Department of Education

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Chief of Department

HOWARD J. ROGERS, Albany, N. Y.

MONOGRAPHS ON EDUCATION IN THE UNITED STATES

EDITED BY

NICHOLAS MURRAY BUTLER

President of Columbia University in the City of New York

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Division of Exhibits

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EDUCATIONAL ORGANIZATION AND ADMINISTRATION

BY

ANDREW SLOAN DRAPER

President of the University of Illinois

OF CONG

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EDUCATIONAL ORGANIZATION AND ADMINISTRATION

INTRODUCTORY

Any treatment of the legal organization and the authoritative methods of administration by which the great public educational system of the United States is carried on must almost necessarily be opened by a statement of the salient points in the evolution of that system, for the form of organization and the laws governing the operations of the schools have not preceded, but followed and been determined by the educational movements of the people and the necessities of the case.

The first white settlers who came to America in the early part of the seventeenth century were from the European peoples, who were more advanced in civilization than any others in the world. Each of the nations first represented had already made some progress in the direction of popular education. Such educational ideals as these different peoples possessed had resulted from historic causes, and were very unlike. The influences more potent than any others in determining the character of American civic institutions were English and Dutch. The English government was a constitutional monarchy, but still a monarchy, and the constitutional limitations were neither so many nor so strong as later popular revolutions have made them. English thought accepted class distinctions among the people. The advantages of education were for the favored class, the nobility. The common people expected little. Colleges and fitting schools were maintained for the training of young men of noble birth for places under the government and in the government church, but there were no common schools for all. The nobility were opposed to general education lest

the masses would come to recognize God-given rights and demand them, and the masses were yet too illiterate to understand and enforce the inalienable rights of human nature. The Dutch had gone farther than the English; they had just waged a long and dreadful and successful war for liberty, and with all its horrors war has uniformly sharpened the intelligence of a people. This war for civil and religious liberty had enlarged their freedom and quickened their activities; they had become the greatest sailors and the foremost manufacturers in the world; and they had established the government policy of maintaining not only colleges, but common schools for all.

The first permanent white settlers in the United States were English and Dutch. In the beginning they had no thought of ceasing to be Englishmen and loyal subjects of the English monarchy, or Dutchmen with permanent fellowship in the Dutch Republic. They each brought their national educational ideas with them. Each people was strongly influenced by religious feelings, and life in a new land intensified those feelings. The English in Massachusetts were at the beginning very like the English in England. The larger and wealthier and more truly English colony recognized class distinctions and followed the English educational policy. They first set up a college to train their aristocracy for places in the state and the church, and for a considerable time their ministers, either at the church or in the homes, taught the children enough to read the Bible and acquire the catechism. The Dutch, more democratic, with smaller numbers and less means, and more dependent upon their government over the sea, at once set up elementary schools at public cost and common to all. In a few years the English overthrew the little Dutch government and almost obliterated the elementary schools. For a century the English royal governors and the Dutch colonial legislatures struggled over the matter of common schools. The government was too strong for the humble people; little educational progress was made. Near the close of that century the government

established King's college to educate sons of noble birth and prevent the spread of republican ideas. The Revolution of 1776 changed all. In fighting together for national independence the different peoples assimilated and became Americans in the new sense. They not only combined their forces in war, but in peace they combined the enlarged intelligence which the war had brought to them. They realized that education in all its phases and grades must be encouraged, and, so far as practicable, made universal under a democracy in which the rights of opportunity were to be equal.

But while they began to be interested in education it was because they saw that schools would help the individual and so promote virtue and extend religion. It did not occur to them at the first that the safety of the new form of government was associated with the diffusion of learning among all the people. This is not strange, for the suffrage was not universal at the beginning of independent government in America. Therefore, while the desirability of education was recognized, it was understood to be the function of parents to provide it for their children, or of guardians and masters to extend it to their wards and apprentices. When schools were first established they were partnership affairs between people who had children in their care, and for their convenience. They apportioned the expense among themselves; such as had no children were without much concern about the matter.

It was soon seen that many who had children to educate would neglect them in order to avoid the expense of contributing to the support of the school. Aside from this the schools were very indifferent affairs. If they were to be of any account they must have recognition and encouragement from government. It was easily conceived to be a function of government to *encourage* schools. Encouragement was given by official and legislative declarations in their behalf and then by authorizing townships to use funds derived from excise fees and other sources for the benefit of the schools when not otherwise needed. It was a greater step to attempt

to say that townships should require people, who had children to educate, to maintain schools, and a still greater one to adopt the principle that every child was entitled to at least an elementary education as of right, that this was as much for the safety of the state as for the good of the child, that therefore the state was bound to see that schools were provided for all, and that all the property of all the people should contribute alike to their support. Perhaps it was even a greater step to provide secondary and collegiate, and in many cases professional and technical, training at the public cost. But these great positions were in time firmly taken.

There was nothing like an educational system in the United States at the beginning of the nineteenth century. At that time there were four or five colleges, here and there a private academy or fitting school, and elementary schools of indifferent character in the cities and the thinly settled towns. In the course of the century a great system of schools has come to cover the land. It is free and flexible, adaptable to local conditions, and yet it possesses most of the elements of a complete and symmetrical system. The parts or grades of this system may perhaps be designated as follows:

a) Free public elementary schools in reach of every home in the land.

b) Free public high schools, or secondary schools, in every considerable town.

c) Free land grant colleges, with special reference to the agricultural and mechanical arts, in all the states.

d) Free state universities in practically all of the southern states and all the states west of Pennsylvania.

e) Free normal schools, or training schools for teachers, in practically every state.

f) Free schools for defectives, in substantially all of the states.

g) National academies for training officers for the army and navy.

h) A vast number of private kindergartens, music and art schools, commercial schools, industrial schools, professional schools, denominational colleges, with a half dozen leading and privately endowed universities.

This mighty educational system has developed with the growth of towns and cities and states. It has been shaped by the advancing sagacity of the people. Above all other of American civic institutions, it has been the one most expressive of the popular will and the common purposes. Everywhere it is held in the control of the people, and so far as practicable in the control of local assemblages. While the tendencies of later years have, from necessities, been towards centralization of management, the conspicuous characteristic of the systems has always been the extent to which the elementary and secondary schools are controlled and directed by each community. The inherent and universal disposition in this direction has favored general school laws and yielded to centralized administration only so far as has come to be necessary to life, efficiency and growth. But circumstances have made this necessary to a very considerable extent.

Bearing in mind the historic facts touching the development of the school system, we may proceed to consider the legal organization and authoritative scheme of administration which have arisen therefrom. We will begin with the most elementary and decentralized form of organization and proceed to the more general and concentrated ones, following the steps which have marked the growth of the system in a general way, but with no thought of tracing the particular lines of educational advancement in the several states.

THE SCHOOL DISTRICT

The "school district" is the oldest and the most primary form of school organization. Indeed, it is the smallest civil division of our political system. It resulted from the natural disposition of neighboring families to associate together for the maintenance of a school. Later it was recognized by

law and given some legal functions and responsibilities. Its territorial extent is no larger than will permit of all the children attending a single school, although it sometimes happens that in sparsely settled country the children have to go several miles to school. It ordinarily accommodates but a few families: districts have had legal existence with but one family in each: many with not more than a half dozen families. It is better adapted to the circumstances of the country than to those of the town or city. A different form has been provided for the considerable towns, and still another for the cities as they have developed. The "district system" is in operation in most of the states, and in such the number of districts extends into the thousands. In New York, for example, there are over eleven thousand and in Illinois over twelve thousand school districts.

The government of the school district is the most simple and democratic that can be imagined. It is controlled by school meetings composed of the resident legal voters. In many of the states women have been constituted legal voters at school meetings. These meetings are held at least annually and as much oftener as may be desired. They may vote needed repairs to the primitive schoolhouse and desirable appliances for the school. They may decide to erect a new schoolhouse. They may elect officers, one or more, commonly called trustees or directors, who must carry out their directions and who are required by law to employ the teacher and have general oversight of the school. Although the law ordinarily gives the trustees free discretion in the appointment of teachers, provided only that a person duly certificated must be appointed, yet it not infrequently happens that the district controls the selection of the teacher through the election of trustees with known preferences.

Much has been said against the district system, and doubtless much that has been said has been justified. At the same time it cannot be denied that the system has had much to commend it. It has suited the conditions of country life:

it has resulted in schools adapted to the thought and wants of farming people: it has done something to educate the people themselves, parents as well as children, in civic spirit and patriotism: and it has afforded a meeting place for the people within comfortable reach of every home. The school has not always been the best, but it has been ordinarily as good as a free and primitive people would sustain or could profit by. It is true that the teachers have generally been young and inexperienced, but they have not yet been trained into mechanical automatons, and as a rule they have been the most promising young people in the world, the ones who, a few years later, have been the makers of opinion and the leaders of action upon a considerable field. Certainly the work has lacked system, continuity and progressiveness, the pupils have commenced at the same place in the book many times and never advanced a great distance, but, on the other hand, the children in the country schools have had the home training and the free, natural life which has developed strong qualities in character and individual initiative in large measure, and so have not suffered seriously, in comparison with the children living in the towns. The district system has sufficed well for them and it has otherwise been of much advantage to the people; and with all its shortcomings, or the abuses that are common where it prevails, they are hardly worse than are found under more pretentious systems. Surely the "American District School System" is to be spoken of with respect, for it has exerted a marked influence upon our citizenship, and has given strong and wholesome impulses in all the affairs of the nation.

THE TOWNSHIP SYSTEM

While in the first half of the century the general educational purpose seems to have been to make the district system more perfect, the tendency in the latter half has unmistakably been to merge it into a more pretentious organization, covering a larger area, and capable of larger undertakings. The cause of this has been the desire for larger schools,

taught by teachers better prepared, and capable of broader and better work, as well as the purpose to distribute educational advantages more evenly to all the people. Accordingly, in most of the states there has been a serious discussion of the relative advantages of the township as against the district system, and in quite a number of the states the former has already supplanted the latter.

The township system makes the township the unit of school government. It is administered by officers chosen at annual town meetings, or sometimes by central boards, the members of which are chosen by the electors of different sub-districts. In any event, the board has charge of all the elementary schools of the township, and if there is one, as is frequently the case, of the township high school. The board, following the different statutes governing them and the authorized directions of the township school electors, provides the buildings and cares for them, supplies the needed furnishings and appliances, employs the teachers, and regulates the general operations of the school.

It is at once seen that the township system is much less formally democratic and much more centralized than the district system. It has doubtless produced better schools and schools of more uniform excellence. One of its most beneficent influences has been the multiplication of township high schools, in which all the children of the township have had equality of rights. These high schools have given an uplifting stimulus to all the elementary schools of the township, and have led all the children to see that the work of the local school is not all there is of education, and given many of them ambitions to master the course of the secondary school.

Very much has been said upon the subject, but it is not necessary to go into it at length here. The township system has many advantages over the district system for a people who are ready for it. It is adapted to the development and to the administration of a higher grade of schools and very likely to better schools of all grades. It is a step, and an

important step, towards that general centralization in management and greater uniformity of improved methods of supervision and instruction now so manifest throughout the school system of the United States.

THE COUNTY SYSTEM

The southern states, most if not all of them, have a county system of school administration. This has not resulted from the development of the school system, but from the general system of county rather than township government prevalent in all the affairs of the southern states from the beginning, and easily traceable to historic causes. The county is the unit of school government in the southern states, because it has been the unit of all government.

The county system is not constituted identically in all of the southern states of the union. In Georgia, for example, the grand jury of each county selects from the freeholders five persons to comprise the county board of education; in North Carolina the justices of the peace and county commissioners of each county appoint such a county board of education, while in Florida such a board is elected by the people biennially, and in some states a county commissioner or superintendent of schools is the responsible authority for managing the schools of the county. In Georgia "each county shall constitute one school district," but in several of the states the county board or superintendent divides the territory into sub-districts and appoints trustees or directors in each. In the latter case the local trustees seem to be ministerial officers carrying out the policy of the county board. In any case the unit of territory for the administration of the schools is the county, and county officials locate sites, provide buildings, select text-books, prescribe the course of work, examine and appoint teachers, and do all the things which are within the functions of district or township trustees or county boards of education in the northern states.

THE CITY SCHOOL SYSTEMS

As communities have increased in population they have outgrown any primary or elementary system of organization for school purposes. Laws of general application or common usage in a county sparsely settled would not suffice for a city of many thousands of people. In such cities the people could not meet to fix the policies and manage the business of the schools: they could not meet even to choose officers to manage the schools. So the state legislatures have made special laws to meet the circumstances of the larger places. In some states these laws are uniform for all cities of a certain class, that is, cities having populations of about the same number, but more often each city has gone to the legislature and procured the enactment of such statutes as seemed suited to the immediate circumstances.

Because of this there is no uniform or general system of public school administration in the American cities. Of course there are some points of similarity. In nearly every case there is a board of education charged with the management of the schools, but these boards are constituted in almost as many different ways as there are different cities, and their legal functions are as diverse as there is diversity in cities. In the city of Buffalo, New York state, the school affairs are managed by a committee appointed by the city council, but happily this case stands by itself, and the evil consequences possible under such a scheme have been much ameliorated in this particular case for the last half dozen years by a most excellent superintendent of schools, elected by the people of that city.

In the greater number of cities the boards of education are elected by the people, in some cases on a general city ticket, and again by wards or sub-districts; in some places at a general or municipal election, and in others at elections held for the particular purpose. But in many cities, and particularly the larger ones, the boards are appointed by the mayor alone, or by the mayor and city council acting

jointly. In the city of Philadelphia the board is appointed by the city judges, in Pittsburgh by local directors, and in New Orleans by the state board of education. In a few instances the board is appointed by the city councils.

In the city of Cleveland, Ohio, the board of education consists of two branches: a school director elected by the people for the term of two years, and a school council of seven members, likewise elected by the people in three groups with terms of three years each. This scheme was devised in 1892 by prominent business men of the city, and, having been enacted by the legislature, has been in very satisfactory operation since.

It must be said that there has been much dissatisfaction with the way school affairs have been managed in the larger cities. In the smaller places, even in cities of a hundred thousand or more inhabitants, matters have gone well enough as a general rule, but in the greater cities there have been many and serious complaints of the misuse of funds, of neglect of property, of the appointment of unfit teachers, and of general incapacity, or worse, on the part of the boards. Of course it is notorious that the public business of American cities has very commonly been badly managed. It would not be true to say that the business of the schools has suffered as seriously as municipal business, but it certainly has been managed badly enough.

All this has come from the amounts of money that are involved and the number of appointments that are constantly to be made. More than a hundred millions of dollars are paid annually for teachers' wages alone in the United States. People who are needy have sought positions as teachers without much reference to preparation, and the kindly disposed have aided them without any apparent appreciation of the injury they were doing to the highest interests of their neighbors. Men engaged in managing the organizations of the different political parties have undertaken to control appointments in the interests of their party machines. And the downright scoundrels have infested the school organization in some places for the sake of plunder.

As cities have grown in size and multiplied in numbers, the more scandal there has been. And American cities have grown marvelously. In 1790 there was but one having between eight and twelve thousand inhabitants: in 1890 there were one hundred and forty-seven such. By the census of the latter year there were fourteen cities having between seventy-five thousand and one hundred and twenty-five thousand inhabitants. Now there are certainly a dozen with more than a half million of people each. The aggregate population of a dozen cities exceeds the aggregate population of twenty states. But if the troubles have multiplied and intensified as the cities have grown, so has the determination of the people strengthened to remedy the difficulties.

There has been no more decided and no more healthy educational movement in the United States in recent years, and none with greater or more strongly intrenched obstacles in its way, than that for better school organization and administration in the larger cities. Its particular features or objective points are pointed out by the committee of fifteen of the National educational association in the following declarations:

"In concluding this portion of the report, the committee indicates briefly the principles which must necessarily be observed in framing a plan of organization and government in a large city school system.

First. The affairs of the school should not be mixed up with partisan contests or municipal business.

Second. There should be a sharp distinction between legislative functions and executive duties.

Third. Legislative functions should be clearly fixed by statute and be exercised by a comparatively small board, each member of which is representative of the whole city. This board, within statutory limitations, should determine the policy of the system, levy taxes, and control the expenditures. It should make no appointments. Every act should be by a recorded resolution. It seems preferable that this board be created by appointment rather than election, and

that it be constituted of two branches acting against each other.

Fourth. Administration should be separated into two great independent departments, one of which manages the business interests and the other of which supervises the instruction. Each of these should be wholly directed by a single official who is vested with ample authority and charged with full responsibility for sound administration.

Fifth. The chief executive officer on the business side should be charged with the care of all property and with the duty of keeping it in suitable condition: he should provide all necessary furnishings and appliances: he should make all agreements and see that they are properly performed: he should appoint all assistants, janitors, and workmen. In a word, he should do all that the law contemplates and all that the board authorizes, concerning the business affairs of the school system, and when anything goes wrong he should answer for it. He may be appointed by the board, but we think it preferable that he be chosen in the same way the members of the board are chosen, and be given a veto upon the acts of the board.

