 years and 6 months. The mid-point of the normal-age span for pupils of grade 6 Senior is 11 years and 9 months. Some pupils fall a year and a half below this while others exceed it by three years. It further shows the mental age of the pupils of this grade to be 1 year and 3 months greater than it should be for the grade in which they are placed.

TABLE 66

DISTRIBUTION OF PUPILS IN THE FOURTH AND SIXTH GRADES OF SCHOOLS FOR COLORED CHILDREN WITH RESPECT TO THE GRADE STANDARDS ATTAINED IN COMPUTATION IN ARITHMETIC

TAMPA, FLORIDA—MAY, 1925

Woody-McCall Test of Mixed Fundamentals in Arithmetic

Grade Standard	Number of Pupils in Each Grade Reaching Indicated Grade Standard	
	Grade 4 Senior	Grade 6 Senior
Below 3 Junior	14	..
3 Junior	10	1
3 Senior	31	9
4 Junior	7	2
4 Senior	3	14
5 Junior	..	7
5 Senior	..	6
6 Junior	..	2
6 Senior	..	1
7 Junior	..	2
Total	65	44
Median Score—TAMPA	13.0	18.0
STANDARD	17.0	25.1

In grade 4 Senior, with the exception of one case at the bottom of the scale and three cases at the top, the range of mental ages is from 8 years and 1 month to 11 years and 9 months with a median age of 9 years and 7 months. The mid-point for the chronological age of grade 4 Senior pupils is 9 years and 9 months which is practically the same as that of the mental age median for this class. This would indicate that these pupils are classified better with respect to mental age than their achievement in reading and arithmetic would indicate.

The extreme cases in mental age and the great spread in reading and arithmetic and in chronological age within the grade

indicate the need for more attention to the regulation of classification and progress.

CONCLUSIONS

If Tampa is to get the best results for the money expended on the schools for colored children, it is highly important to take steps to overcome the present conditions in these schools. Among the steps to be taken is the improvement of instruction and of the regulation of classification and progress. A complete reorganization and reclassification is essential.

TABLE 67

DISTRIBUTION OF PUPILS IN THE FOURTH AND SIXTH GRADES OF SCHOOL FOR COLORED CHILDREN WITH RESPECT TO LEVEL OF MENTAL DEVELOPMENT EXPRESSED IN MENTAL AGE

TAMPA, FLORIDA—MAY, 1925

McCall Multi-Mental Scale

Level of Mental Development Mental Age in Years Months	Number of Pupils in Each Grade of Indicated Mental Age	
	4 Senior	6 Senior
6—0	2	..
6—2 .....	..	..
6—3 .....	..	..
6—4 .....	..	..
6—6 .....	..	..
6—8 .....	..	..
6—10 .....	..	1
7—0 .....	..	..
7—2 .....	..	..
7—4 .....	..	..
7—7 .....	..	..
7—9 .....	..	..
8— $\frac{1}{2}$	2	..
8—3	1	3
8—6	3	..
8—9	9	..
9—1	9	2
9—4	15	5
9—7	11	4
10—1	11	13
10—5	13	22
10—9	4	13
11—3	2	8
11—8	2	5
12—1 .....	..	3
12—8	1	1
12—2* .....	..	1
13—8	2	..

* Thirteen years, 2 months represents 12 years, 11 months to 13 years, 5 months.

Another step that should be taken to overcome the present undesirable condition is the establishment of a well-organized junior-senior high school. Many of the boys and girls now enrolled in grades 5 and 6 who are over age for the grade in which they are placed would be greatly benefited by being given the opportunity to attend a junior-senior high school in which they could have opportunities other than those offered in the traditional school. The interest in education that has resulted in making the thirteen-year-age group the largest in school indicates particular need on the junior high school level. The opportunities that are needed for colored children should be organized and supervised by an individual trained for this particular task.

CHAPTER XII

TEACHERS' SALARIES AND COST OF LIVING

This chapter presents the results of a study of the relation of teachers' salaries to the cost of their board and rooms this year and a year ago. The facts here presented were obtained from an analysis of the confidential reports made by more than 460 of the 564 teachers in the Tampa schools. Two hundred eighty-four, or more than 60 per cent of these teachers who reported, were living at home and about 40 per cent were living in rented rooms. Of the 178 living in rented rooms all but 10 reported complete facts concerning their salaries and the cost of board and room for this year. One hundred twenty-two of those living in rented rooms also reported their expense for board and room for the preceding year.

The detailed study of the cost of board and room was of necessity confined to those teachers who were not living at home. It was often impossible for those living at home to compute accurately the share of the total expenditure of the family which was properly chargeable to them. It is further true that the fact that some of these teachers living at home did not pay either room rent or board would have no bearing upon the salary needs of Tampa teachers as a whole. It would be absurd, of course, to assume that the community has a right to pay smaller salaries to teachers because the families of some of them see fit to donate to these fortunate individuals the whole or a part of their living expenses.

GENERAL STATEMENTS CONCERNING ALL TEACHERS

Certain facts reported by all teachers, whether living at home or in rented rooms, are of general interest. Teachers in the Tampa schools have had an average of 9 years of teaching experience. Four of these years have been spent in Tampa and 5 outside of Tampa. Those teachers living at home average a half

year more of teaching experience than those living in rented rooms. The first group has, on the average, 5 years of experience in Tampa and 4 years outside, while those teachers living in rented rooms have taught less than 3 years in Tampa and nearly 6 years elsewhere before entering the Tampa school system.

Teachers of the Hillsboro County High School reported an average teaching experience of a little more than 12 years—four and one-half years in Tampa and seven and one-half years outside of Tampa. The junior high school teachers averaged 4 years' teaching in Tampa and a little less than 7 years outside. The elementary teachers, on the whole, have had less teaching experience than the junior and senior high school teachers. The elementary teachers of each of the two districts have averaged 4 years' service in the Tampa schools. Those of District No. 4 have also had 4 years' experience outside of Tampa, while those in District No. 45 have had only two and one-half years' experience before entering the Tampa schools.

The average salary of all the teachers who reported is \$1,150 for 1925-1926. Last year these same teachers averaged \$1,174. This decrease in the average salary does not indicate a lowering of salaries by the school authorities of Tampa. The higher average for these teachers for 1924-1925 results from the fact that a certain number of them taught in other cities last year, many of them at salaries from \$200 to \$300 higher than are being paid them in Tampa this year. As a matter of fact, a part of the teachers who taught in Tampa both this year and last received increases of \$45 or \$90 a year, though a great many are receiving exactly the same salary this year as last. It is an interesting fact that the average salary of those teachers living in rented rooms is \$50 a year more than the salary of those living at home. The explanation of this undoubtedly lies in the probability that many of the newer teachers are living in rented rooms, and it has been found impossible for the school authorities to secure new teachers who are satisfactory unless they paid them a salary higher than the average salary being paid throughout the Tampa schools.

The average salary of the 47 senior high school teachers who reported is \$1,524. Seventy-nine junior high school teachers report an average of \$1,320, almost exactly \$200 per year less. The average salary reported by 233 teachers of District No. 4 was

TABLE 68

FACTS CONCERNING 462 TAMPA TEACHERS' SALARIES AND SUMMER SCHOOL ATTENDANCE FOR LAST TWO YEARS AND TOTAL TEACHING EXPERIENCE

TAMPA, FLORIDA—OCTOBER, 1925

Location of Positions by Teacher Group	Mean Annual Salary		Summer Session			
			Per Cent Attending		Mean Expense	
	1924	1925	1924	1925	1924	1925
Senior High School						
At Home	\$1633	\$1584	12.5%	29.2%	\$467*	\$321*
Not at Home	1499	1462	30.4	21.7	306*	421*
Total	\$1562	\$1524	21.3%	25.5%	\$354	\$362
Junior High Schools						
At Home	\$1362	\$1308	17.1%	39.0%	\$188	\$219*
Not at Home	1378	1334	39.5	34.2	230	308
Total	\$1369	\$1320	27.8%	36.7%	\$217	\$259
Elementary, White, District No. 4						
At Home	\$1070	\$1049	16.1%	33.3%	\$158	\$159
Not at Home	1059	1055	20.7	29.3	156	187
Total	\$1066	\$1051	17.7%	31.9%	\$157	\$168
All Teachers, White, District No. 4						
At Home	\$1182	\$1156	15.9%	33.9%	\$191	\$187
Not at Home	1223	1197	27.3	29.4	211	252
Total	\$1198	\$1172	20.4%	32.1%	\$202	\$210
Elementary, White, District No. 45						
At Home	\$928	\$962	29.4%	29.4%	\$144	\$125
Not at Home	1219*	896*	.0	37.5	....	83*
Total	\$969	\$950	23.8%	31.0%	\$144	\$115
All Elementary Teachers, White, Both Districts						
At Home	\$1043	\$1033	18.5%	32.6%	\$154	\$153
Not at Home	1070	1042	18.9	30.0	156	175
Total	\$1051	\$1036	18.6%	31.8%	\$155	\$160
All Teachers, White, Both Districts						
At Home	\$1147	\$1130	17.7%	33.3%	\$180	\$179
Not at Home	1222	1183	25.8	29.8	211	241
Total	\$1174	\$1150	20.7%	32.0%	\$195	\$201
All Colored, Both Districts						
At Home	\$574	\$584	34.4%	44.8%	\$144	\$110
Not at Home	679	751	11.1	18.5	179*	123*
Total	\$621	\$664	23.2%	32.1%	\$152	\$114