Sixth. The chief executive officer of the department of instruction should be given a long term and may be appointed by the board. If the board is constituted of two branches, he should be nominated by the business executive and confirmed by the legislative branch. Once appointed he should be independent. He should appoint all authorized assistants and teachers from an eligible list to be constituted as provided by law. He should assign to duties and discontinue services for cause, at his discretion. He should determine all matters relating to instruction. He should be charged with the responsibility of developing a professional and enthusiastic teaching force, and of making all the teaching scientific and forceful. He must perfect the organization of his department and make and carry out plans to accomplish this. If he cannot do this in a reasonable time he should be superseded by one who can."

It ought to be said before passing from this phase of the subject that these principles have made much headway, and that the promise is excellent. There is not a city of any importance in the country in which they are not under discussion, and there are few in which some of them have not been adopted and put in operation.

The powers of the city boards of education are very broad, almost without limits as to the management of the schools. They commonly do everything but decide the amount of money which shall be raised for the schools, and in some cases even that high prerogative is left to them. They purchase new sites, determine the plans and erect new buildings, provide for maintenance, appoint officers and teachers, fix salaries, make promotions, and, acting within very few and slight constitutional or statutory limitations, enact all of the regulations for the control of the vast system.

The high powers, cheerfully given by the people to school boards, have arisen from the earnest desire that the schools shall be independent and the teaching of the best. Of course these independent and large prerogatives are exceedingly advantageous to educational progress when exercised by good men: when they fall into the hands of weak or bad men they are equally capable of being put to the worst uses. And it is not to be disguised that in some of the foremost cities they have fallen into some hands which are corrupt, but more often into the hands of men of excellent personal character, but who do not see the importance of applying pedagogical principles to instruction, and who are, in one way or another, used by designing persons for partizan, selfish or corrupt purposes. Of course it is not to be implied that there are not to be found in every school board men or women with clear heads and stout hearts who understand the essential principles of sound school administration and are courageously contending for them. Nor must the serious difficulty of holding together pupils from such widely different homes in common schools be lost sight of. And again, the obstacles in the way of choosing and training a teaching

force of thousands of persons, and of continually energizing the entire body with new pedagogical life, must be remembered. And yet again, the dangers of corruption where millions of dollars are being annually disbursed by boards which are practically independent, are apparent. But, notwithstanding all of the hindrances, the issue is being joined and the battle will be fought out to a successful result. There can be but one outcome. The forces of decency and progress always prevail in the end.

The demands of the intelligent and sincere friends of popular education in our great cities are for a more scientific plan of organization which shall separate legislative and executive functions, which shall put the interests of teachers upon the merit basis and leave them free to apply pedagogical principles to the instruction, which shall give authority to do what is needed and protect officers and teachers, while it locates responsibility and provides the way for ousting the incompetent or the corrupt. The trouble has been that the boards were independent and the machine so ponderous and the prerogatives and responsibilities of officials so confused that people who were aggrieved could not get a hearing or could not secure redress, perhaps for the reason that no one official had the power to afford redress. What is demanded and what is apparently coming is a more perfect system, which will give one credit for good work in the schools and enable a parent to point his finger at and procure the dismissal of one who inflicts upon his child a school room which is not wholesome and healthful, or a teacher who is physically, pedagogically or morally unfit to train his child.

THE STATES AND THE SCHOOLS

Since the American school system has come to be supported wholly by taxation, it has come to depend upon the exercise of a sovereign power. In the United States the sovereign powers are not all lodged in one place. Such as have not been ceded to the general government are retained by the states. The provision and supervision of schools is

one of these. Hence the school system, while marked by many characteristics which are common throughout the country, has a legal organization peculiar to each state.

The dependence upon state authority which has thus arisen has gone farther than anything else towards the development of a *system* and towards the equalization of school privileges to the people of the same state. Naturally indisposed to relinquish the management of their own school affairs in their own way, they have been obliged to bow to the authority of their states, in so far as the state saw fit to assert its authority, because they could not act without it, as counties, cities, townships and districts have no power whatever to levy taxes for school purposes except as authorized by the state. They have become reconciled to the intervention of state authority, moreover, as they have seen that such authority improved the schools.

Of such improvement by such intervention there can be no doubt. In many cases state school funds have been created, or large sums are raised by general levy each year, which are distributed so as to give the most aid to the sections which are poorest and most need it. In the state of New York, for example, the cities pay more than half a million of dollars every year to the support of the schools in the country districts. In practically all of the states excellent normal schools are maintained to prepare teachers for the elementary and secondary schools. In all of the southern and western states great state universities are sustained as parts of the state school systems. In ten universities of the North-Central division of states there are twenty thousand students in college and professional courses, and the work is of as high grade and of as broad range as in the oldest universities of the country. These things are exerting strong influences upon the sentiment of the people of the different states and increasing their respect for the authority of their states over their schools.

And the application of state authority to all of the schools supported by public moneys of course makes them more

alike and better. The whims of local settlements disappear. The schoolhouses are better. More is done for the preparation of teachers, and more uniform exactions are put upon candidates for the teaching service. The courses of study are more quickly and symmetrically improved. There is criticism and stimulus from a common center for all of the educational work of the state.

The different states have gone to very different lengths in exercising their authority. The length to which each has gone has depended upon the necessity of state intervention by the exercise of the taxing power, or of delegating that power to subdivisions of the territory, and upon the sentiment of the people. In most cases it has been determined by the location of the point of equipose between necessity and free consent. The state government has, of course, not been disposed to go farther than the people were willing, for all government is by the people. The thought of the people in the different states has been somewhat influenced by considerations which arise out of their early history, but doubtless in most cases it is predicated upon their later experiences.

All of the state constitutions now contain provisions relating to popular education. This was not true of the original constitutions of all of the older states, for when they were adopted the maintenance of schools was looked upon as a personal or local rather than a state concern. But later amendments have since introduced such provisions into all of the older state constitutions. And all of the newer ones have contained strong and elaborate sections, making it a fundamental duty of the government they established to encourage education and provide schools for all.

Of course, all of the states have legislated much in reference to the schools, and there is scarcely a session of one of the state legislatures in which they do not receive considerable attention. In all of the states there is some sort of a state school organization established by law. In practically all there is an officer known as the state superintendent of

public instruction, or the state school commissioner. In some there is a state board of education. In New York there is a state board of regents in charge of the private academies, in some measure of the public secondary schools, and of all of the higher institutions; and also a state superintendent of public instruction, with very high authority over the elementary schools and in a large measure over the public high schools.

The officer last referred to doubtless is vested with larger authority than any other one educational official in the country. He apportions the state schools funds; he determines the conditions of admission, the courses of work and the employment of teachers, and audits all the accounts of the twelve normal schools of the state; he has unlimited authority over the examination and certification of teachers; he regulates the official action of the school commissioners in all of the assembly districts of the state; he appoints the teachers' institutes, arranges the work, names the instructors, and pays the bills. He determines the boundaries of school districts. He provides schools for the defective classes and for the seven Indian reservations yet remaining in the state. He may condemn schoolhouses and require new ones to be built. He may direct new furnishings to be provided. He is a member of the state board of regents and of the board of trustees of Cornell university. He may entertain appeals by any person conceiving himself aggrieved from any order or proceeding of local school officials, determine the practice therein, and make final disposition of the matter in dispute, and his decision cannot be "called in question in any court or in any other place."

All this, with the splendid organization of the state board of regents, unquestionably provides New York with a more complete and elaborate educational organization than any other American state.

There are some who think that it is more elaborate and authoritative than necessary; that it unduly overrides local freedom and discourages individual initiative. One who has

been a part of that system, and who has also been associate with educational work where there is but very slight stat supervision, will hardly be disposed to think so. But it i certainly exceptional among the states. Most of ther undertake to regulate school affairs but very little. In th larger number of cases the state board of education onl controls the purely state educational institutions, and th principal functions of the leading educational official of th state are to inspire action through his addresses and gath statistics and disseminate information deducible therefron

However, there can be no doubt about the general te dency being strongly towards greater centralization. N only are its advantages quite apparent, but the overwhelmin current of legislation and of the decisions of the courts making it imperative. These are practically in accord, an are to the effect that in each state the school system is n local, but general; not individual schools controlled by sep rate communities, but a closely related system of schoo which has become a state system and is entirely under sta authority. Local school officials are now uniformly held be agents of the state for the administration of a state sy tem of education.

The granting of aid by the state, the necessity of t exercise of powers without which the schools cannot li and which powers reside exclusively in the state, implies t right of the state to name the conditions upon which the a shall be received, and the duty to see that the exercise such powers shall result in equal advantages to all.

Widely dissimilar conditions lead different states to greater or lesser appreciation of their educational respon bilities and make them more or less able or disposed to ex cise their legal functions to the full measure of their goo Yet all are appreciating the fact that a constitutional, se governing state exists for the moral and intellectual adva tage of every citizen and for the common progress of t whole mass. All are moving as best they are able, a according to the light they have, in fulfillment of wise pub

policy and constitutional obligation. They have employed and will continue to employ different methods. Some will act directly through state officials: some will delegate a large measure of authority to local boards and officials so long as it seems well: but all have the highest authority, the supreme responsibility in the matter, and under the influence of the later knowledge will undo whatever may be necessary, and take whatever new steps may be necessary, to carry the best educational opportunities to every child.

And it is the purpose of the people and the law of most of the states that such educational opportunities shall not only be provided for every American child, but that every one shall be required to take advantage of them. Compulsory attendance laws have been enacted in most of the states. These are not as carefully framed as a good knowledge of educational administration might very easily lead them to be, and they are not as completely enforced as the true interests of many unfortunate children require, yet it may be said safely that the right and the duty of the state to educate them is recognized, and that the tendency towards greater thoroughness in the way of making education universal as a safeguard to our free citizenship is general.

It was not so in the beginning, but American public schools are rapidly coming to be related together in a system of schools, that system a state system, and at once the most flexible and adaptable to our manner of living, our social ideals and our national ambitions.

THE GENERAL GOVERNMENT AND EDUCATION

As already pointed out, the authoritative management of the schools has never been conferred upon the general government, but is reserved to and exercised by the several states. What might have been done at the time of the framing of the federal constitution, if it had been supposed that in a few years the support and management of schools would develop into a government function, can only be speculated upon. It is well known that the members of the

first constitutional convention were not indifferent to ed cation. But their view of the subject was the view of a men of their time, *i. e.*, that it was highly desirable that a social organizations should encourage, perhaps even by th time that it was proper for government to see that schoc were maintained, but that the real responsibility, and course the expense, should fall upon people legally charg able with the custody of children. The functions of gc ernment touching education were not then under conside tion at all, and when they forced themselves upon pub attention the towns, and, when the exercise of the power taxation became imperative, the states assumed them they were bound to do.

Accordingly, the federal government has never exercis any control over the public educational work of the count But it may be said with emphasis that that government h never been indifferent thereto. It has shown its interest different times by generous gifts to education, and by t organization of a bureau of education for the purpose gathering the fullest information from all of the states, a from foreign nations as well, and for disseminating the sa to all who would be interested therein.

The gifts of the United States to the several states encourage schools have been in the form of land rights fr the public domain. In the sale of public lands the practi of reserving one lot in every township "for the maintenan of public schools within the township" has uniformly be followed. In 1786 officers of the revolutionary army pe tioned congress for the right to settle territory north a west of the Ohio river. A committee reported a bill favor of granting the request, which provided that one s tion in each township should be reserved for common schoc one section for the support of religion, and four townshi for the support of a university. This was modified so as give one section for the support of religion, one for comm schools, and two townships for the support of a "litera institution to be applied to the intended object by the l

islature of the state." This provision, coupled with the splendid declaration that "religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged," foreshadowed the general disposition and policy of the central government and made the "Ordinance of 1787 for the government of the Northwest territory" famous. The precedent here established became national policy, and after the year 1800 each state admitted to the Union, with the exception of Maine, Texas and West Virginia, received two or more townships of land for the founding of a university. In 1836 congress passed an act distributing to the several states the surplus funds in the treasury. In all $28,101,645 was so distributed, and in a number of the states this was devoted to educational uses.

But the most noble, timely, and carefully guarded gift of the federal government was embodied in the land grant act of 1862 for colleges of agriculture and the mechanic arts. This act gave to each state thirty thousand acres of land for each senator and representative in congress to which the state was entitled under the census of 1860, for the purpose of founding "at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the states shall respectively prescribe, in order to promote the liberal education of the industrial classes in the several pursuits and professions of life." This act has been added to by other congressional enactments and the proceeds of the sales of lands have been generously supplemented by the state legislatures until great peoples' colleges and universities have arisen in all of the States.

The work of the United States bureau of education is a most exact, stimulating and beneficent one. Without exercising any authority, it is untiring and scientific in gathering data, in the philosophic treatment of educational subjects,

and in furnishing the fullest information upon every conceivable phase of educational activity to whomsoever would accept it. Its operations have by no means been confined to the United States. It has become the great educational clearing house of the world. The commissioners who have been at the head of this bureau have been eminent men and great educational leaders. The present commissioner, Dr. William T. Harris, stands without a peer as the most philosophical thinker and the readiest writer upon educational subjects in the world. Under such fortunate direction the bureau of education has collected the facts and made most painstaking research into every movement in America and elsewhere which gave promise of advantage to the good cause of popular education.

So, while the government of the United States is not chargeable under the constitution with providing or supervising schools, and while it does not exercise authority in the matter, it will be quickly seen that it has been steadily and intelligently and generously true to the national instinct to advance morality and promote culture by its influence and its resources.

PRIVATE INSTITUTIONS

Up to this time we have been treating of the American public school system, using the term in its strictest sense. We have been referring to the schools supported by public moneys and supervised by public officers. Yet there is an infinite number of other schools which comprise an important part of the educational system of the country and are of course subject to its laws. Any statement concerning American school organization and administration, even of the most general character, would be incomplete which did not cover these, but obviously it is not desirable in this connection to do more than touch upon the relation in which they stand, by common usage and under the laws, to American education.

In the first half of the century just closing many private "academies" or "seminaries" sprang up in all directions

where the country had become at all settled. This was in response to a demand from people who began to reach out, but could not get what they wanted in the common schools. Any teacher with a little more than ordinary gifts could open one of these schools upon a little higher plane than usual and very soon have an abundance of pupils and a profitable income. Many of these institutions did most excellent work. Not a few of the leading citizens of the country owe their first inspiration and much help to them. The larger part of these schools served their purpose and finally gave way to new public high schools. Some yet remain and continue to meet the desires of well-to-do and select families who prefer their somewhat exclusive ways. A considerable number have been adopted by their states and developed into state normal schools, and not a few have by their own natural force grown into literary colleges.

The earlier American colleges were, in the beginning, in a large sense the children of the state. Yale, Harvard, Princeton, Columbia were all chartered by and in some measure supported by their states at the start, and are yet subject to the law, though they have become independent of such support. A vast number of colleges has been established by the religious denominations for the training of their ministry, and, so far as possible, for giving all their youth a higher education while keeping them under their denominational influence.

In recent years innumerable schools have arisen out of private enterprise. Every conceivable interest has produced a school to promote its own ends and accordingly adjusted to its own thought. So professional, technical, industrial and commercial schools of every kind have sprung up on every hand.

All such schools operate by the tacit leave of the states in which they exist. The states are not disposed to interfere with them, as they ask no public support. Some of them hold charters granted by the legislature, and more secure recognized standing by organizing under general corporation laws enacted to cover all such enterprises. In some cases the states distribute public moneys to some of these institutions by way of encouragement, and perhaps impose certain conditions upon which they shall be eligible to share in such distributions. But ordinarily a state does no more than protect its own good name against occasional impostors who wear the livery of heaven to serve the devil more effectually, and it is feared that some states have not yet come to do this as completely as they ought.

The tendency to regulate private schools by legislation, to the extent at least of seeing that they are not discreditable to the state, is unmistakable. New York, for example, has prohibited the use of the name "college" or "university" except when the requirements of the state board of regents are met. All of the reputable institutions,—and they constitute nearly the whole number,—desire reasonable supervision, for it certifies their respectability and constitutes them a part of the public educational system of the state.

EXPERT SUPERVISION

It has not been convenient in tracing the preceding pages to treat of an exceedingly important phase of the American school system which distinguishes that system from any other national system of education, and which has come to be well established in our laws; that is, supervision by professional experts, both generally and locally.

From the beginning the laws have provided methods for certificating persons deemed to be qualified to teach in the schools. This has ordinarily been among the functions of state, city, and county superintendents or commissioners. Sometimes boards of examiners have been created whose only duty should be to examine and certificate teachers. The functions of certificating and of employing teachers have, for obvious reasons, not commonly been lodged in the same officials. Superintendents began to be provided for by law in the early part of the century. The first state superin-

tendency was established by New York in 1812. Other states took similar action in the next thirty years. Town, city and county superintendencies came along rapidly, and by or soon after the middle of the century had been set in operation in most parts of the then settled country.

The main duty of these officials in the earlier days was to examine candidates for teaching, report statistics, and make addresses on educational occasions. In later years, however, they are held in considerable measure responsible for the quality of the teaching. In the country districts the superintendents hold institutes, visit the schools, commend and criticise the teaching, and exert every effort to promote the efficiency of the schools, until a discreet and active county superintendent comes to exert almost a controlling influence over the school affairs of his county.