* No great significance should be attached to the figures of this table which are starred, like \$1,219. The averages marked thus are based on a group of fewer than 10 cases.

\$1,051 and that reported by 40 teachers of District No. 45 was \$950. The elementary teachers of the two districts have an average salary this year of \$1,036. In every case the average salary of these same teachers last year was greater than it is at present.

These averages of years of teaching experience and of salaries for this year and for last year, together with facts concerning the cost of summer school attendance, are reported in Table 68 at the close of this chapter.

The cost of summer school attendance is an important factor in the economic status of the teachers of Tampa. Of the 462 teachers who made reports, 138 attended summer school in 1925 at a total cost of more than \$28,000. Of these same teachers 97 reported summer school attendance in 1924 at a cost of more than \$18,000. These cost figures include traveling expenses, tuition, and the cost of living while in attendance at summer session.

Twenty-one per cent of the teachers of both districts attended summer school in 1924 and 32 per cent of this group were in attendance during the summer of 1925 (Table 68). The average cost per teacher attending summer school was \$195 in 1924 and \$201 in 1925. The junior high schools reported the largest percentage in summer school each summer with 28 per cent for 1924 and 37 per cent for 1925. The average cost per teacher for attending summer school this past summer was \$362 for a senior high school teacher, \$259 for a junior high school teacher, and \$160 for an elementary school teacher. The average cost per teacher last year was not quite as high as in 1925, but the difference is not at all significant. Teachers who live at home and went to summer school this past summer spent \$62 per teacher less than those who live in rented rooms.

Even if it is to be assumed that a teacher should be expected to attend summer school only one summer out of every three, it is clear that she would have to lay aside from \$60 to \$120 from her salary each year in order to be able to care for this professional expense every third year.

FACTS CONCERNING TEACHERS WHO LIVE AT HOME

It has been stated that of the 462 teachers who reported, 284 were living at home. "At home" was defined as meaning "as one of a family of near relatives." Two hundred forty-two of

these teachers living at home reported the complete facts concerning the number of rooms in the home and either the market value, if the home was owned, or the annual rental paid. Sixty-three of these teachers live with families whose homes are rented and 179 in homes which are owned. The typical teacher living at home is one of a family of four, three of whom are adults. Those who rent homes have an average of six rooms at an average annual rental of \$908. These facts for each group of teachers in Tampa are presented in Table 69 at the end of this chapter.

Those living in owned homes have nearly seven rooms per home on the average and the average value of these seven rooms per family is \$15,559.

FACTS CONCERNING TEACHERS NOT LIVING AT HOME

The real truth concerning the adequacy of the salaries of the teachers of Tampa must be found in a study of the living costs of those teachers who must rent rooms and buy their meals. In that such teachers must pay the total cost of living from their salaries—none of it being contributed by other members of the family—salaries of all teachers must be high enough to make it possible for teachers to live under conditions in which they must finance themselves wholly.

Complete facts are available for 178 teachers living in rented rooms. These facts are presented in Tables 70 and 71 at the end of the chapter. The first of these, Table 70, shows that the teachers of District No. 4 who pay for meals and rooms separately are paying a little more than \$28 per month for room and nearly \$9.50 per week, or \$38 per month for meals, or a total of \$66 per month for board and room. Those of the same group of teachers who pay for board and room together, are able to secure it, on the average, for only \$43 per month. This indicates that those teachers who board at the homes where they rent their rooms are able to live on less than two-thirds as much as those who must go out for their meals. The facts for the teachers of District No. 4 are based upon the returns from 114 teachers securing board and room separately and 26 teachers who board at their rooming place.