In the cities, and particularly the larger ones, the problem is much more difficult. The teachers are much greater in number and the task of securing persons of uniform excellence is much enlarged. The schools are less homogeneous and instruction less easy. Frequently the superintendent cannot know the personal qualities of each teacher, or even visit all of the schools. Yet a system must be organized by which, through the aid of assistants, the superintendent's office will be advised fully of the work of every teacher in the system. And if the system is to have anything like uniform excellence, if the rights of children are to be met, and the instruction is to have life in it, all teachers must be upon the merit basis, the most deserving must be advanced in rank and pay as rapidly as practicable, and the weak must be helped and trained into efficiency or removed from their positions.

The laws are coming to recognize the responsibilities and difficulties of the superintendent's position, and are continually throwing about that officer additional safeguards and giving him larger powers and greater freedom of action. The great issue that is now on in American school affairs is

between education and politics. The school men are insisting upon absolute immunity from political influence in their work. It would doubtless seem strange to people of other nations not familiar with our political conditions, that such insistence may be necessary. Pure democracy has its troubles. The machinations of men who are seeking political influence constitute the most serious of them. However, the good cause of education against political manipulation is making substantial progress. The law books of all of the states show provisions recognizing the professional school superintendent: in many of the states they contain provisions directing and protecting his work: and in some of them they are beginning to confer upon him entire authority over the appointment, assignment and removal of teachers, while they impose upon him entire responsibility for the quality of the teaching.

It is this professional supervision, by states and counties as well as by towns and cities, taken up almost spontaneously at the beginning and early established and compensated by law, which has given the American schools their peculiar spirit. As intelligence has advanced and the people have come to know the worth of good teaching and have been unwilling that their children should be associated with teachers who have not the kindly spirit of a true teacher, or be kept marking time by incompetents, they have favored larger exactions and closer supervision over the teaching, to the end that it might be in accord with the best educational opinion. All this is yearly becoming more and more apparent in the laws, and it is advancing the great body of American teachers along philosophical lines more steadily and rapidly than any other great body of teachers in the world is advancing. American teachers have always had freedom. Now they are learning to exercise it, and they are being permitted to exercise it, in accord with educational principles.

CONCLUSION

In conclusion a few facts touching the great school sys-
em, the legal organization of which we have briefly tried to
ketch, and which has produced that organization and in
urn has in part been produced by it, will be of interest.
The enrollment of pupils in the state common schools alone
was, in 1895–6, 14,379,078. These schools were kept open
n average of 140.5 days in the year. The number of teach-
rs employed was 130,366 males and 269,959 females, a total
f 400,325. The total value of the public school prop-
rty was $455,948,164, and the running expenses for the
ear were $184,453,780. There was raised by taxation
163,023,294. Of institutions above the grade of elemen-
ary schools there were 677 colleges and universities, with
7,134 collegiate students and 69,014 preparatory students.
ome of these are too ambitious in calling themselves
colleges," it is true, yet all are doing work that counts, and
ducational nomenclature is straightening itself out slowly
ut steadily. There were 5,108 public high schools with
09,433 secondary pupils, and there were 2,100 private high
chools and academies with 107,633 secondary pupils.
There were 77 law schools with 10,449 students, 148 medi-
al schools with 24,265 pupils, 157 theological schools with
,173 students, and 362 normal schools with 67,380 students.
n cities of over 8,000 inhabitants there were 601 schools
ith 3,590,875 pupils. In the whole country there were
,184 public libraries with 34,596,258 volumes.

In the year 1896 there was paid for teachers' and superin-
endents' wages in the common schools $116,377,778, or 63.1
er cent of the total expenditure for school purposes.

Laws making attendance at school compulsory have been
nacted in 32 states and territories.

One of the most gratifying facts in connection with the
ducational work of the United States is the large increase
n the number of graduate students in the colleges. The
ollowing table exhibits the number of resident graduate

students in universities and colleges of the United States for 25 years and down to as late a time as the figures are available:

Year	Number	Year	Number	Year	Number
1871–'72	198	1880–'81	460	1889–'90	1,717
1872–'73	219	1882–'83	522	1890–'91	2,131
1873–'74	283	1883–'84	778	1891–'92	2,499
1874–'75	369	1884–'85	869	1892–'93	2,851
1875–'76	399	1885–'86	935	1893–'94	3,493
1876–'77	389	1886–'87	1,237	1894–'95	3,999
1877–'78	414	1887–'88	1,290	1895–'96	4,363
1878–'79	465	1888–'89	1,343	1896–'97	4,919
1879–'80	411				

The United States bureau of education, to which I am indebted for the foregoing figures and much other information, is aided by a corps of 15,000 voluntary correspondents who furnish printed reports and catalogs and cheerfully answer the bureau's inquiries upon every phase of educational work.

It is of course difficult for one not familiar with American institutions and American ways to understand or appreciate the American school system. To him it seems anything but a *system*. It is a product of conditions in a new land, and it is adapted to those conditions. It is at once expressive of the American spirit and it is energizing, culturing and ennobling that spirit. It is settling down to an orderly and symmetrical institution, it is becoming scientific, and it is doing its work efficiently. It exerts a telling influence upon every person in the land, and is proving that it is supplying an education broad enough and of a kind to support free institutions.

DEPARTMENT OF EDUCATION

UNIVERSAL EXPOSITION, ST. LOUIS, 1904

Chief of Department

HOWARD J. ROGERS, Albany, N. Y.

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EDITED BY

NICHOLAS MURRAY BUTLER

President of Columbia University in the City of New York

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ELEMENTARY EDUCATION

BY

WILLIAM T. HARRIS

United States Commissioner of Education, Washington, D. C.

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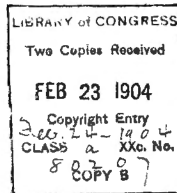
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ELEMENTARY EDUCATION

PART I — GENERAL SURVEY OF THE SCHOOL SYSTEM OF THE UNITED STATES

In all the schools of the United States, public and private, elementary, secondary and higher, there were enrolled in the year 1898 about sixteen and one-half millions (16,687,643) pupils. (See appendix I.) This number includes all who attended at any time in the year for any period, however short. But the actual average attendance for each pupil in the public schools (supported by taxes) did not exceed 98 days, although the average length of the school session was 143.1 days. There were enrolled in the aggregate of public and private schools out of each 100 of the population between the ages of 5 and 18 years, 71 pupils.

Out of the entire number of sixteen and a half millions of pupils deduct the pupils of private and parochial schools of all kinds, elementary, secondary, higher, and schools for art, industry and business, for defective classes and Indians, there remain over 15,000,000 for the public school enrollment, or nearly 91 per cent of the whole. (See appendix I.) In the 28 years since 1870 the attendance on the public schools has increased from less than 7,000,000 to 15,000,000. (Appendix II.) The expenditures have increased somewhat more, namely, from 63,000,000 to 199,000,000 of dollars per annum, an increase from $1.64 per capita of population to $2.67. To account for this *pro rata* increase of 61 per cent in the cost of the common schools one must allow for a slight increase in the average length of the school term, and for the increase of enrollment from less than 17 per cent to more than 20 per cent of the population. But the chief items of increase are to be found in teachers' wages for professionally educated teachers, and the cost of

expert supervision. These account for more than two-thirds of the 50 per cent, while the remaining one-sixth (of the whole) is due to better apparatus and more commodious school buildings.

The increase of cities and large villages, owing to the influence of the railroad, has brought nearly one-half the school population within reach of the graded school holding a long session of from 180 to 200 days per year, and taught by professional teachers. (See appendix III.) In 1870 there were for each 10,000 inhabitants 12.75 miles of railway, but in 1890 the number of miles of railway for the same number of inhabitants had risen to 26.12 miles, or more than double the former amount. The effect of this increase of railway is to extend the suburbs of cities and vastly increase the urban population. The rural schools in sparsely settled districts still continue their old practice of holding a winter school with a session of 60 to 80 days only, and taught by the makeshift teacher who works at some other employment for two-thirds of the year. The school year of ideal length should be about 200 days, or 5 days per week for 40 weeks, *i. e.*, nine and one-half months. In the early days of city schools the attempt was made to hold a session of over 46 weeks in length, allowing only six weeks or less for three short vacations. But experience of their advantage to the pupil has led to the increase of the holidays to nearly double the former amount.

Reducing the total average attendance in all the schools, public and private, to years of 200 school days each, it is found that the average total amount of schooling each individual of the population would receive at the rates of attendance and length of session for 1898, is five years, counting both private and public schools.

The average schooling, it appears from the above showing, amounts to enough to secure for each person a little more than one-half of an elementary school course of eight years,— enough to enable the future citizen to read the newspaper, to write fairly well, to count, add, subtract, multiply and divide, and use the simplest fractions. In addition he acquires a little geographical knowledge, so important to enable him to understand the references or allusions in his daily newspaper to places of interest in other parts of the world. But the multiplicity of cheap books and periodicals makes the life of the average citizen a continuation of school to some extent. His knowledge of reading is called into use constantly, and he is obliged to extend gradually his knowledge of the rudiments of geography and history. Even his daily gossip in his family, in the shop, or in the field is to some extent made up of comments on the affairs of the state, the nation, or distant peoples,— China, Japan, Nicaragua, or the Sandwich islands, as the case may be,— and world interests, to a degree, take the place of local scandals in his thoughts. Thus, too, he picks up scraps of science and literature from the newspaper, and everything that he learns becomes at once an instrument for the acquirement of further knowledge. In a nation governed chiefly by public opinion digested and promulgated by the daily newspaper, this knowledge of the rudiments of reading, writing, arithmetic and geography is of vital importance. An illiterate population is impenetrable by newspaper influence, and for it public opinion in any wide sense is impossible; its local prejudices are not purified or eliminated by thought and feeling in reference to objects common to the whole civilized world.

The transformation of an illiterate population into a population that reads the daily newspaper, and perforce thinks on national and international interests, is thus far the greatest good accomplished by the free public school system of the United States. It must be borne in mind that the enrollment in school of one person in every five of the entire population of the country means the same result for the southern states as for the northern, since the states on the Gulf of Mexico enroll nearly 22 per cent of their total population, colored and white, and the south Atlantic 20.70 per cent, while the north Atlantic and the western, mountain and

Pacific divisions enroll only 18 per cent, having a much smaller ratio of children of school age.

In a reading population one section understands the motives of the other, and this prevents political differences from becoming too wide for solution by partisan politics. When one section cannot any longer accredit the other with honest and patriotic motives, war is only a question of time. That this general prevalence of elementary education is accompanied by a comparative neglect of the secondary and higher courses of study is evident from the fact that out of the number of pupils enrolled more than ninety-five in every hundred are pursuing elementary studies; less than four in a hundred are in secondary studies in high schools, academies and other institutions; only one in a hundred (13 in one thousand) is in a college or a school for higher studies.

In considering the reasons for the increase of the length of the term of the elementary school and its adoption of a graded course of study, one comes upon the most important item of improvement that belongs to the recent history of education, namely, the introduction of professionally trained teachers. The first normal school established in the United States recently celebrated its fiftieth anniversary. It was founded at Lexington, Massachusetts, in 1839. The number of public normal schools supported by the state or municipal governments has increased since that year to 167, enrolling 46,245 students, and graduating nearly 8,000 per annum. To this number are to be added 178 private normal schools, with an aggregate of 21,293 students and 2,000 graduates. In 1880 there were 240 normal school students in each million of inhabitants; in 1897 there were 936, or nearly four times as many in each million.

The professionally educated teacher finds his place in the graded schools, above mentioned as established in cities and large villages, and kept in session for the entire scholastic year of 200 days. It is the experience of school superintendents that graduates of normal schools continue to improve in skill and efficiency for many years. The advantage of the professionally educated teacher above others is to be found in the fact that he has been trained to observe methods and devices of instruction. On entering a school taught by another teacher he at once sees, without special effort, the methods of teaching and management, and notes the defects as well as the strong points if there are any. He is constantly increasing his number of successful devices to secure good behavior without harsh measures, and to secure industry and critical attention in study. Every normal school has a thorough course of study in the elementary branches, taking them up in view of the higher branches from which they are derived, and explaining their difficult topics. This kind of work prepares the teacher in advance for the mishaps of the pupil, and arms him with the skill to assist self-activity by teaching the pupil to analyze his problem into its elements. He can divide each step that is too long for the pupil to take, into its component steps, down to any required degree of simplicity. The normal school graduate, too, other things being equal, has a better idea than other teachers of the educational value of a branch of study. He knows what points are essential, and what are accidental and subsidiary. He therefore makes his pupils thoroughly acquainted with those strategical positions, and shows him how to conquer all the rest through these.

As it would appear from the statistics given, the rural districts are precluded by their short school terms from securing professional teachers. The corps of teachers in a highly-favored city will be able to claim a large percentage of its rank and file as graduates of its municipal training schools — perhaps 50 to 60 per cent. But the cities and villages as a whole in their graded schools cannot as yet show an average of more than one teacher in four who has received the diploma of a normal school.

Another important advantage has been named as belonging to the schools of the village or city. They are graded schools, and have a regular course of study, uniformity of text-books, and a proper classification of pupils. In the

small rural schools some 20 to 50 pupils are brought together under one teacher. Their ages vary from 4 years to 20, and their degree of advancement ranges from new beginners in the alphabet up to those who have attended school for 10 or 12 winters, and are now attempting Latin and algebra. It often happens that there is no uniformity of text-books, except perhaps in the spelling-book and reader, each pupil bringing such arithmetic, geography or grammar as his family at home happens to possess. Twenty pupils are classified in three classes in reading, three in spelling, and perhaps as many classes in arithmetic, grammar, geography, and other studies as there are pupils pursuing those branches. The result is from 20 to 40 separate lessons to look after, and perhaps five or 10 minutes to devote to each class exercise. The teacher finds himself limited to examining the pupil on the work done in memorizing the words of the book, or to comparing the answers he has found to the arithmetic problems with those in the printed key, occasionally giving assistance in some difficult problem that has baffled the efforts of the pupil — no probing of the lesson by analytical questions, no restatement of the ideas in the pupil's own words, and no criticism on the data and methods of the text-book.

This was the case in the old-time district school — such as existed in 1790, when 29 out of 30 of the population lived in rural districts; also as late as 1840, when only one in twelve lived in a city. As the railroad has caused villages to grow into cities, so it has virtually moved into the city a vast population living near railway stations in the country by giving them the morning newspaper and rapid transportation. In 1890 one-third of the population were living in cities of not less than 8,000 inhabitants. But the suburban populations made urban by the railroad — as indicated above — would swell the city population to one-half of the whole nation. Hence the great change now taking place in methods of building school houses and in organizing schools.

In the ungraded schools the naturally bright pupils accom-

plished a fair amount of work if they happened to have goc text-books. They were able to teach themselves from tl books. But the rank and file of the school learned a litt reading, writing and arithmetic, and probably studied tl same book for several winters, beginning at the first pag on the first day of school each year. Those who needed n help from the teacher learned to help themselves and enjoye a delightful freedom. Those who were slow and dull di not get much aid. Their industry may have been stimulate by fear of the rod, which was often used in cases of real c supposed indolence. Harsh measures may succeed in for ing pupils to do mechanical work, but they cannot secur much development of the power of thought. Hence th resources of the so-called "strict" teacher were to compe the memorizing of the words of the book.

With the growth from the rural to the urban condition c population the method of "individual instruction," as it i called, giving it a fine name, has been supplanted by clas instruction, which prevails in village and city schools. Th individual did not get much instruction under the old plar for the simple reason that his teacher had only five or te minutes to examine him on his daily work. In the properl graded school each teacher has two classes, and hears on recite while the other learns a new lesson. Each class i composed of twenty to thirty pupils of nearly the sam qualifications as regards the degree of progress made i their studies. The teacher has thirty minutes for a recita tion (or "lesson" as called in England), and can go into th merits of the subject and discuss the real thoughts that i involves. The meaning of the words in the book is probed and the pupil made to explain it in his own language. Bu besides this all pupils learn more by a class recitation thai by an individual recitation. For in the class each can se the lesson reflected in the minds of his fellow-pupils, anc understand his teacher's views much better when drawn ou in the form of a running commentary on the mistakes of th duller or more indolent pupils. The dull ones are encour

aged and awakened to effort by finding themselves able to see the errors and absurdities of fellow-pupils. For no two minds take precisely the same view of a text-book exposition of a topic. One child is impressed by one phase of it, and another by a different phase. In the class recitation each one has his crude and one-sided views corrected more or less by his fellows, some of whom have a better comprehension of this point, and some of that point, in the lesson. He, himself, has some glimpses of the subject that are more adequate than those of his fellows.

The possibilities of a class recitation are, therefore, very great for efficient instruction in the hands of a teacher who understands his business. For he can marshal the crude notions of the members of the class one after another, and turn on them the light of all the critical acumen of the class as a whole, supplemented by his own knowledge and experience. From beginning to end, for thirty minutes, the class recitation is a vigorous training in critical alertness. The pupil afterwards commences the preparation of his next lesson from the book with what are called new "apperceptive" powers, for he finds himself noticing and comprehending many statements and a still greater number of implications of meaning in his lesson that before had not been seen or even suspected. He is armed with a better power of analysis, and can "apperceive," or recognize and identify, more of the items of information, and especially more of the thoughts and reflections, than he was able to see before the discussions that took place in the recitation. He has in a sense gained the points of view of fellow-pupils and teacher, in addition to his own.

It is presupposed that the chief work of the pupil in school is the mastery of text-books containing systematic treatises giving the elements of branches of learning taught in the schools. For in the United States more than in any other country text-book instruction has predominated over oral instruction, its method in this respect being nearly the opposite of the method in vogue in the elementary schools of Germany.

The evil of memorizing words without understanding their meaning or verifying the statements made in the text-book is incident to this method and is perhaps the most widely prevalent defect in teaching to be found in the schools of the United States. It is condemned universally, but, nevertheless, practiced. The oral method of Germany escapes this evil almost entirely, but it encounters another evil. The pupil taught by the oral method exclusively is apt to lack power to master the printed page and get out of it the full meaning; he needs the teacher's aid to explain the technical phrases and careful definitions. The American method of text-book instruction throws the child upon the printed page and holds him responsible for its mastery. Hence even in the worst forms of verbal memorizing there is perforce acquired a familiarity with language as it appears to the eye in printed form which gradually becomes more useful for scholarly purposes than the knowledge of speech addressed to the ear. This is the case in all technical, or scientific language, and in all poetry and literary prose; the new words or new shades of meaning require the mind to pause and reflect. This can be done in reading but not in listening to an oral delivery.

In the United States the citizen must learn to help himself in this matter of gaining information, and for this reason he must use his school time to acquire the art of digging knowledge out of books. Hence we may say that a deep instinct or an unconscious need has forced American schools into an excessive use of the text-book method.

In the hands of a trained teacher the good of the method is obtained and the evil avoided. The pupil is taught to assume a critical attitude towards the statements of the book and to test and verify them, or else disprove them by appeal to other authorities, or to actual experiments.

This ideal hovers before all teachers, even the poorest, but it is realized only by the best class of teachers found in the schools of the United States,—a class that is already large and is constantly increasing, thanks to the analytic

methods taught in the normal schools. Text-book memorizing is giving place to the method of critical investigation.

This review of methods suggests a good definition of school instruction. It is the process of re-enforcing the sense-perception of the individual pupil by adding the experience of the race as preserved in books, and it is more especially the strengthening of his powers of thought and insight by adding to his own reflections the points of view and the critical observations of books interpreted by his teachers and fellow-pupils.

In the graded school the pupil is held responsible for his work in a way that is impossible in the rural school of sparsely-settled districts. Hence the method of investigation, as above described, is found in the city schools rather than in the rural schools. Where each pupil forms a class by himself, there is too little time for the teacher to ascertain the character of the pupil's understanding of his book. Even if he sees that there has been a step missed somewhere by the child in learning his lesson, he cannot take time to determine precisely what it is. Where the ungraded school makes some attempt at classification of pupils it is obliged to unite into one class say of arithmetic, grammar, or geography, pupils of very different degrees of progress. The consequence is that the most advanced pupils have not enough work assigned them, being held back to the standard of the average. They must "mark time" (or go through the motions of walking without advancing a step) while the rest are coming up. The least advanced find the average lesson rather too much for them, and become discouraged after trying in vain to keep step with their better prepared fellow-pupils. This condition of affairs is to be found in many rural districts even of those states where the advantages of classification are seen and appreciated in city schools, and an effort is in progress to extend those advantages to the rural schools. But the remedy has been, in many cases, worse than the disease. For it has resulted that classification gets in the way of self-help which the bright pupil is

capable of, and the best scholars "mark time" listlessly, while the poorest get discouraged, and only the average pupils gain something.

It must be admitted, too, that in many village schools just adopting the system of grading, this evil of holding back the bright pupils and of over-pressure on the dull ones exists, and furnishes just occasion for the criticism which is made against the so-called "machine" character of the American public school. The school that permits such poor classification, or that does not keep up a continual process of readjusting the classification by promoting pupils from lower classes to those above them, certainly has no claim to be ranked with schools organized on a modern ideal.

I have dwelt on this somewhat technical matter because of its importance in understanding the most noteworthy improvements in progress in the schools of the United States. Briefly, the population is rapidly becoming urban, the schools are becoming "graded," the pupils of the lowest year's work placed under one teacher, and those of the next degree of advancement under a second teacher; perhaps from eight to twenty teachers in the same building, thus forming a "union school," as it is called in some sections. Here there is division of labor on the part of teachers, one taking only classes just beginning to learn to read and write, another taking the pupils in a higher grade. The inevitable consequence of such division of labor is increase of skill. The teacher comes to know just what to do in a given case of obstructed progress — just what minute steps of work to introduce — just what thin wedges to lift the pupil over the threshold that holds back the feeble intellect from entering a new and higher degree of human learning.

It will be asked: What proportion of the teachers of cities and villages habitually use this higher method in conducting recitations. According to a careful estimate, at least one-half of them may reasonably claim to have some skill in its use; of the one-half in the elementary schools who use it perhaps two-fifths conduct all their recitations so

as to make the work of their pupils help each individual in correcting defects of observation and critical alertness. Perhaps the other three-fifths use the method in teaching some branches, but cling to the old memoriter system for the rest. It may be claimed for graduates of normal schools that a large majority follow the better method.

The complaint urged against the machine character of the modern school has been mentioned. I suppose that this complaint is made quite as often against good schools as against poor ones. But the critical-probing method of conducting a recitation is certainly not machine-like in its effects. It arouses in the most powerful manner the activity of the pupil to think and observe for himself. Machine-like schools do not follow this critical method, but are content with the memoriter system, that prescribes so many pages of the book to be learned verbally, but does not inquire into the pupil's understanding, or "apperception," as the Herbartians call it. It is admitted that about 50 per cent of the teachers actually teaching in the schools of villages and cities use this poor method. But it is certain that their proportion in the corps of teachers is diminishing, thanks to the two causes already alluded to: first, the multiplication of professional schools for the training of teachers; and second, the employment of educational experts as supervisors of schools.

The rural schools, which in the United States enroll one-half of the entire number of school children, certainly lack good class teaching, even when they are so fortunate as to obtain professionally educated teachers, and not five per cent of such schools in the land succeed in procuring better services than the "makeshift" teacher can give. The worst that can be said of these poorly taught schools is that the pupils are either left to help themselves to knowledge by reading their books under the plan of individual instruction, or, in the attempt at classification and grading, the average pupils learn something, while the bright pupils become listless and indolent for want of tasks commensurate with their strength and the backward pupils lose their courage for their want of

ability to keep step. Even under these circumstances the great good is accomplished that all the pupils learn the rudiments of reading, writing and arithmetic, and all are made able to become readers of the newspapers, the magazines, and finally of books.

Another phase of the modern school that more than anything else gives it the appearance of a machine, and the American city schools are often condemned for their mechanism, is its discipline, or method of organization and government. In the rural school with twenty-five pupils, more or less, it makes little difference whether pupils come into the school room and go out in military order, so far as the work of the school is concerned. But in the graded school with three hundred to eight hundred pupils order and discipline are necessary down to the last particular, for the safety of the pupils as well as for the accomplishment of the ends for which the school exists. There must be regularity and punctuality, silence and conformity to order, in coming and going. The whole school seems to move like a machine. In the ungraded school a delightful individuality prevails, the pupil helping himself to knowledge by the use of the book, and coming and going pretty much as he pleases, with no subordination to rigid discipline, except perhaps when standing in class for recitation.

Regularity, punctuality, silence, and conformity to order, —military drill,—seem at first to be so much waste of energy,—necessary, it is true, for the large school, but to be subtracted from the amount of force available for study and thought. But the moment the question of moral training comes to be investigated, the superiority of the education given in the large school is manifest. The pupil is taught to be regular and punctual in his attendance on school and in all his movements, not for the sake of the school alone, but for all his relations to his fellow-men. Social combination is made possible by these semi-mechanical virtues. The pupil learns to hold back his animal impulse to chatter or whisper to his fellows and to interrupt their serious

absorption in recitation or study, and by so much self-restraint he begins to form a good habit for life. He learns to respect the serious business of others. By whispering he can waste his own time and also that of others. In moving to and fro by a sort of military concert and precision he acquires the impulse to behave in an orderly manner, to stay in his own place and not get in the way of others. Hence he prepares for concerted action,— another important lesson in citizenship, leaving entirely out of account its military significance.

With the increase of cities and the growth of great industrial combinations this discipline in the virtues that lie at the basis of concerted action is not merely important, but essential. In the railroad system a lack of those semi-mechanical virtues would entirely unfit one for a place as laborer or employee; so, too, in a great mill or a great business house. Precision, accuracy, implicit obedience to the head or directive power, are necessary for the safety of others and for the production of any positive results. The rural school does not fit its pupils for an age of productive industry and emancipation from drudgery by means of machinery. But the city school performs this so well that it reminds some people unpleasantly of a machine.

The ungraded school has been famous for its harsh methods of discipline ever since the time of the flogging schoolmaster Orbilius whom Horace mentions. The rural schoolmaster to this day often prides himself on his ability to "govern" his unruly boys by corporal punishment. They must be respectful to his authority, obedient and studious, or else they are made to suffer bodily pain from the hand of the teacher. But harsh discipline leaves indurations on the soul itself, and is not compatible with a refined type of civilization. The schoolmaster who bullies his pupils into obedience does what he can to nurture them into the same type as himself.

In the matter of school discipline the graded school has an advantage over the school of the rural district. A corps

of teachers can secure good behavior more efficiently than a single teacher. The system, and what is disparaged as its "mechanism," help this result. In many cities of the larges size in the United States, corporal punishment is seldom resorted to, or is even entirely dispensed with. (See appendix V.) The discipline of the school seems to improve after the discontinuance of harsh punishments. The adoption of a plan of building better suited for the purpose of graded schools has had much to do with the disuse of the rod. As long as the children to the number of one or two hundred studied in a large room under the eye of the principal of the school, and were sent out to small rooms to recite to assistant teachers, the order of the school was preserved by corporal punishment. When Boston introduced the new style of school building with the erection of the Quincy school in 1847, giving each class-teacher a room to herself, in which pupils to the number of fifty or so prepared their lessons under the eye of the same teacher that conducted their recitations (*i. e.*, "heard their lessons"), a new era in school discipline began. It is possible to manage a school in such a building with little or no corporal punishment.

The ideal of discipline is to train the pupil into habits of self-government. This is accomplished partly by perfecting the habit of moving in concert with others, and by self-restraint in all actions that interfere with the work of other pupils.

That the public schools of cities have worked great and favorable changes to the advantage of civil order cannot be doubted. They have generally broken up the feuds that used to prevail between the people of different precincts. Learning to live without quarreling with school-fellows is an efficient preparation for an orderly and peaceful life with one's neighbors.

The rural school, with all its shortcomings, was, and is to-day, a great moral force for the sparsely settled regions, bringing together the youth of the scattered families, and forming friendships, cultivating polite behavior, affording to

each an insight into the motives and springs of action of his neighbors, and teaching him how to co-operate with them in securing a common good.

The city school is a stronger moral force than the rural school because of its superior training in the social habits named — regularity, punctuality, orderly concerted action and self-restraint.

Take any country with a school system, and compare the number of illiterate criminals with the total number of illiterate inhabitants, and also the number of criminals able to read and write with the entire reading population, and it will be found that the representation from the illiterate population is many times larger than from an equal number of people who can read and write. In the United States the prevailing ratio is about eight to one — that is to say, the illiterate population sends eight times its quota to jails. In the prisons or penitentiaries it is found that the illiterate stratum of the population is represented by two and a half times its quota. (See part IV of this monograph.) School education is perhaps in this case not a cause so much as an index of orderly tendencies in the family. A wayward tendency will show itself in a dislike of the restraints of school. If, however, the wayward can be brought under the humanizing influences of school, trained in good behavior, which means self-restraint and orderly concerted action, interested in school studies and the pursuit of truth, what can do more to insure a moral life, unless it is religion?

PART II — EDUCATIONAL ORGANIZATION IN THE UNITED STATES

The European student of education inquiring about schools always asks concerning the laws and regulations issued by the central government at Washington, taking for granted that things of such interest as education are regulated by the nation, as in Europe.

The central government of the United States, however, has never attempted any control over education within the several states. It is further than ever from any such action

at the present time. The idea of local self-government is that each individual shall manage for himself such matters as concern him alone; that where two or more persons are concerned the smallest political subdivision shall have jurisdiction and legislative powers; where the well-being of several towns is concerned the county or the state may determine the action taken. But where the interests of more than one state are concerned, the nation has ultimate control.

While the general government has not interfered to establish schools in the states, it has often aided them by donations of land, and in some cases by money, as in the acts of 1887 and 1890, which appropriate annual sums in aid of agricultural experiment stations and increase the endowment of agricultural colleges, which were formerly established in 1862 by generous grants of land.

The total amount of land donated to the several states for educational purposes since 1785 to the present have been as follows:

	Acres
1. For public or common schools:	
Every 16th section of public land in states admitted prior to 1848 and the 16th and 36th sections since (Utah, however, having four sections)	67,893,919
2. For seminaries or universities:	
Two townships in each state or territory containing public land..............................	1,165,520
3. For agricultural and mechanical colleges:	
30,000 acres for each member of congress to which the state is entitled..........................	9,600,000
Total number of acres......................	78,659,439

At the rate of one dollar and a quarter an acre (the traditional price asked by the government for its lands) this amounts to about one hundred millions of dollars.

Besides this a perpetual endowment by act of 1887 is made of $15,000 per annum for each agricultural experiment station connected with the state agricultural college, and $25,000 perpetual additional endowment by act of 1890 for

each of the colleges themselves — this is equivalent to a capitalized fund of one million dollars at four per cent for each state and territory, or in the aggregate about fifty millions more.

The general government supports the military school at West Point, established in 1802, to which each congressional district, territory (and the District of Columbia) is entitled to send one cadet, the president appointing ten additional cadets at large. Each cadet receives $540 a year to pay his expenses. (The course of study is four years. The number of graduates between 1802 and 1876 was 2,640, about fifty per cent of all admitted.)

The United States naval academy at Annapolis was established in 1845. Its course of study in 1873 was extended to six years. Cadets are appointed in the same manner as at West Point.

The general government provides for the education of the children of uncivilized Indians and for all the children in Alaska. There have been, besides the general grants referred to, special grants of land for educational purposes such as the "swamp lands" (Acts of 1849, 1850, 1860), by which 62,428,419 acres were given to 14 states (Alabama, Arkansas, California, Florida, Illinois, Indiana, Iowa, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Ohio and Wisconsin) and by some of these appropriated to education.

By the act of 1841 a half million of acres was given to each of sixteen states (including all above named except Indiana and Ohio, and besides these Kansas, Nebraska, Nevada and Oregon). This gives an aggregate of 8,000,000 of acres, the proceeds of most of which was devoted to education. The surplus funds of the United States treasury were in 1837 loaned to the older states for educational purposes to the amount of $15,000,000 and this fund constitutes a portion of the school fund in many of the states.

The aggregate value of lands and money given for education in the several states is therefore nearly three hundred millions of dollars.

In 1867 congress established a national bureau of education "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several states and territories, and of diffusing such information respecting the organization and management of school systems and methods of teaching as shall aid the people of the United States in the establishment and maintainance of efficient school systems, and otherwise promote the cause of education throughout the country." This bureau up to 1898 has published 350 separate volumes and pamphlets including 30 annual reports ranging from 800 to 2,300 pages each. The policy of the national government is to aid education but not in anywise to assume its control.

The several states repeat in the general form of their state constitutions the national constitution and delegate to the subdivisions — counties or townships — the management of education. (See appendix VIII, The local unit of school organization.) But each state possesses centralized power and can exercise it when the public opinion of its population demands such exercise.

Compulsory attendance — Even in colonial times as far back as 1642 a compulsory law was enacted in Massachusetts inflicting penalties on parents for the neglect of education. In the revival of educational interest led by Horace Mann in the years after 1837, it was felt that there must be a state law, with specific provisions and penalties and this feeling took definite shape and produced legislative action. A truant law was passed in 1850 and a compulsory law in 1852, requiring a minimum of 12 weeks attendance on school each year for children between the ages of eight and fourteen under penalty of twenty dollars.

In the Connecticut colony in 1650 the Massachusetts law of 1642 was adopted. Amendments were adopted in 1805 and 1821. By a law of 1813 manufacturing establishments were compelled to see that "the children in their employ were taught to read, write and cipher [arithmetical calculation], and that attention was paid to their morals." In

1842 a penalty was attached to a similar law which forbade "the employment of children under the age of 15 years unless they had been instructed at school at least three months of the 12 preceding."

The efficiency of these early laws has been denied because cases of prosecution have not been recorded. But a law-abiding people does not wait until prosecuted before obeying the law.

The existence of a reasonable law is sufficient to secure its general obedience in most parts of the United States. But in the absence of any law on the subject the parents yield to their cupidity and do not send their children to school. The efficiency of a law is to be found in its results and if twenty parents in a district send their children to school in obedience to the law and would not otherwise have sent them, it follows that the law is very useful though the twenty-first parent is obdurate and refuses to send his children and yet is not prosecuted for it.

This explanation of the working of one compulsory law will throw light on the working of compulsory laws in the twenty-seven states and territories that have passed them. There are exceptional localities in each state where an obnoxious law is openly and frequently violated, but the law is obeyed in all but a few places. In each locality, too, there are individuals who are disposed to violate the law and succeed in doing so, while all the citizens except these few obey the law because they have a law-abiding disposition. Abolish the law and the number who neglect the education of their children will increase by a large per cent. More and more attention has been given in later years to drafting compulsory laws with provisions that are sure to be efficient. The advocates of these new laws are apt in their pleas for more stringent laws to do injustice to the old laws. The following paragraphs show what states have adopted compulsory laws and the dates of adoption (the earlier dates in Connecticut and Massachusetts being unnoticed):

Statistics of compulsory attendance—Thirty states, one

territory and the District of Columbia have laws making education compulsory, generally at a public or approved private school. Sixteen states and one territory do not make education compulsory, although all of these have fully organized systems of schools free to every child of school age of whatever condition.