The same table shows that the teachers of District No. 45 spend a total of nearly \$73 a month for board and room if they pay

TABLE 69
FACTS CONCERNING 284 TEACHERS LIVING AT HOME
SIZE OF FAMILY AND MARKET VALUE OR ANNUAL RENTAL VALUE OF FAMILY HOMES
TAMPA, FLORIDA—OCTOBER, 1925

Teacher Group	Number of Teachers Reporting	Size of Family			Rented Houses			Number of Teachers Reporting	Mean Value of Home Per Teacher	Mean Value of Home Per Room	Mean Number of Rooms Per Teacher
		Mean Number in Family	Mean Numbers of Adults	Number of Teachers Reporting	Mean Cost of Rental Per Teacher	Mean Cost of Rental Per Room	Mean Number of Rooms Per Teacher				
Senior High School	23	4.0	3.2	4	\$ 750	\$167	4.5	\$24,861	\$8,009	6.9	
Junior High School	41	4.0	3.1	10	1,070	167	6.4	13,600	1,967	6.9	
Elementary, White, District No. 4	154	4.3	3.4	35	940	149	6.3	15,568	2,354	6.6	
Elementary, White, District No. 45	33	4.2	3.3	8	644	114	5.6	9,690	1,443	6.7	
Elementary, White, Both Districts	187	4.3	3.4	43	885	143	6.2	14,531	2,192	6.6	
All White, District No. 4	218	4.2	3.3	49	951	154	6.2	16,446	2,455	6.7	
All White, Both Districts	251	4.2	3.3	57	908	149	6.1	15,559	2,322	6.7	
All Colored, Both Districts	29	3.9	2.9	6	284	53	5.3	7,796	1,081	7.2	

Not all of the 284 teachers reported all of the facts requested.

for them separately, as against \$32.50 if these are secured in the same house. It is a peculiar fact that those teachers in District No. 45 who get board and room together, spend no more for both board and room than the others spend for room alone. This apparent impossibility is explained by the fact that there were only seven white teachers of District No. 45 living in rented rooms who made reports. Three of them secured board and room separately, and four of them boarded at the place where they roomed. It would be absurd to generalize concerning living conditions for teachers of District No. 45 on the basis of such a small number of cases.

In the last three columns of Table 70 is presented the average monthly expenditure for board and room in 1924 and in 1925, along with the percentage of increase of that cost during this one-year period. It should be noted in connection with these three columns that the comparison there reported is based only on the reports of those teachers who gave the facts for both 1924 and 1925. They are for that reason much more valid than if they were general averages based on two different groups of teachers. According to this table the average expenditure of the teachers of District No. 4 for board and room increased 34 per cent from 1924 to 1925. The average increase for the teachers of District No. 45 was 16 per cent.

A further study was made to determine the relative cost of board and room to those teachers who roomed alone and to those who roomed with others. Of the 140 teachers of District No. 4 who made reports, 103 roomed with others and 37 roomed alone. Twenty of those who roomed with others secured board and room at the same place, as did 6 of the 37 who roomed alone. Those who roomed with others secured rooms without meals for \$10 per month less than those who roomed alone, but they spent \$1 per week or \$4 per month more for meals, which resulted in a net saving of approximately \$6 per month. Those who roomed in the homes where they boarded saved only \$2 per month by rooming with others. This table also shows the additional cost of living alone for the teachers of other groups in the two districts.

It is interesting to note that the teachers who prepare meals in their rooms do so at an average of 51 cents per meal as against 47 cents per meal bought in boarding houses or restaurants.

It will be found that the facts in the first five columns of Table 70 do not seem to be consistent with those reported in the last three columns. The explanation is that the first part of the table presents the data for every teacher who reported any of these facts for 1925. As stated above, the last three columns are based upon the reports of those teachers who gave the facts for both 1924 and 1925.

The most important and significant study of the economic status of Tampa's teachers is reported in Table 71. There were some teachers who reported their salary who did not report their expenditure for board and room. In this table the reports of these teachers were eliminated. In determining the percentage of the salary of each group which was expended for board and room in 1924 and in 1925, the average salary of all teachers reporting from the two districts was nearly \$1,150 in 1924, and their average expenditure for board and room was more than \$49 per month. This means that the yearly cost of board and room in 1924 was 51 per cent of the total income of the teachers in Tampa. The situation is much more serious this year.