The most general period of required attendance at school is from eight to fourteen years of age, as is the case in Vermont, District of Columbia, West Virginia, Indiana, Michigan, North Dakota, South Dakota, Nebraska, Kansas, Montana, Colorado, Utah, Nevada, Idaho, Oregon and California. It begins likewise at eight, but is extended to 15 in Maine and Washington, and is from eight to 16 in New Hampshire, Connecticut, New York, Pennsylvania, Minnesota and New Mexico.

The child is required to begin attendance at the earlier age of seven, and continue to 12 in New Jersey, to 13 in Wisconsin, to 14 in Massachusetts, Kentucky and Illinois; to 15 in Rhode Island, and to 16 in Wyoming.

This is a general statement of age limits; the required time period is in some states shortened in the case of children employed to labor, or extended in the case of those not so employed, or growing up in idleness, or illiterate.

In Massachusetts and Connecticut the child is required to attend the full time that the schools are in session; in New York and Rhode Island, also, the full term, with certain exceptions in favor of children employed to work. In Pennsylvania the attendance is required for 70 per cent of the full term; in California for 66 2-3 per cent; for 20 weeks annually in Vermont, New Jersey, Ohio and Utah; 16 weeks annually in Maine, West Virginia, Illinois, Michigan and Nevada; 12 weeks annually in New Hampshire, District of Columbia, Indiana, Wisconsin, Kansas, North Dakota, South Dakota, Nebraska, New Mexico, Idaho, Washington, Oregon; and eight weeks annually in Kentucky.

In the following states habitual truants are sent to some special institution (truant or industrial school, reformatory,

parental home, etc.): Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Indiana, Minnesota and Michigan.

Massachusetts requires counties, and New York requires cities to maintain truant schools, or provide for their truants in the truant schools of neighboring localities. Illinois requires cities of over 100,000 inhabitants to maintain truant schools. In Rhode Island towns and cities must provide suitable places for the confinement and instruction of habitual truants.

Clothing is furnished in case of poverty to enable children to attend school in Vermont, Indiana and Colorado.

Laws absolutely prohibiting the employment of children under a specified minimum age in mercantile or manufacturing establishments are in force in New Hampshire (under 10 years), Rhode Island (under 12), and Massachusetts and Connecticut (under 14). These states, together with Vermont, New York, New Jersey, Ohio, Illinois, Michigan, North and South Dakota, have laws permitting the employment of children of a certain age only while the schools are not in session, or provided they have already attended school a given number of weeks within the year.

Statistics of supervision — There are county superintendents of schools in all those states where the county is a political unit for the administration of civil affairs other than courts of law. About thirty-five states have this form of organization. But in the six New England states and in Michigan the only supervision is that of the township, and the counties in those states are units almost solely for the administration of justice through county courts. In Arkansas, Texas and North Carolina supervision is only that of the subdivisions of townships described as districts. Louisiana, Mississippi and West Virginia have a modified township supervision. The county superintendents are elected by the people in only 13 states. In the rest they are appointed by some state or county officers, or chosen by the combined vote of the school boards. (See appendix VIII for an explanation of the local unit of school organization.)

Each state has a superintendent of public instruction. He has this title in 29 states; in the remaining states other designations, as "superintendent of common schools," "of free schools," or "of public schools," "of education" or "commissioner of public schools," are used; he is called "secretary of state board of education" in Massachusetts and Connecticut.

Eight hundred and thirty-six (836) cities have superintendents of their public schools.

School boards — In cities the local boards which have the management of the schools are generally termed "boards of education;" in towns and districts the designations most generally used are "school directors" and "school trustees."

They are termed "school directors" in Arkansas, Illinois, Iowa, Louisiana, Pennsylvania, Tennessee and Washington; "school trustees" in Indiana, Kentucky, New Jersey, New York, Mississippi, Nevada, South Carolina and Texas; "school boards" in Michigan, Wisconsin, Nebraska and New Hampshire; "school committees" in Massachusetts and Rhode Island; "school visitors" in Connecticut; "superintending school committees" in Maine; "boards of education" in Ohio; and "prudential committees" in Vermont.

These boards are similar in their constitution, powers and duties, and are generally chosen by the voters at elections. They are corporate bodies and can make contracts, acquire, hold and dispose of property.

They employ teachers (and superintendents when such are deemed necessary) and fix their salaries. They make the rules and regulations for the government of the schools and fix the course of study and the list of text-books to be used. They hold meetings monthly or oftener.

Women in school administration — There are at present (1899) two women holding the position of state superintendent of schools, 18 that of city superintendent, and 256 that of county superintendent. The last named are divided between California, Colorado, Idaho, Illinois, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Montana,

Nebraska, New York, North Dakota, Oklahoma, Pennsylvania, South Dakota, Tennessee, Utah, Vermont, Washington, Wisconsin and Wyoming. In all these states, women hold minor school offices also. Ohio, Maine, New Hampshire, Massachusetts, Rhode Island and Connecticut have no officers corresponding to county superintendents, but in all those states there are women who are members of county examining boards, township superintendents and the like. They may be district trustees or members of local school boards in still other states, as in New Jersey. Women may hold any school office in Colorado, Idaho, Illinois, Indiana, Louisiana, Oregon, South Dakota, Utah, Vermont, Wyoming, and any office of school management in Minnesota. One of the members of the Iowa educational board of examiners must be a woman.

Women have like suffrage, in all particulars, with men in Colorado, Idaho, Utah and Wyoming. With certain limitations specified, in some of the states they may vote at school elections in Arizona, Connecticut, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Montana, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oregon, South Dakota, Vermont, Washington and Wisconsin. The limitations, when there are any, usually restrict the suffrage of women to widows with children to educate, guardians and taxpayers, or to certain kinds of elections.

Salaries of teachers—The expenditure for salaries in the public schools, teachers and superintendents both included, was $123,809,412, in 1897–98, or 63.8 per cent of the total expenditure for school purposes. The highest average salaries are found in the western division, among the Pacific states and territories, the average per month for men being $58.59, and for women $50.92, in that section of the union. The lowest average salaries and the least variance between the averages for men and women are found in the South Atlantic section. The averages are, for men $31.21, and for women $31.45.

The length of the school year must be considered in determining the annual salary. This period averages for the whole country 143.1 days, or about seven months of 20 days each, and ranges from 98.6 days in the south central division to 174.5 days in the North Atlantic. (See appendix VI, Teachers' pensions, etc.)

Co-education of the sexes—In both the central and the western divisions the education of boys and girls in the same schools is common and exceptions rare in the public schools. In the North and South Atlantic divisions many of the older cities continue to educate the girls in separate schools. In newly-added suburban schools, however, co-education is the rule (as in Boston, for example). In the rural districts of the Atlantic divisions north and south, co-education has always been the custom. Considering the whole country, it may be said that co-education, or the education of boys and girls in the same classes, is the general practice in the elementary schools of the United States. The cities that present exceptions to this rule are fewer, apparently, than 6 per cent of the total number. In the majority of these cities the separation of boys and girls has arisen from the position or original arrangement of buildings, and is likely to be discontinued under more favorable conditions. Of the 50 principal cities enumerated by the census of 1890, 4, namely, Philadelphia (Pennsylvania); Newark (New Jersey); Providence (Rhode Island); and Atlanta (Georgia)—report separation of the sexes in the high schools only; 2 cities of this class, San Francisco (California), and Wilmington (Delaware), reported in 1892, separation in all grades above the primary. In 6 cities, New York and Brooklyn (New York); Boston (Massachusetts); Baltimore (Maryland); Washington (District of Columbia), and Louisville (Kentucky)—both separate and mixed classes are found in all grades. Five cities of the second class, having a population of 8,000 or more, report separation of the sexes in the high schools, and 10 cities of the same group separate classes in other grades. Of cities whose population

is less than 8,000, nine report separate classes for boys and girls in some grades.

Co-education is the policy in about two-thirds of the total number of private schools reporting to this bureau, and in 65 per cent of the colleges and universities.

Sectarian division of school funds — In connection with this matter of state compulsory laws against neglect of schools it is well to mention the provisions made in the several states prohibiting appropriations of money to aid denominational schools.

There are forty states with constitutional provisions forbidding all, or at least sectarian diversion of the money raised for the support of education.

1. Constitutions which prohibit sectarian appropriations — California,[1] Colorado, Florida, Georgia, Idaho, Illinois, Indiana,[2] Louisiana, Michigan, Minnesota, Mississippi,[3] Missouri, Montana, New Hampshire, North Dakota, Oregon,[2] South Dakota, Texas, Washington, Wisconsin,[2] Wyoming, — 21 states.

2. Constitutions which do not prohibit sectarian appropriations — Alabama,[4] Arkansas,[4] Connecticut, Delaware, Iowa,[4] Kansas, Kentucky,[5] Maine, Maryland, Massachusetts, Nebraska,[6] Nevada,[6] New Jersey,[7] New York, North Carolina, Ohio, Pennsylvania,[4] Rhode Island, South Carolina,[6] Tennessee, Vermont, Virginia, West Virginia, — 23 states.

3. Constitutions which prohibit any diversion of the school fund — Alabama, Arkansas, California, Connecticut, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New

[1] Can make per capita grants to institutions.

[2] Covers only religious and theological institutions.

[3] Prohibits any devise, legacy, or gift by last will and testament to religious or ecclesiastical corporations or societies.

[4] Sectarian appropriations can be made by two-thirds vote of all the members of both houses of the legislature.

[5] Has a revised constitution pending popular adoption.

[6] Prohibits sectarian instruction in public schools.

[7] Prohibits appropriations to societies, associations or corporations.

Jersey, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Washington, West Virginia, Virginia, Wisconsin, — 36 states.

The local unit of school organization — The state exercises remote authority over all public schools in its borders. The county in most states has a closer supervision of all schools in its limits, but has very little to do with schools in New England. In certain states it becomes the unit for the entire local administration of public schools. The town or township takes more or less of the local functions in other states, and the district becomes a local unit for variable functions in yet others. In 35 counties of Texas there is a community system. Counties generally receive, hold and disburse moneys for townships and districts formed by subdivision of counties. Towns or townships generally hold the same relation to districts formed by division of towns or townships. In a few states districts have their own tax collectors and treasurers.

The summarized statement below shows the principal agency through which local support and control of schools is exercised, special laws excepted, under which cities, towns and independent districts exist.

County — Alabama, with either town or township; Florida, with provision for districts of limited power; Georgia; Louisiana, recognizing congressional townships in accounts of sixteenth section land funds; Maryland; Mississippi, with provision for separate districts; North Carolina, with districts capable of holding real estate; Tennessee, with some local functions in districts and only supervisory powers in sub-districts; Utah, with provision for division.

Town or township — Alabama, the congressional township[1] for administrative convenience, its officers appointed and its accounts kept by county officers; Connecticut, the town may abolish districts; Illinois, township based on congressional township or district, optional; Indiana, New Jersey, Ohio

[1] The expression "congressional township" refers to the division established in new territories by the government survey. Lines of latitude and longitude cross one another six statute miles apart, making townships exactly six miles square.

and Pennsylvania, each township, incorporated town or city (or borough in Pennsylvania), a district corporation for school purposes; Iowa, township based on congressional township, with sub-districts for supervisory convenience and independent districts, both in use; Maine, Massachusetts; Minnesota, township may be a district as a part of a county; New Hampshire; New York, recognized for certain land funds, but districts generally; North Dakota, based on congressional township; Rhode Island, may create or abolish districts; South Dakota, based on congressional township; Vermont, Wisconsin, optional in formation of districts.

District — Arkansas, Arizona, California, Colorado; Connecticut, where not abolished by the town; Delaware, Florida, Idaho; Illinois, optional with townships; Iowa, independent districts as well as townships; Kansas, Minnesota, Missouri, districts may be less than townships; Kentucky, Michigan, Mississippi, optional; Montana, Nebraska; Nevada, each village, town or city is a district; New Mexico; New York, commissioner's district, a county or part of a county, has supervisory authority, school districts are parts of commissioners' districts, towns recognized for certain land funds; North Carolina, with limited powers as stated under county; Oklahoma, Oregon, South Carolina; Tennessee, with limited powers as stated under county; Texas, but cities may acquire exclusive control of their schools, towns and villages may be incorporated for school purposes only, in 35 community counties families associate from year to year to support schools and draw their share of public money; Utah, permissible as stated under county; Virginia, West Virginia, corresponding geographically to magisterial districts; Washington, each city or town (incorporated); Wisconsin, optional, see town or township; Wyoming.

PART III — THE ELEMENTARY COURSE OF STUDY

A committee appointed by the National Educational Association in 1894 prepared a course of study for the eight years of the elementary schools recommending two innovations,

namely, the introduction of Latin, French or German in the eighth year and algebra in the seventh and eighth years. The following presents the course as given in the report of the committee together with a conspectus in the nature of a yearly programme.

ELEMENTARY SCHOOL COURSE

Reading. Eight years, with daily lessons.

Penmanship. Six years, ten lessons per week for first two years, five for third and fourth, and three for fifth and sixth.

Spelling Lists. Fourth, fifth and sixth years, four lessons per week.

Grammar. Oral, with composition or dictation, first year to middle of fifth year, text-book from middle of fifth year to close of seventh year, five lessons per week. (Composition writing should be included under this head. But the written examinations on the several branches should be counted under the head of composition work.)

Latin or French or German. Eighth year, five lessons per week.

Arithmetic. Oral first and second year, text-book third to sixth year, five lessons per week.

Algebra. Seventh and eighth years, five lessons per week.

Geography. Oral lessons second year to middle of third year, text-book from middle of third year, five lessons weekly to seventh year, and three lessons to close of eighth.

Natural Science and Hygiene. Oral lessons, 60 minutes per week, eight years.

History of United States. Five hours per week seventh year and first half of eighth year.

Constitution of United States. Last half of the eighth year.

General History and Biography. Oral lessons, 60 minutes a week, eight years.

Physical Culture. 60 minutes a week, eight years.

Vocal Music. 60 minutes a week, eight years.

Drawing. 60 minutes a week, eight years.

Manual Training or Sewing and Cooking. One-half day each week in seventh and eighth years.

GENERAL PROGRAM

BRANCHES	1st year	2d year	3d year	4th year	5th year	6th year	7th year	8th year
Reading	10 lessons a week		5 lessons a week					
Writing	10 lessons a week		5 lessons a week		3 lessons a week			
Spelling lists				4 lessons a week				
English grammar	Oral, with composition lessons					5 lessons a week with text-book		
Latin, French, or German								5 lessons
Arithmetic	Oral, 60 minutes a week		5 lessons a week with text-book					
Algebra							5 lessons a week	
Geography		Oral, 60 minutes a week	5 lessons a week with text-book				3 lessons a week	
Natural Science+Hygiene	Sixty minutes a week							
United States History							5 lessons a week	
United States Constitution								5 ls
General History	Oral, sixty minutes a week							
Physical Culture	Sixty minutes a week							
Vocal Music	Sixty minutes a week divided into 4 lessons							
Drawing	Sixty minutes a week							
Manual Training or Sewing+Cookery							One-half day each week	
Number of Lessons	20+7 daily exer.	20+7 daily exer.	20+5 daily exer.	24+5 daily exer.	27+5 daily exer.	27+5 daily exer.	23+6 daily exer.	23+6 daily exer.
Total Hours of Recitations	12	12	11 2-3	13	16 1-4	16 1-4	17 1-2	17 1-2
Length of Recitations	15 min	15 min	20 min	20 min	25 min	25 min	30 min	30 min

The subjects actually taught in the elementary schools — In the report of the National bureau of education for 1888–89 (pp. 373–410), from a selected list of 82 of the most important cities of the nation, statistics are given showing the amount of time consumed in the entire eight years of the elementary course on each of the branches constituting the curriculum. The returns included 26 branches, one of which was spelling. The total number of hours of instruction in the entire eight years varied in the different cities from 3,000 to 9,000, with a general average of about 7,000 hours, which would mean that each pupil used about four and a half hours per day for 200 days in actual study and in recitation or class exercises. The amount of time reported as used by pupils in studying and reciting spelling during the eight years varied from about 300 to 1,200 hours, with an average of 516. This means that from 37 to 150 hours a year, with average of 77 hours a year for eight years, was devoted to spelling. The English speaking child who learns to read has to use an inordinate amount of time in memorizing the difficult combinations of letters used to represent English words.

This report of the bureau of education gives the time devoted to reading in 82 cities as ranging from about 600 to about 2,000 hours, and the average as 1,188 hours. Thus from 75 to 250 hours a year, with an average of 150, are spent in learning to read.

Geography is reported as using from 200 to 1,000 hours, with an average of about 500, or 25 to 125 hours per year, the average being rather more than 60 hours a year. This, we see, is less than the time devoted to spelling.

Arithmetic, as shown by the report, still receives more attention than any other branch. The amount of time used varies from 600 to 2,240 hours, with an average of about 1,190 hours — that is to say, from 75 to 280 hours per year — an average of 150 hours a year. No other nation gives so much time to arithmetic. The question naturally arises whether corresponding results are obtained in the mastery

of this difficult branch, and whether so much arithmetic strengthens or weakens the national character on the whole.

Turning from arithmetic to grammar, we find a great falling off in the amount of attention it receives compared with the time assigned to it a few years ago. The 82 cities report a very large substitution of "language lessons" for technical grammar. Grammar proper gets from 65 to 680 hours of the course, with an average of about 300 hours. This would allow from 8 to 80 hours, with an average of 38 hours per year, if distributed over the entire course. But it is evident that grammar proper is, as a study, not profitable to take up until the seventh year of the course of study. But the language lessons, which are practiced in all the grades above the lowest two, more than compensate for any curtailment in technical grammar and "parsing."

Mathematics gives an insight into the nature of matter and motion, for their form is quantitative. But the form of mind on the other hand is shown in consciousness — a subject and object. The mind is always engaged in predicating something of something, always modifying something by something, and the categories of this mental operation are the categories of grammar, and appear as parts of speech. The child by the study of grammar gets some practice in the use of these categories and acquires unconsciously a power of analysis of thoughts, motives and feelings, which is of the most practical character.

History, which gives an insight into human nature as it is manifested in social wholes — tribes, nations and peoples — is a study of the elementary school, usually placed in the last year or two of the course, with a text-book on the history of the United States. The returns from the 82 cities show that this study everywhere holds its place, and that it receives more than one-half as much time as grammar. Considering the fact that grammar is begun a year earlier, this is better than we should expect. With history there is usually joined the study of the constitution of the United States for one-quarter of the year. Besides this, some schools have

taken up a special text-book devoted to civics, or the duties of citizens. History ranges from 78 to 460 hours, with an average of about 150.

General history has not been introduced into elementary schools, except in a few cases by oral lessons. Oral lessons on physiology, morals and manners, and natural science have been very generally introduced. The amount of time assigned in 66 cities to physiology averages 169 hours; to a course of lessons in morals and manners in 27 cities 167 hours; to natural science on an average in the 39 cities that give a systematic course of lessons, 176 hours.

Singing is quite general in all the schools, and instruction in vocal music is provided for in many cities. Lessons in cookery are reported in New Haven (80 hours); and Washington, D. C. (114 hours). It is also taught in Boston, and many other cities not reporting it in the list of 82.

Physical culture is very generally taught. Of the 82 cities, 63 report it as receiving on an average 249 hours a year.

Manual training — Manual training is by no means a novelty in American schools. Thomas Jefferson recommended it for the students of the University of Virginia, and Benjamin Franklin included it in his plan for an academy in Philadelphia. An active propaganda was carried on in behalf of manual labor in educational institutions for many years, beginning about 1830, and some of our foremost institutions had their origin under its influence. But what is now known as "manual training" is traced to an exhibit of a Russian institution at the centennial exposition in 1876. The value of the system of hand training there suggested was recognized by such men as John D. Runkle and C. M. Woodward, who became advocates of the new idea and introduced it into the institutions under their charge. Strong opposition was met among schoolmen for a time, but manual training has steadily grown in popularity, and with its growth it has constantly improved in matter and method, and consequently in usefulness. In 1898 manual training was an essential feature in the public school course of 149

cities. In 359 institutions other than city schools there is training which partakes more or less of the nature of manual training, and which belongs in a general way to the same movement. These institutions embrace almost every class known to American education, and the manual features vary from the purely educational manual training of the Teachers college in New York city to the specific trade instruction of the apprentice schools.

In many cases the legislatures have taken cognizance of the movement. Massachusetts requires every city of 20,000 inhabitants to maintain manual training courses in both elementary and high schools. Maine authorizes any city or town to provide instruction in industrial or mechanical drawing to pupils over 15 years of age; industrial training is authorized by general laws in Connecticut, Illinois, Indiana (in cities of over 100,000 population), Maryland, New Jersey, New York, Pennsylvania, Utah, Wisconsin and Wyoming. Congressional appropriations are regularly made for manual training in the District of Columbia; Georgia authorizes county manual labor schools, and in Washington manual training must be taught in each school under the control of the State normal school.

Kindergartens — Kindergartens are authorized by general law in Arizona, California, Colorado, Connecticut, Illinois, Indiana, Iowa, Michigan, New York, Ohio, Oregon, Pennsylvania, Vermont and Wisconsin.

Cities also establish kindergartens through powers inherent in their charters. In 1897–98 there were public kindergartens in 189 of the 626 cities of 8,000 population and over. In these 189 cities there were 1,365 separate kindergartens supported by public funds. The number of kindergarten teachers employed was 2,532, and under their care were 95,867 children, 46,577 boys and 49,290 girls.

Information was obtained concerning 2,998 private kindergartens in 1897–98 and it is probable that at least 500 others were in existence. The 2,998 private kindergartens had 6,405 teachers and 93,737 pupils. It will be seen that the

total number of kindergartens, public and private, was 4,363, with 8,937 teachers and 189,604 pupils. The actual number of pupils enrolled in kindergartens in the United States in 1897–98 must have exceeded 200,000.

PART IV — THE PLACE OF POPULAR EDUCATION IN THE IDEALS OF THE AMERICAN PEOPLE

Education in the United States is regarded as something organic — something belonging essentially to our political and social structure. Daniel Webster announced, in his clear and incisive manner, this necessity that appertains to the American form of government. He said: "On the diffusion of education among the people rests the preservation and perpetuation of our free institutions. I apprehend no danger to our country from a foreign foe. * * * Our destruction, should it come at all, will be from another quarter. From the inattention of the people to the concerns of the government, from their carelessness and negligence, I confess I do apprehend some danger. I fear that they may place too implicit confidence in their public servants, and fail properly to scrutinize their conduct; that in this way they may be the dupes of designing men and become the instruments of their undoing. Make them intelligent and they will be vigilant; give them the means of detecting the wrong and they will apply the remedy."

We are making the experiment of self-government — a government of the people by the people — and it has seemed a logical conclusion to all nations of all times that the rulers of the people should have the best education attainable. Then, of course, it follows that the entire people of a democracy should be educated for they are the rulers.

Quoting again from Webster's Plymouth oration in 1822: "By general instruction we seek as far as possible to purify the whole atmosphere, to keep good sentiments uppermost, and to turn the strong current of feeling and opinion, as well as the censures of the law and the denunciations of religion, against immorality and crime."

This necessity for education has been felt in all parts of
he nation, and the whole subject is reasoned out in many a
chool report published by city or state. By education we
dd to the child's experience the experience of the human
ace. His own experience is necessarily one-sided and
hallow; that of the race is thousands of years deep, and it
rounded to fullness. Such deep and rounded experience
what we call wisdom. To prevent the child from making
ostly mistakes we give him the benefit of seeing the lives of
thers. The successes and failures of one's fellow-men
struct each of us far more than our own experiments.

The school attempts to give this wisdom in a systematic
anner. It uses the essential means for its work in the
ape of text-books, in which the experience of the race is
gested and stated in a clear and summary manner, in its
veral departments, so that a child may understand it. He
s a teacher to direct his studies and instruct him in the
oper methods of getting out of books the wisdom recorded
them. He is taught first in the primary school how to
ell out the words and how to write them himself. Above
, he is taught to understand the meaning of the words.
l first use of words reaches only a few of their many sig-
ications; each word has many meanings and uses, but the
ild gets at only one meaning, and that the simplest and
guest, when he begins. His school work is to train him
o accuracy and precision in the interpretation of language.
e learns gradually to fill each word of the printed page
h its proper meaning. He learns to criticise the state-
nts he reads, and to test them in his own experience and
comparison with other records of experience.

n other words, the child at school is set to work to enlarge
own puny life by the addition of the best results of
er lives. There is no other process so well adapted to
ure a growth in self-respect as the mastery of the thought
the thinkers who have stored and systematized the expe-
nce of mankind.

his is the clue to the hopes founded on education. The

patriotic citizen sees that a government managed by illiterate people is a government of one-sided and shallow experience, and that a government by the educated classes insures the benefits of a much wider knowledge of the wise ways of doing things.

The work of the school produces self-respect, because the pupil makes himself the measure of his fellows and grows to be equal to them spiritually by the mastery of their wisdom. Self-respect is the root of the virtues and the active cause of a career of growth in power to know and power to do. Webster called the free public school "a wise and liberal system of police, by which property and the peace of society are secured." He explained the effect of the school as exciting "a feeling of responsibility and a sense of character."

This, he saw, is the legitimate effect; for, as the school causes its pupils to put on the forms of thought given them by the teacher and by the books they use — causes them to control their personal impulses, and to act according to rules and regulations — causes them to behave so as to combine with others and get help from all while they in turn give help; as the school causes the pupil to put off his selfish promptings, and to prefer the forms of action based on a consideration of the interests of others — it is seen that the entire discipline of the school is ethical. Each youth educated in the school has been submitted to a training in the habit of self-control and of obedience to social order. He has become to some extent conscious of two selves; the one his immediate animal impulse, and the second his moral sense of conformity to the order necessary for the harmonious action of all.

The statistics of crime confirm the anticipations of the public in regard to the good effects of education. The jails of the country show pretty generally the ratio of eight to one as the quotas of delinquents furnished from a given number of illiterates as compared with an equal number of those who can read and write. Out of 10,000 illiterates there will be eight times as many criminals as out of 10,000

who can read and write. In a state like Michigan, for example, where less than five per cent of the people are illiterate, here are 30 per cent of the criminals in jail who are illiterte. The 95 per cent who are educated to read and write urnish the remaining 70 per cent.

In comparing fractions, it is necessary to consider the enominators as well as the numerators. Comparing only he numerators, we should say education produces more rime than illiteracy; for here are only 30 per cent of those riminals from the illiterate class, but 70 per cent are from hose who can read and write. On the other hand, taking he denominators also into consideration, we say: But there re less than five per cent illiterates and more than 95 of ducated persons in the entire adult population. Hence the ue ratio is found, by combining the two fractions, to be ne-eighth, or one to eight for the respective quotas furished. $(\frac{30}{5} : \frac{70}{95} :: 8 : 1)$.

The penitentiaries, or state prisons, contain the selected iminals who have made more serious attacks on person nd property and on the majesty of the law than those left the jails. These, therefore, come to a larger extent from e 70 per cent of arrests which are from the educated class; d it is found, by comparing the returns of the 20 odd states at keep records of illiteracy, that the illiterates furnish om two to four times their quota for the prisons, while ey furnish eight times their quota for the jails and houses correction.

But it is found on investigation that the criminals who can ad and write are mostly from the ranks bordering on illitacy. They may be described as *barely* able to read and ite, but without training in the use of those arts for quainting themselves with the experience and wisdom of eir fellow-men.[1]

A point is made that those states which have the completest systems of educa- have the most criminals in their jails and prisons. This is true, but its sigcance is not read aright until one sees by an analysis of the causes of arrest it is not a real increase of crime, but an increase of zeal on the part of the munity to abolish the seeds of crimes, to repress the vices that lead to crime.

It is against all reason and all experience that the school whose two functions are to secure good behavior and an intelligent acquaintance with the lessons of human experience, should not do what Webster said, namely, "Prevent in some measure the extension of the penal code, by inspiring a salutary and conservative principle of virtue and of knowledge in an early age."

Thus the political problem, which proposes to secure the general welfare by intrusting the management of the government to representatives chosen by all the people, finds its solution in the establishment of schools for the people.

PART V — HISTORICAL BEGINNINGS OF SCHOOLS IN THE UNITED STATES

All who become interested in the system of education prevailing in the United States and see the direct bearing it has on the realization of the ideal of self-government, feel an interest in the question of its origin. Anything is best understood when seen in the perspective of its history. We see not only what is present before us but its long trend hitherward.

The school is the auxiliary institution founded for the purpose of reinforcing the education of the four fundamental institutions of civilization. These are the family, civil society (devoted to providing for the wants of food, clothing, and shelter), the state, the church. The characteristic of the school is that it deals with the means necessary for the acquirement, preservation, and communication of intelligence. The mastery of letters and of mathematical symbols; of the technical terms used in geography and grammar and the sciences; the conventional meaning of the lines used on maps to indicate water or mountains or towns or latitude and longitude, and the like. The school devotes

In Massachusetts, for example, there were in 1850, 3,351 arrests for drunkenness, while in 1885, the number had increased to 18,701. But meanwhile the crimes against person and property had decreased from 1860 to 1885 forty-four per cent, making allowance for increase of population. Life and property had become more safe, but drunkenness had become less safe.

elf to instructing the pupil on these dry details of arts
at are used to record systematic knowledge. These con-
ntionalities once learned, the youth has acquired the art
self-help; he can of his own effort open the door and
ter the treasure-house of literature and science. What-
er his fellow-men have done and recorded he can now
rn by sufficient diligence of his own.

The difference between the part of education acquired in
family and that acquired in the school is immense and
alculable. The family arts and trades, manners and
toms, habits and beliefs, form a sort of close-fitting
ritual vesture: a garment of the soul always worn, and
pressive of the native character not so much of the indi-
ual as of his tribe or family or community. The indi-
ual has from his birth been shaped into these things as
a mould; all his thinking and willing and feeling have
n moulded into the form or type of humanity looked
on as the ideal by his parents and acquaintances.

This close-fitting garment of habit gives him direction but
self-direction or freedom. He does what he does blindly,
n the habit of following custom and doing as others do.
But the school gives a different sort of training,—its
cipline is for the freedom of the individual. The educa-
of the family is in use and wont and it trains rather than
ructs. The result is unconscious habit and ungrounded
judice or inclination. Its likes and dislikes are not
unded in reason, being unconscious results of early train-

But the school lays all its stress on producing a con-
usness of the grounds and reasons of things. I should
say all its stress; for the school does in fact lay much
ss on what is called discipline,—on habits of alert and
cal attention, on regularity and punctuality, and self-
trol and politeness. But the mere mention of these
nents of discipline shows that they, too, are of a higher
er than the habits of the family, inasmuch as they all
uire the exertion of both will and intellect consciously
rder to attain them. The discipline of the school forms

a sort of conscious superstructure to the unconscious basis of habits which have been acquired in the family.

School instruction, on the other hand, is given to the acquirement of techniques; the technique of reading and writing, of mathematics, of grammar, of geography, history, literature, and science in general.

One is astonished when he reflects upon it at first, to see how much is meant by this word technique. All products of human reflection are defined and preserved by words used in a technical sense. The words are taken out of their colloquial sense, which is a loose one except when employed as slang. For slang is a spontaneous effort in popular speech to form technical terms.

The technical or conventional use of signs and symbols enables us to write words and record mathematical calculations; the technical use of words enables us to express clearly and definitely the ideas and relations of all science. Outside of technique all is vague hearsay. The fancy pours into the words it hears such meanings as its feelings prompt. Instead of science there is superstition.

The school deals with technique in this broad sense of the word. The mastery of the technique of reading, writing, geography and history lifts the pupil into a plane of freedom hitherto not known to him. He can now by his own effort master for himself the wisdom of the race.

By the aid of such instruments as the family education has given him he cannot master the wisdom of the race, but only pick up a few of its results, such as the custom of his community preserves. By the process of hearsay and oral inquiry it would take the individual a lifetime to acquire what he can get in six months by the aid of the instruments which the school places in his hands. For the school gives the youth the tools of thought.

Immigrants to America in the colonial period laid stress on the establishment of schools. The ideas of Luther were echoed by reformers in Holland, Sweden, Switzerland and elsewhere. Education is called "the foundation

the commonwealth," in 1583, in a school law of Holland.
: that time there was a stringent school law passed. In
/eden education was common before 1650, and every peas-
t's child was taught to read.
Boston, in 1635, voted a school and funds to support a
ster. Roxbury was quite active in the founding of free
ools. Plymouth, Weymouth, Dorchester, Salem, Cam-
dge, and other towns had schools before 1650. A law of
: general court of Massachusetts decreed that in every
vn the selectmen should prosecute those who refused to
ain their children in learning and labor," and to impose a
: of 20 shillings on those who neglected to teach their
ldren "so much learning as may enable them perfectly
ead the English tongue."
chools were established in the Connecticut colonies
nediately after their settlement. The Rhode Island col-
es had schools by 1650. In 1636 occurred the important
: of the general court of Massachusetts, setting apart
· hundred pounds for the establishment of a college which
endowed two years afterward by John Harvard, receiv-
1700 pounds and named from its benefactor. The
lic Latin school of Boston dates from 1635. Meanwhile
Jew York the Dutch had brought over their zeal for
cation. The Dutch West India company, in 1621,
ged its colonists to maintain a clergyman and a school-
ter. It seems that in 1625 the colonial estimate included
ergyman at 1440 florins, and a schoolmaster at 360
ns. In 1633 the first schoolmaster arrived—Adam
landson. His name is revered like that of Ezekiel
ever and Philomon Purmont, schoolmasters of early
on.
s regards common schools in Virginia, the opinion of the
l governor, Berkeley, is often quoted: "I thank God
: be no free schools nor printing-presses, and I hope we
not have them these hundred years; for learning has
ght disobedience and heresy and sects into the world,
printing has divulged them and libels against the best

of governments: God keep us from both." The governor of the Connecticut colony answered to a question (apparently of the commissioners of foreign plantations): "One-fourth of the annual revenue of this colony is laid out in maintaining free schools for the education of our children."