The average salary of those who also reported their living costs is \$1,186 this year and the average expenditure for board and room is \$61.49 per month. This means that the annual cost of board and room is this year more than 62 per cent of the total annual salary. These averages are based on the reports of the 151 teachers who lived in rented rooms.

Table 71 at the end of this chapter reports corresponding facts for various groups of teachers and also makes a separate study of the relative cost of board and room to those teachers who are new in Tampa this year as compared with those who have been in Tampa for a longer period. It is to be noted that teachers who have come to Tampa this year are finding it necessary to spend little more of their salary for board and room than are those who have been teaching in Tampa more than one year.

It may be enlightening to discuss these expenditures for board and room in terms of gross amounts as well as in terms of the percentage of total salary which board and room use up. The teachers of the two districts with an average salary of \$1,186 per year are spending at the rate of \$738 per year for board and room alone. This means that the typical teacher has less than \$450 per year to spend for all of the other things she may need

or want. If this comparison were made on the basis of the largest group of teachers falling in one classification—the teachers of the elementary schools of District No. 4—it is found that the average annual salary is almost exactly \$1,058 this year and the cost of board and room is at the rate of \$707 per year. The difference in these amounts is only \$350 per teacher.

If one of these elementary teachers of District No. 4 plans to go to summer school next summer, it will cost her \$170 on the basis of the average cost to these teachers in the summer of 1925. This would necessitate her paying out less than \$180 for all items other than board and room if she is to pay summer session bills out of this year's salary.

The survey staff has made a very careful and detailed study of all of the evidence available as to the cost of board and room to teachers of other localities. It has been found that there is a very general agreement that employed women must have a salary large enough that not more than 50 per cent of it will be required for board and room. With living costs as reported in Tampa this year, the acceptance of this standard would require an increase of an average of \$290 per year to every teacher in the two districts. The average salary of high school teachers would have to be increased nearly \$150, that of junior high school teachers \$215, that of the elementary teachers in District No. 4 by \$350, and that of the elementary teachers in District No. 45 by more than \$400 if Tampa teachers are to spend only 50 per cent of their salary for board and room this year.

The last three columns of Table 71 report the average cost of attendance at summer school. There were three high school teachers, five junior high school teachers and six elementary teachers, all of District No. 4, who attended summer school both in 1924 and 1925. The average cost of the two sessions was \$531, or \$265 per summer. There were 25 teachers among these 178 teachers living in rented rooms who attended summer school in 1924 only, and another group of 30 teachers who attended in 1925 but not in 1924. Of these 178 teachers there were therefore 14 who were in summer school both summers and 55 others who attended school one of the two summers. These figures indicate that more than 40 per cent of the teachers of Tampa who live in rented rooms have been in summer session one or both of the last two summers.

It is reasonable to expect a larger proportion of the Tampa teachers to become interested in the professional training available in summer schools as the educational program of the Tampa schools becomes broadened and modernized. The citizens of Tampa can make no better investment than to increase salaries of these teachers to the point that teachers will not have to use the entire savings of two or three years in order to pay for attendance at a single summer session.

The two tables, Tables 70 and 71, contain a great number of most interesting and important facts for the teachers and the administrative officials of Tampa schools. It is impossible to discuss all of these facts in the text of this survey report. It is recommended that all those interested study these tables carefully. They undoubtedly represent one of the most significant studies of the economic status of teachers ever made in an American city.

FACTS CONCERNING COLORED TEACHERS

Reports were secured from 56 teachers of colored children. Their average salary this year is \$664. Twenty-nine of these teachers lived at home and the other 27 lived in rented rooms. These 56 teachers had an average of nearly six years of teaching in Tampa and more than four and one-half years outside of Tampa.

Of the 29 teachers living at home, 6 reported an average rental per family of \$284 for five rooms; 19 reported that they lived in homes that were owned, the average home having seven rooms and being valued at \$8,000. Four teachers did not report these facts. Twenty-three per cent of those reporting attended summer school in 1924 at an average expense of \$152; 32 per cent attended in 1925 at an average expense of \$114 per teacher. Only 2 of these 27 teachers who lived in rented rooms and bought their board secured board and room together. The average cost to these two teachers was \$32.50 per month for both board and room. Of the 25 teachers of the two districts who did not secure their meals at the place where they roomed, the average cost of room rent was \$17.50 per month. Their expenditure for meals averaged \$7.68 per week, or approximately \$31 per month, making their total expenditure for room and board a little less than \$50 per month.