Apropos to this utterance of Berkeley, against whom the more progressive spirit of Virginia arose in rebellion in 1676, there should be quoted a more noteworthy sentence from the Virginian, Thomas Jefferson, who wrote (to J. C. Cabell) in 1818: "A system of general instruction which shall reach every description of our citizens from the richest to the poorest, as it was my earliest, so shall it be the latest of all the public concerns in which I shall permit myself to take an interest."

In 1647 the Massachusetts general court passed what has become the most celebrated of the early school laws of the colonies. In it occurs the often-quoted passage: "To the end that learning may not be buried in the graves of our forefathers, * * * it is ordered that every township within this jurisdiction * * * of the number of fifty households shall appoint one within their town to teach all such children as shall resort to him to write and read, whose wages shall be paid either by the parents or masters of such children, or by the inhabitants in general * * * further ordered that any town * * * of one hundred * * * householders * * * shall set up a grammar school, the master thereof being able to instruct youths so far as they may be fitted for the university." This law attached a penalty to its violation. "Grammar" meant Latin grammar at that period.

New Jersey established schools as early as 1683, and an example of a permanent school fund is found in an appropriation made that year. In 1693 a law compelled citizens to pay their shares for the maintenance of a school. In 1726 a clergyman from Pennsylvania established in New Jersey a classical school that grew in after times into Princeton college.

The original charter given William Penn required that he government of his colony should erect and aid public chools. Within 20 years after its settlement, schools were ounded in Philadelphia, and others in towns of that colony.

The management of the district (elementary) schools egan in most cases with the church and gradually came nto the hands of the smallest political subdivision, known as districts." Each township was divided into districts for chool purposes, and for minor political purposes such as pair of the public highways. Each district contained an erage of four square miles, with a schoolhouse near the cenr of population, usually a little distance from some village, d holding a maximum of forty or fifty pupils. The school mmittee employed teachers. The schools held a three onths' session in the winter, and sometimes this was made ur months. The winter school was nearly always "kept" a man. There might be a summer school for a brief ssion kept by a woman. Wages for the winter school, en as late as 1840, in the rural districts of New England, re six to ten dollars a month. The schoolmaster might a young college student trying to earn money during his cation to continue his course in college. More commonly was a surveyor, or clerk, or a farmer who had a slender re of learning but who could "keep order." He possed the faculty to keep down the boisterous or rebellious pils and could hear the pupils recite their lessons memord by them from the book.

There were in some places school societies, semi-public porations, that founded and managed the schools, receiv- more or less aid from the public funds. Such associans provided much of the education in New York, Philaphia, and in many parts of New England before the ent of the public school.

When the villages began to catch the urban spirit and ablish graded schools with a full annual session, there e a demand for a higher order of teacher, the profesal teacher, in short. This caused a comparison of ideals;

the best enlightened in the community began an agitation of the school question, and supervision was demanded. In Massachusetts, where the urban civilization had made most progress, this agitation resulted in the formation of a state board of education in 1837, and the employment of Horace Mann as its secretary (June, 1837). Boston had been connected with Providence, Worcester and Lowell by railroads before 1835, and in 1842 the first great trunk railroad had been completed through Springfield to Albany, opening to Boston a communication with the great west by the Erie canal and the newly completed railroad from Albany to Buffalo. This was the beginning of the great urban epoch in America that has gone on increasing the power of the city to this day.

The number of cities containing 8,000 inhabitants and upwards, was, in 1790, only, six; between 1800 and 1810 it had increased to 11; in 1820 to 13; in 1830, 26; in 1840, 44; in the fifty years between 1840 and 1890 it increased from 44 to 443, or 10 times the former number. The urban population of the country in 1790 was, according to the superintendent of the census (see Bulletin No. 52, April 17, 1791), only one in 30 of the population; in 1840 it had increased to one in 12; in 1890, to one in three. In fact, if we count the towns on the railroads that are made urban by their close connection with the large cities, and the suburban districts, it is safe to say that now one-half of the population is urban.

Horace Mann came to the head of education in Massachusetts just at the beginning of the epoch of railroads and the growth of cities. He attacked with unsparing severity the evils of the schools as they had been. The school district system, introduced into Connecticut in 1701, into Rhode Island about 1750, and into Massachusetts in 1789, was pronounced by him to be the most disastrous feature in the whole history of educational legislation in Massachusetts.

Horace Mann extended his criticisms and suggestions to the examination of teachers and their instruction in teachers'

itutes; to the improvement of school buildings; the
ing of school funds by taxation; the creating of a cor-
: public opinion on school questions; the care for vicious
th in appropriate schools. He discarded the hide-bound
t-book method of teaching and substituted the oral dis-
sion of the topic in place of the memorizing of the words
the book. He encouraged school libraries and school
aratus.

Iorace Mann's influence founded the first normal school
he United States at Lexington (afterwards moved to
mingham), and a second one founded at Bridgewater in
fall of the same year (1839).

nspired by the example in Massachusetts, Connecticut
aroused by Henry Barnard, who carried through the
slature the act organizing a state board of commissioners,
became himself the first secretary of it (1839). In 1849,
inecticut established a normal school. In 1843, Mr.
nard went to Rhode Island and assisted in drawing up
state school law under which he became the first com-
sioner, and labored there six years.

'hese were the chief fermenting influences in education
: worked a wide change in the management of schools in
middle and western states within the past fifty years.

uperintendents of city school systems began in 1837
ı Buffalo. Providence followed in 1839; New Orleans
841; Cleveland in 1844; Baltimore in 1849; Cincinnati
1850; Boston in 1851; New York, San Francisco and
sey City in 1852; Newark and Brooklyn in 1853; Chi-
o and St. Louis in 1854; and finally Philadelphia in 1883.

itate superintendents began with New York, 1813; New
rk was followed by 16 of the states before 1850. From
1 to the civil war, eight states established the office
state superintendent; since then, nineteen other states,
luding 10 in the south, that had no state systems of
ication previously.

Iormal schools in the United States increased from one,
rinning in 1839 in Massachusetts, to 138 public and 46

private normal schools in 1889, with an attendance of upwards of 28,000 students preparing for the work of teaching. This would give a total of some twelve thousand a year of new teachers to meet the demand. It may be assumed, therefore, that less than one-sixth of the supply of new teachers comes from the training schools specially designed to educate teachers.

The history of education since the time of Horace Mann is very largely an account of the successive modifications introduced into elementary schools through the direct or indirect influence of the normal school.

APPENDIX I — *Total number of pupils and students of all grades in both public and private schools and colleges, 1897–98*

NOTE.— The classification of states made use of in the following table is the same as that adopted by the United States census, and is as follows: *North Atlantic Division:* Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania. *South Atlantic Division:* Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida. *South Central Division:* Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Texas, Arkansas, and Oklahoma. *North Central Division:* Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. *Western Division:* Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Idaho, Washington, Oregon, and California.

DIVISION	Pupils receiving elementary instruction (primary and grammar grades)		Pupils receiving secondary instruction (high school grade) *a*		Students receiving higher instruction								
					In universities and colleges *c*			In schools of medicine, law, and theology *e*			In normal schools *g*		
	Public.	Private (largely estimated)	Public *b*	Private (in preparatory schools, academies, seminaries, etc.)	Public *d*	Private	Total	Public *f*	Private	Total	Public	Private *h*	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
The United States	14 589 036	1 249 665	459 813	166 302	29 728	71 330	101 058	8 096	46 135	54 231	46 245	21 293	*i*67 538
North Atlantic Division	3 472 716	510 286	143 977	50 635	5 072	26 667	31 739	254	17 366	17 620	19 470	1 724	21 194
South Atlantic Division	2 110 342	88 741	25 729	22 371	3 688	10 158	13 846	762	6 113	6 875	4 445	1 449	5 894
South Central Division	2 842 478	143 872	34 658	32 473	2 815	10 795	13 610	1 099	4 668	5 767	2 999	4 265	7 264
North Central Division	5 443 994	467 933	228 358	51 562	14 184	20 771	34 955	5 292	16 693	21 985	15 542	13 145	28 687
Western Division	719 506	38 833	27 091	9 261	3 969	2 939	6 908	689	1 295	1 984	3 789	710	4 499

Total number of pupils and students of all grades in both public and private schools, 1897–98— Continued

DIVISION	Summary of higher (including normal) instruction		Summary of pupils by grade			Summary according to control		Grand total
	Public	Private	Elementary	Secondary	Higher	Public	Private	
1	15	16	17	18	19	20	21	22
The United States	84 069	138 758	15 838 701	626 115	222 827	15 132 918	1,554 725	16 687 643
North Atlantic Division	24 796	45 757	3 983 002	194 612	70 553	3 641 489	606 678	4 248 167
South Atlantic Division	8 895	17 720	2 199 083	48 100	26 615	2 144 966	128 832	2 273 798
South Central Division	6 913	19 728	2 986 350	67 131	26 641	2 884 049	196 073	3 080 122
North Central Division	35 018	50 609	5 911 927	279 920	85 627	5 707 370	570 104	6 277 474
Western Division	8 447	4 944	758 339	36 352	13 391	755 044	53 038	808 082

a Including pupils in preparatory or academic departments of higher institutions, public and private, and excluding elementary pupils, who are classed in columns 2 and 3.

b This is made up from the returns of individual high schools to the bureau, and is somewhat too small, as there are many secondary pupils outside the completely organized high schools whom there are no means of enumerating.

c Including colleges for women, agricultural and mechanical (land-grant) colleges and scientific schools. Students in law, theological, and medical departments are excluded, being tabulated in columns 9–11. Students in academic and preparatory departments are also excluded, being tabulated in columns 4 and 5.

d Mainly state universities and agricultural and mechanical colleges.

e Including schools of dentistry, pharmacy, and veterinary medicine.

f Mainly in schools or departments of medicine and law attached to state universities.

g Non-professional pupils in normal schools are included in columns 4 and 5.

h Private normal schools are, with few exceptions, scarcely superior to the ordinary secondary schools.

i There are, in addition to this number, 21,687 students taking normal courses in universities, colleges, and public and private high schools.

APPENDIX II—*Number of pupils enrolled in the common schools at various periods and the relation of the enrollment to the school population*

STATE OR TERRITORY	Number of different pupils enrolled during the school year (excluding duplicate enrollments)				Per cent of school population (*i. e.*, of children 5 to 18 years of age) enrolled			
	1870–71	1879–80	1889–90	1897–98	1870–71	1879–80	1889–90	1897–98
1	2	3	4	5	6	7	8	9
UNITED STATES	7 561 582	9 867 505	12 722 581	15 038 636	61.45	65.50	68.61	70.08
North Atlantic Division	2 743 344	2 930 345	3 112 622	3 614 463	77.95	75.17	70.45	70.38
South Atlantic Division	603 619	1 242 811	1 785 486	2 134 725	30.51	50.74	59.22	63.63
South Central Division	767 839	1 371 975	2 293 579	2 875 366	34.17	46.43	60.14	64.41
North Central Division	3 300 660	4 033 828	5 015 217	5 669 572	76.87	75.84	76.46	75.25
Western Division	146 120	288 546	515 677	744 510	54.77	64.96	70.01	76.73
North Atlantic Division								
Maine	*a* 152 600	149 827	139 676	134 405	*a* 87.35	89.80	85.88	83.35
New Hampshire	71 957	64 341	59 813	*b* 64 207	91.31	81.32	71.28	*b* 72.25
Vermont	*c* 65 384	75 238	*c* 65 608	65 532	....	87.21	....	79.53
Massachusetts	273 661	306 777	371 492	456 141	72.34	71.76	72.56	74.03
Rhode Island	*a* 34 000	40 604	52 774	65 384	*a* 59.24	59.59	62.65	64.33
Connecticut	113 588	119 694	126 505	147 833	80.83	76 97	72.02	72.72
New York	1 028 110	1 031 593	1 042 160	*b* 1 203 199	82.98	77.10	70.71	*b* 71.48
New Jersey	169 430	204 961	234 072	304 680	63.20	64.77	62.21	65.29
Pennsylvania	834 614	937 310	1 020 522	1 173 082	76.35	74.37	69.53	67.83
South Atlantic Division								
Delaware	20 058	27 823	31 434	*d* 33 174	50.04	65.20	66.19	*d* 67.93
Maryland	115 683	162 431	184 251	236 003	46.70	58.13	60.37	67.16
District of Columbia	15 157	26 439	36 906	44 698	41.60	55.40	63.10	61.71
Virginia	131 088	220 736	342 269	*b* 367 817	32.34	45.00	60.51	*b* 63.19
West Virginia	76 999	142 850	193 064	236 188	49.47	69.21	75.27	81.10
North Carolina	*a* 115 000	252 612	322 533	399 375	*a* 31.23	55.87	56.39	64.41
South Carolina	66 056	134 072	201 260	*b* 258 183	27.28	40.56	47.08	*b* 54.55
Georgia	49 578	236 533	381 297	450 832	11.89	46.24	58.45	60.54
Florida	14 000	39 315	92 472	108 455	21.21	44.16	71.10	63.37
South Central Division								
Kentucky	*e* 178 457	*e* 276 000	399 660	*b* 501 893	....	....	65.64	*b* 76.00
Tennessee	*a* 140 000	300 217	447 950	*f* 481 585	*a* 32.00	58.21	74.05	*f* 74.97
Alabama	141 312	179 490	301 615	*b* 348 899	40.36	42.60	55.83	*b* 56.13
Mississippi	117 000	236 654	334 158	*b* 367 579	40.60	61.29	70.62	*b* 69.17
Louisiana	57 639	77 642	120 253	182 341	24.78	25.87	31.58	39.76
Texas	63 504	*a* 220 000	466 872	*b* 612 140	21.00	*a* 42.40	59.50	*b* 61.84
Arkansas	69 927	81 972	223 071	303 808	40.29	30.81	55.41	65.75
Oklahoma	....	....	....	77 121	....	....	....	78.96
North Central Division								
Ohio	719 372	729 499	797 439	810 285	84.04	76.69	76.54	72.92
Indiana	450 057	511 283	512 955	566 157	78.64	82.39	79.21	84.82
Illinois	672 787	704 041	778 319	939 163	81.01	74.61	71.97	66.25
Michigan	292 466	362 556	427 032	496 025	79.66	78.08	73.45	79.25
Wisconsin	265 285	299 457	351 723	435 914	73.92	73.78	69.77	69.25
Minnesota	113 983	180 248	280 960	384 063	75.92	75.87	74.59	75.18
Iowa	341 938	426 057	493 267	548 852	84.44	83.52	85.51	86.62
Missouri	330 070	482 986	620 314	688 583	56.03	68.85	74.43	72.30
North Dakota	*a* 1 660	13 718	35 543	67 375	*a* 39.26	41.68	71.26	70.05
South Dakota			78 043	*f* 89 001			81.04	*f* 74.78
Nebraska	23 265	92 549	240 300	273 914	58.79	68.48	75.35	77.97
Kansas	89 777	231 434	399 322	370 240	74.22	73.23	88.56	88.20
Western Division								
Montana	1 657	4 270	16 980	35 070	70.24	63.77	71.14	78.94
Wyoming	*a* 450	2 907	7 052	13 042	*a* 45.34	77.44	54.46	54.46
Colorado	4 357	22 119	65 490	104 733	42.28	60.82	72.20	81.38
New Mexico	*a* 1 320	4 755	18 215	26 484	*a* 4.42	13.32	42.25	51.99
Arizona	....	4 212	7 989	14 613	....	53.16	52.72	66.09
Utah	16 992	24 326	37 279	70 878	53.36	50.61	55.26	82.45
Nevada	3 106	9 045	7 387	7 348	53.97	79.73	73.80	81.78
Idaho	906	5 834	14 311	29 737	46.06	77.85	62.66	69.88
Washington	*a* 5 000	14 780	55 964	97 916	*a* 69.00	72.36	70.58	91.42
Oregon	21 000	37 533	63 254	85 230	67.73	75.02	74.78	84.64
California	91 332	158 765	221 756	259 459	63.63	73.37	77.38	73.17

a Approximately
b In 1896–97
c Pupils of legal age only
d In 1891–92
e Highest number enrolled
f In 1895–96

APPENDIX III — *Common school statistics of the United States*

	1870–71	1879–80	1889–90	1897–98 *a*
I — *General statistics*				
Total population	39 500 500	50 155 783	62 622 250	72 737 100
Number of persons 5 to 18 years of age	12 305 600	15 065 767	18 543 201	21 458 294
Number of different pupils enrolled on the school registers	7 561 582	9 867 505	12 722 581	15 038 636
Per cent of total population enrolled	19.14	19.67	20.32	20.68
Per cent of persons 5 to 18 years of age enrolled	61.45	65.50	68.61	70.08
Average daily attendance	4 545 317	6 144 143	8 153 635	10 286 092
Ratio of same to enrollment	60.1	62.3	64.1	68.4
Average length of school term (days)	132.1	130.3	134.7	143.1
Aggregate number of days attended	600 432 802	800 719 970	1 098 232 725	1 471 435 367
Average number for each person 5 to 18 years of age	48.7	53.1	59.2	68.6
Average number for each pupil enrolled	79.4	81.1	86.3	97.8
Male teachers	90 293	122 795	125 525	131 750
Female teachers	129 932	163 798	238 397	277 443
Whole number of teachers	220 225	286 593	363 922	409 193
Per cent of male teachers	41.0	42.8	34.5	32.2
Average monthly wages of teachers:				
Males	....	....	....	*b* $45 16
Females	....	....	....	*b* $38 74
Number of schoolhouses	132 119	178 222	224 526	242 390
Value of school property	$143 818 703	$20 9571 718	$342 531 791	$492 703 781
II — *Financial statistics*				
Receipts:				
Income from permanent funds	....	....	$7 744 765	$9 213 323
From state taxes	....	....	26 345 323	35 600 643
From local taxes	....	....	97 222 426	134 104 053
From all other sources	....	....	11 882 292	20 399 578
Total receipts	....	....	$143 194 806	$199 317 597
Per cent of total derived from —				
Permanent funds	....	....	5.4	4.6
State taxes	....	....	18.4	17.9
Local taxes	....	....	67.9	67.3
All other sources	....	....	8.3	10.2
Expenditures:				
For sites, buildings, furniture, libraries, and apparatus	....	....	$26 207 041	$32 814 532
For salaries of teachers and superintendents	$42 580 853	$55 942 972	91 836 484	123 809 412
For all other purposes	....	....	22 463 190	37 396 526
Total expenditures	$69 107 612	$78 094 687	$140 506 715	$194 020 470
Expenditure per capita of population	1.75	1.56	2.24	2.67
Expenditure per pupil (of average attendance):				
For sites, buildings, etc	....	....	$3.21	$3.19
For salaries	$9.37	$9.10	11.26	12.04
For all other purposes	....	....	2.76	3.63
Total expenditure per pupil	$15.20	$12.71	$17.23	$18.86
Per cent of total expenditure devoted to —				
Sites, buildings, etc	....	....	18.6	16.9
Salaries	61.6	71.6	65.4	63.8
All other purposes	....	....	16.0	19.3
Average expenditure per day for each pupil (in cents):				
For tuition	7.1	7.0	8.4	8.4
For all purposes	11.5	9.7	12.8	13.2

a The figures for 1897–98 are approximate. *b* In 44 states.