The average salary of the 27 teachers is a little more than \$750 this year and their monthly expenditure for board and room \$47. In other words, these teachers are finding it necessary to spend 75 per cent of their total annual income for board and room alone. The cost of board and room has increased 13 per cent in the last year.

The colored teachers of Tampa spend on the average but \$185 of their total salary for things other than board and room. Attending a session of summer school in 1924 cost these teachers approximately \$115. In spite of that fact, 32 per cent of those who reported did go to school.

SUMMARY

A. Facts Concerning All Teachers Reporting

1. The study of the relation of teachers' salaries to their expenditure for board and room is based on confidential signed reports from 462 of the 564 teachers of the Tampa schools.

2. These 462 teachers have had nine years of teaching experience on the average, five years outside of Tampa and four years in the Tampa schools. Senior high school teachers have an average of 12 years' experience; junior high school teachers, 11 years; elementary teachers of District No. 4, 8 years; and those of District No. 45, 6½ years.

3. The average salary of the teachers reporting was \$1,150 in 1925-1926 and \$1,174 in 1924-1925. This does not mean that any salaries of teachers were decreased in 1925-1926. The lower average results from many new teachers accepting lower salaries in Tampa than they received in other cities in 1924-1925.

4. Senior high school teachers report an average salary of \$1,524; junior high school teachers, \$1,320; elementary teachers of District No. 4, \$1,051; and elementary teachers of District No. 45, \$950.

5. One hundred thirty-eight teachers, or 32 per cent of these reporting, attended summer session last summer at a total cost of more than \$28,000. Ninety-seven teachers of the group attended summer school in 1924 at an expenditure of more than \$18,000. These figures include traveling expenses, tuition, and the cost of living while in attendance at summer session.

6. The average expenditure for summer school attendance per

teacher in 1925 was \$362 for senior high school teachers, \$259 for junior high school teachers, and \$160 for elementary teachers.

B. Facts Concerning Teachers Living at Home

7. Approximately 60 per cent of the whole group of teachers reporting are living at home this year. "At home" is defined as meaning "as one of a family of near relatives."

8. Twenty-five per cent of these teachers live in families whose homes are rented; 75 per cent in homes which are owned.

9. The typical teacher living at home is one of a family of four, three of whom are adults.

10. The families of teachers living in rented rooms pay an average of \$908 annually for an average of six rooms.

11. Homes which are owned average seven rooms and have a market value of nearly \$15,000.

C. Facts Concerning Teachers Not Living at Home

12. A valid study of the relationship between teachers' salaries and cost of living must be based on the facts for teachers living in rented rooms.

13. Teachers of District No. 4, securing board and room separately, are spending an average of \$66 per month or \$800 per year for board and room. Those who board at their rooming place expend only \$43 per month for room and board.

14. There were too few reports from District No. 45 to justify any general conclusion concerning the cost of living for this group of teachers.

15. It costs \$10 per month more on the average to room alone than to room with others.

16. The average cost of meals prepared at home is 51 cents as against the cost of 47 cents per meal bought in boarding houses or restaurants.

17. The average cost of board and room for the teachers of District No. 4 has increased 34 per cent in the last year. The increase for teachers of District No. 45 was 16 per cent.

18. Last year the teachers of Tampa secured board and room at an annual cost of 51 per cent of their total salary. This year the cost of board and room is 62 per cent of the annual salary.

19. Students of sociology and economics agree, in general, that the salary of an employed woman should be at least two times the cost of room and board.

20. With the cost of living as it now is in Tampa, meeting this standard of spending only 50 per cent of the annual salary for board and room would require that the average salary of senior high school teachers be increased \$150; that of junior high school teachers, \$215; that of elementary teachers of District No. 4, \$350; and that of elementary teachers of District No. 45 be increased more than \$400.

D. Facts Concerning Colored Teachers

21. The average salary of the colored teachers reporting is \$664 this year. Their average teaching experience is six years in Tampa and four and one-half years outside of Tampa.

22. Twenty-three per cent of the colored teachers attended summer school in 1924 and 32 per cent in 1925. The average expense for summer school was \$152 in 1924 and \$114 in 1925.

23. Twenty-five colored teachers who secure board and room separately expend an average of \$50 per month for these items.

24. These colored teachers are spending 75 per cent of their salary for board and room this year as against 67 per cent last year.

TABLE 70
FACTS CONCERNING 178 TAMPA TEACHERS LIVING IN RENTED ROOMS (NOT AT HOME)
COMPARISON OF THOSE ROOMING ALONE VERSUS WITH OTHERS, AND OF THOSE TEACHING FIRST YEAR IN TAMPA VERSUS THOSE IN TAMPA BEFORE THIS YEAR
TAMPA, FLORIDA—OCTOBER, 1925

Living Conditions Among Teacher Groups	Mean Monthly Rental (Board and Room Separately)	Mean Monthly Rental (Board and Room Together)	Mean Weekly Cost of Meals Compared to Rooms	Mean Weekly Cost of Meals Bought Outside	Mean Weekly Total Cost—In and Out	Meals Prepared. Per Meal	Meals Bought Outside. Cost Per Meal	In and Out Total Cost Per Meal	Mean Monthly Cost Board and Rental 1924	Mean Monthly Cost Board and Rental 1925	Percent- age of Increase of Mean Monthly Rental and Board 1925 Over 1924
Senior High School											
Living with Others	\$25.55	\$81.00*	\$3.27	\$5.39	\$11.06	\$.92	\$.57	\$.59	\$40.50*	\$72.38*	78.7%*
Living Alone	31.56*	38.00*	.56*	7.89	8.45*	.31*	.46*	.45*	47.14*	62.89*	33.4*
New	32.75*	36.00*	2.00*	8.19	10.19*	.53*	.48*	.49*	40.25*	71.00*	76.4*
Old	26.64	60.50*	2.27	7.94	10.21	.57	.55	.56	44.82	66.84	49.1
Total	28.25	52.33*	2.05	8.17	10.22	.55	.52	.53	43.60	67.95	55.8
Junior High Schools											
Living with Others	28.59	47.97*	2.57	6.70	9.27	.40	.49	.46	44.42	57.64	29.8
Living Alone	39.75	48.00*	1.03	7.53	8.56	.44	.42	.42	54.23	69.05	27.3
New	32.10	40.93*	2.30	7.17	9.47	.41	.49	.47	49.79	60.39	21.3
Old	34.39	52.20*	1.54	6.91	8.45	.42	.43	.42	47.08	63.80	35.5
Total	33.21	47.98*	1.93	7.04	8.97	.41	.46	.45	48.34	62.21	28.7
Elementary Schools, White, District No. 4											
Living with Others	24.79	36.92	4.59	4.93	9.52	.54	.46	.50	48.23	62.26	29.1
Living Alone	33.35	47.50*	2.05	7.17	9.22	.53	.48	.49	51.50*	74.35*	44.4*
New	22.78	33.75*	4.21	4.77	8.98	.56	.45	.51	41.22	59.96	45.5
Old	28.87	40.00	4.39	5.48	9.87	.53	.48	.48	51.68	65.55	26.8
Total	26.11	38.33	4.21	5.27	9.48	.54	.47	.49	48.64	63.77	31.1

All Schools, White, District No. 4											
Living with Others	25.67	42.44	4.01	5.74	9.75	.52	.49	.50	46.31	62.23	34.4
Living Alone	35.31	44.50*	1.22	7.52	8.74	.46	.45	.45	51.59	68.60	33.0
New	27.90	36.73*	3.33	5.97	9.30	.51	.48	.49	44.63	61.44	37.7
Old	29.76	45.67	3.31	6.28	9.59	.52	.47	.48	49.11	65.31	33.0
Total	28.29	42.92	3.26	6.22	9.48	.51	.47	.49	47.73	63.94	34.0
All Schools, White, District No. 45											
Living with Others	35.00*	30.00*	11.25*	1.25*	13.50*	.61*	.50*	.60*	80.00*	85.00*	6.3*
Living Alone	28.00*	35.00*	5.00*	5.00*	5.00*	..	.24*	.24*	28.00*	48.00*	71.4*
New	28.00*	30.00*	5.00*	5.00*	5.00*	..	.24*	.24*	28.00*	48.00*	71.4*
Old	35.00*	35.00*	11.25*	1.25*	13.50*	.61*	.50*	.60*	80.00*	85.00*	6.3*
Total	32.67*	32.50*	7.50*	2.50*	10.00*	.61*	.29*	.48*	62.67*	72.67*	16.0*
All Schools, Colored, Both Districts											
Living with Others	16.59	32.50*	7.45	1.30	8.75	.51	.41	.49	51.71	53.07	2.6
Living Alone	18.21	32.50*	1.98	4.86	6.84	.40	.39	.39	33.88	43.00	26.9
New	17.33*	32.50*	2.58	4.50*	7.08*	.47*	.39*	.41*	33.67*	44.17*	31.2*
Old	17.59	..	5.41	2.61	8.02	.48	.40	.45	47.89	50.06	4.5
Total	17.50	32.50*	4.39	3.29	7.68	.48	.39	.36	42.20	47.70	13.0

* No great significance should be attached to the figures of this table which are starred, such as \$31.56.* The averages marked thus are based on a group of fewer than 10 cases.

TABLE 71
FACTS CONCERNING 178 TEACHERS LIVING IN RENTED ROOMS (NOT AT HOME)
SUMMER SCHOOL EXPENSE AND COMPARISON OF SALARIES WITH COST OF BOARD AND ROOMS
TEACHERS NEW IN TAMPA THIS YEAR COMPARED WITH THOSE IN TAMPA BOTH YEARS
TAMPA, FLORIDA—OCTOBER, 1925

Teacher Group	1925				1926				Mean Expense Summer Season		
	Mean Annual Salary	Mean Monthly Board and Room	Per Cent of Salary	Mean Annual Salary	Mean Monthly Board and Room	Per Cent of Salary	Per Cent of Salary	Both Summers	1925 Only	1924 Only	
Senior High School											
New	\$1,525.00*	\$40.25*	31.7%*	\$1,383.12*	\$75.25*	65.3%*		\$800.00*	\$108.00*		
Old	1,449.55	44.82	37.1	1,527.86	63.23	49.7		877.00*	\$412.50*	325.00*	
Total	1,469.67	43.60	35.6	1,475.23	67.60	55.0		851.33*	412.50*	216.50*	
Junior High Schools											
New	1,488.75	49.96	40.3	1,368.89	65.13	57.1		1,087.50*	162.33*	387.50*	
Old	1,305.63	47.08	43.3	1,299.74	63.99	59.1		420.00*	305.00*	152.25*	
Total	1,384.11	48.31	41.9	1,333.38	64.55	58.1		687.00*	251.50*	293.40	
Elementary Schools, White, District No. 4											
New	1,081.00	49.53	55.0	1,027.67	57.11	66.7		248.33*	291.67*	224.40*	
Old	1,071.43	51.64	57.8	1,083.29	60.44	66.9		233.33*	175.64	128.33*	
Total	1,074.77	50.91	56.8	1,057.68	58.91	66.8		240.83*	216.59	172.00	
All Schools, White, District No. 4											
New	1,296.13	48.50	44.9	1,174.98	61.85	63.2		620.00*	248.56*	281.77	
Old	1,215.18	48.95	48.3	1,222.97	61.88	60.7		464.25*	237.89	169.08	
Total	1,244.36	48.79	47.0	1,201.29	61.87	61.8		531.00	241.44	227.68	

All Schools, White, District No. 45									
New	992.50*	64.00*	77.4*	707.50*	27.50*	46.6*	.....	75.00*	.....
Old	992.50*	64.00*	77.4*	900.00*	63.75*	87.7*	.....	87.50*	.....
Total	992.50*	64.00*	77.4*	835.83*	53.00*	76.1*	.....	83.33*	.....
All Schools, White Both Districts									
New	1,296.13	48.50	44.9	1,160.13	60.76	62.8	620.00*	231.20	281.77
Old	1,207.37	49.48	49.2	1,206.41	62.08	61.7	464.25*	222.85	169.08
Total	1,146.59	49.13	51.4	1,185.73	61.49	62.2	531.00	225.63	227.68
All Schools, Colored, Both Districts									
New	943.33*	33.67*	42.8*	925.23	43.25	56.1	.....	.....	150.00*
Old	634.44*	47.89*	90.6*	630.47	49.66	94.5	.....	123.40*	193.00*
Total	758.00	42.20	66.8	750.56	47.05	75.2	.....	123.40*	178.67*

* No great significance should be attached to the figures of this table which are starred, such as \$1,525.* The averages marked thus are based on a group of fewer than 10 cases.