APPENDIX IV — *Statistics of state common school systems, 1897–98*

STATE OR TERRITORY	Pupils enrolled	Average number of pupils attending school each day	Average number of days the schools were kept during the year	Teachers: Male	Teachers: Female	Teachers: Total	Estimated value of all school property	Total expenditure during 1897–98
UNITED STATES	15 038 636	10 286 092	143.1	131 750	277 443	409 193	$492 703 781	$194 020 470
North Atlantic Division	3 614 463	2 587 468	174.5	19 231	80 732	99 963	198 197 537	75 902 063
South Atlantic Division	2 134 725	1 314 627	112.7	20 199	26 605	46 804	22 266 065	12 163 944
South Central Division	2 875 366	1 870 510	98.6	31 317	29 167	60 484	21 760 411	13 219 921
North Central Division	5 669 572	3 996 895	152.4	54 911	124 442	179 353	211 848 908	78 157 540
Western Division	744 510	516 597	151.8	6 092	16 497	22 589	38 630 860	14 577 002
North Atlantic Division								
Maine	134 405	97 616	137.	1 257	5 470	6 727	4 225 401	1 614 330
New Hampshire	64 207	47 717	134.6	202	2 509	2 711	3 284 121	1 040 309
Vermont	65 532	48 060	154.	389	2 397	2 786	1 800 000	933 424
Massachusetts	456 141	349 147	186.	1 174	12 029	13 203	39 077 405	13 653 649
Rhode Island	65 384	47 370	191.	193	1 659	1 852	4 579 334	1 717 492
Connecticut	147 833	105 002	188.8	373	3 570	3 943	9 879 922	2 986 163
New York	1 203 199	827 652	176.	5 461	28 924	34 385	71 832 511	28 588 871
New Jersey	304 680	200 278	185.	834	5 442	6 276	14 601 840	5 723 424
Pennsylvania	1 173 082	864 626	159.4	9 348	18 732	28 080	48 917 003	19 644 401
South Atlantic Division								
Delaware	33 174	22 693	160.	218	622	840	904 426	275 000
Maryland	236 003	134 539	182.	1 144	3 843	4 987	4 500 000	2 709 104
District of Columbia	44 698	34 383	185.	148	959	1 107	3 750 000	1 251 655
Virginia	367 817	213 421	120.2	3 013	5 562	8 575	3 090 777	1 827 008
West Virginia	236 188	159 768	111.	4 096	2 712	6 808	3 471 697	2 046 623
North Carolina	399 375	214 540	68.8	3 695	3 522	7 217	970 675	931 143
South Carolina	258 183	182 559	83.2	2 245	2 728	4 973	845 596	697 068
Georgia	450 832	278 715	116.9	4 519	4 986	9 505	3 977 070	1 758 106
Florida	108 455	74 004	104.	1 121	1 671	2 792	755 824	668 242
South Central Division								
Kentucky	501 893	308 697	115.4	4 909	5 051	9 960	5 448 814	2 650 190
Tennessee	481 585	338 176	90.2	5 121	4 014	9 135	3 133 780	1 690 750
Alabama	348 899	222 690	80.1	4 741	2 778	7 519	1 500 000	800 273
Mississippi	367 579	223 900	101.6	3 649	4 254	7 903	1 636 055	1 165 840
Louisiana	182 341	132 046	106.3	1 362	2 472	3 834	1 066 000	956 888

APPENDIX IV — *Statistics of state common school systems, 1897–98* — Continued

STATE OR TERRITORY	Pupils enrolled	Average number of pupils attending school each day	Average number of days the schools were kept during the year	Teachers: Male	Teachers: Female	Teachers: Total	Estimated value of all school property	Total expenditure during 1897–98
Texas	612 140	404 372	106.	6 179	6 774	12 953	6 081 356	4 320 271
Arkansas	303 808	191 447	69.	4 515	2 558	7 073	2 294 397	1 220 362
Oklahoma	77 121	49 182	86.3	841	1 266	2 107	600 000	415 347
Indian Territory	....	....	....	....	....	....	....	....
North Central Division								
Ohio	810 285	618 667	162.	10 358	14 898	25 256	41 428 289	12 563 949
Indiana	566 157	432 931	144.	7 197	8 026	15 223	21 536 212	7 846 139
Illinois	939 163	729 227	158.7	6 718	18 549	25 267	43 705 943	16 468 055
Michigan	496 025	347 714	160.8	3 625	12 048	15 673	18 138 589	6 281 003
Wisconsin	435 914	287 000	160.	2 654	9 811	12 465	14 800 000	5 132 063
Minnesota	384 063	243 200	156.	2 304	8 939	11 245	14 559 564	4 893 678
Iowa	548 852	370 845	162.	5 855	22 839	28 694	17 450 534	8 451 504
Missouri	688 583	440 692	141.7	5 951	9 315	15 266	16 718 410	6 248 961
North Dakota	67 375	41 155	122.	1 115	2 522	3 637	2 132 738	1 288 031
South Dakota	89 001	54 600	138.4	1 321	3 187	4 508	2 920 744	1 280 663
Nebraska	273 914	173 930	131.	2 433	7 175	9 608	8 943 924	3 712 017
Kansas	370 240	256 932	124.3	5 380	7 133	12 513	9 504 961	3 991 477
Western Division								
Montana	35 070	23 400	149.2	201	885	1 086	1 857 964	776 150
Wyoming	13 042	8 700	110.	102	434	536	441 460	213 291
Colorado	104 733	69 973	159.7	744	2 238	2 982	5 987 703	2 341 311
New Mexico	26 484	16 950	96.6	333	270	603	281 000	154 532
Arizona	14 613	9 011	130.	156	279	435	472 108	229 323
Utah	70 878	49 638	157.	502	837	1 339	2 652 595	1 047 174
Nevada	7 348	4 982	154.	40	274	314	265 011	203 642
Idaho	29 737	21 528	100.	324	524	848	597 718	274 377
Washington	97 916	64 192	148.0	1 033	2 288	3 321	4 977 679	1 795 795
Oregon	85 230	62 799	123.9	1 250	2 443	3 693	3 748 154	1 274 937
California	259 459	185 424	172.4	1 407	6 025	7 432	17 349 468	6 266 470

APPENDIX V — *Corporal punishment*

In one state, New Jersey, the teacher is forbidden by law to inflict corporal punishment. No other state goes to this length, but Illinois, Kansas, Mississippi, Montana, Pennsylvania, South Dakota, Washington, and West Virginia specifically prescribe a penalty for excess amounting to cruelty. Legal punishment would be meted out to a brutal teacher in the other states just as surely as in these, but resort would be had to the common law and not to a statute. Only in Arizona is there formal statutory authority for corporal punishment, but whipping has been the common mode of discipline in school from time immemorial; custom legalizes it, and unless forbidden in express terms the teacher does not need the authority of a special permissive law. Judicial decisions to this effect have been made in Alabama, Arkansas, Connecticut, Indiana, Iowa, Maine, Minnesota, North Carolina, Ohio, Pennsylvania, Wisconsin, and probably in other states.

Local school boards have always the implied power to make regulations for the order and discipline of their respective schools, and three states, viz., Michigan, New York, and Pennsylvania, expressly grant them this power. Acting under this power, expressed or implied, several cities, notably New York city, Chicago, Albany, Baltimore, Cleveland and Syracuse, have prohibited absolutely the use of the rod. The same is true of Providence, Rhode Island, except in the primary grades, and in them whipping must not be inflicted unless the written consent of the parent or guardian has been previously filed with the city superintendent. In St. Paul corporal punishment is prohibited except to repel violence.

Corporal punishment may be used as a last resort and under rigid regulations as to reports, etc., in a great many cities, among them being Alleghany, Pa., Boston, Mass., Buffalo, N. Y., Cincinnati, O., Columbus, O., Denver, Col., Detroit, Mich., Fall River, Mass., Indianapolis, Ind., Kansas City, Mo., Los Angeles, Cal., Louisville, Ky., Memphis, Tenn., Milwaukee, Wis., Minneapolis, Minn., New Haven, Conn., New Orleans, La., Philadelphia, Pa., Pittsburg, Pa., Rochester, N. Y., St. Joseph, Mo., St. Louis, Mo., San Francisco, Cal., Toledo, O., Washington, D. C.

APPENDIX VI — *Teachers' pensions, and benefit associations*

Voluntary mutual benefit associations for temporary aid only exist in Baltimore, St. Louis, Cincinnati, Cleveland, Detroit, Chicago, Buffalo, San Francisco, St. Paul, and one interstate. These have from one to two dollars initiation fee, one to five dollars annual dues. Special assessments of one dollar each are made in some cases. Benefits in sickness range from fifty cents a day to ten dollars a week; at death funeral expenses only are paid in some instances, and in others a sum equal to one dollar from each member of the association.

Associations for annuity or retirement fund only are in New York city, Boston, and Baltimore, and there is an annuity guild in Massachusetts. The initiation fees reported are three to five dollars; the annual dues one to one and a half per cent of salary up to eighteen or twenty dollars. The annuity is from 60 per cent of salary to $600 a year. Time of service required for retirement, from 2 to 5 years with disability, from 35 to 40 years without disability.

Associations for both temporary aid and annuity exist in Hamilton county (Cincinnati), Ohio; Philadelphia, Brooklyn, and District of Columbia. Initiation fees, one to ten dollars; annual dues, five to forty dollars; annuity, five dollars per week to $600 a year, and $100 for funeral expenses in case of death; temporary aid during illness, five or six dollars per week; minimum service for retirement — with disability, 3 to 5 years; without disability,

Pension or retirement funds are authorized by state legislation for St. Louis, all cities in California, Boston, Brooklyn, New York, Detroit, Poughkeepsie, Chicago, all cities in New Jersey, Cincinnati, Charleston, S. C., and Buffalo and for all cities in Ohio. Dues, one per cent of salary; annuity, $250 to one-half of salary; minimum, $300, to $600 maximum; minimum service — with disability, 20 to 30 years; without disability, 25 to 35 years. In Maryland, the state pays pensions ($200) to retired teachers.

APPENDIX VII — *Text-books; selection and supply.*

In some states a guaranty is required from publishers to supply books, according to samples, at wholesale, retail, introduction, exchange, mail prices, part or all, for a term of years.

In fewer states the school boards buy and sell the books on public account. In certain states boards continue to own the books used free by pupils. Indigent pupils are more frequently supplied at public expense.

In most states special or general laws give cities the control of the details of their school administration, including text-books.

Specific penalties are expressed in certain cases for using other than prescribed books, but in general such use would be only a violation of law, to be dealt with as it occurred.

In the states and territories immediately following, individuals, except in many cases indigents, buy their books:

Alabama.— State text-book commission fixes list for 5 years, to whom a sub-commission reports on merits of books. Publishers sell through at least 3 agencies in each county.

Arizona.— Territorial board fixes list for 4 years.

Arkansas.— Where voters elect county uniformity, a county school-book board fixes list for 6 years.

California.— The state publishes a series for the lower grades, beyond which local boards fix lists for 4 years. High-school list is uniform throughout the state, and must be approved by state board. Penalty for using other than state list, forfeiture of one-fourth of state apportionment. Indigent pupils are furnished free.

Florida.— County boards fix lists for 5 years.

Georgia.— List fixed by county board, unchangeable within 5 years except by three-fourths vote of full board. Penalty, teacher cannot receive pay for pupils using other books.

Indiana.— State board fixes list under publishers' guaranty. County boards may select additional books for high schools for 6 years. Local boards regulate purchase and sale of books, which become private property. Districts supply indigents.

Illinois.— District board fixes list for 4 years.

Kentucky.— County board of examiners fixes list for 5 years, with publishers' guaranty. County judge furnishes indigents.

Louisiana.— State board fixes list for 4 years, with limited local discretion.

Mississippi.— A county committee adopts a series for 5 years

on publishers' guaranty. Penalty, pupils without the prescribed books in each branch are not to receive instruction in that branch.

Missouri.— State school-book commission fixes list and contracts with publishers for 5 years. Penalty, $5 to $25 fine for directors to permit use of other books. Indigents supplied from local contingent funds.

Nevada.— Legislature fixes list, in lower branches, upon recommendation of state board; to be changed not oftener than 4 years, and by legislature; penalty for non-use, forfeiture of apportionment. List in additional branches prescribed by state board. Trustees supply indigents.

New Mexico.— Territorial board fixes list for 4 years and contracts with publishers; sells to counties at cost plus freight and 5 per cent. Local boards furnish indigents.

North Carolina.— A state commission fixes list for 5 years, with publishers' guaranty.

Ohio.— A state commission fixes a list on publishers' guaranty, from which local boards fix lists for 5 years (with exception). Boards may buy and sell to pupils, or arrange with dealers to supply them. Indigents are furnished.

Oregon.— State text-book board fixes list for 6 years on publishers' guaranty.

South Carolina.— State board fixes a list for 5 years on publishers' guaranty, and may require publishers to have depositaries in each county, or county superintendent may sell books to pupils at cost.

Tennessee.— A state text-book commission fixes list for 5 years. Penalty, $10 to $50 fine.

Texas.— State text-book board fixes list for 5 years, on report of a commission upon merit of books irrespective of cost.

Virginia.— Two books of John Esten Cooke — "Virginia, a History of her People;" "Stories of the Old Dominion" — are prescribed by law. State board fixes a list, from which local boards adopt books for 4 years.

The following, regularly or through stated action, authorize provision for free use of books by pupils:

Colorado.— District boards fix list for 4 years, with exceptions. Indigents are furnished, and, on popular vote, all pupils, free.

Connecticut.— State board may fix list for 5 years. Town boards

may take additional action, and, on popular vote, furnish free text-books.

Delaware.— State board fixes list; district board furnishes free text-books.

District of Columbia.— Board of education fixes list and furnishes free books and supplies.

Idaho.— Books adopted by a state text-book commission are furnished free by the district, under contracts with publishers for 6 years.

Iowa.— County uniformity may be fixed for 5 years. Local boards may buy and sell to pupils at cost, or, on popular vote, furnish books free. Indigents furnished.

Kansas.— A school-text book commission selects books in common-school studies, and contracts with publishers to furnish them to pupils through agencies at every county-seat. Upon a two-thirds vote of a district, local boards may purchase books and loan free to pupils. Penalty for using other text-books except for reference, $25 to $100, with or without imprisonment.

Maine, *New Hampshire*, *Massachusetts*, *Rhode Island* (towns), *New Jersey*, *Pennsylvania* (local boards), and *Maryland* (counties), furnish free text-books.

Michigan.— District boards fix list for 5 years, furnish books to indigents and, on popular vote, to all pupils free.

Minnesota.— Local boards may fix a list for 3 to 5 years, with publishers' guaranty, and may purchase and provide for free loan or sale at cost to pupils.

Montana.— State text-book commission fixes list for 4 years, to be handled through dealers, with publishers' guaranty. Text-books are furnished free on popular vote.

Nebraska.— Local boards furnish books free; may fix list not beyond 5 years, with publishers' guaranty. A local dealer may be designated to handle the books on agreed terms.

New York.— List is fixed by local boards in cities, villages, and union free-school districts, and by a two-thirds vote of legal voters at an annual school meeting in common-school districts; change not to be made within 5 years, except by a three-fourths vote of said authorities respectively. Local boards furnish free books to all pupils in union free-school districts, and to indigents in common-school districts.

North Dakota.— Local boards may furnish free text-books, and must do so on petition of two-thirds of the voters of the district. Contracts must be for 3 to 4 years without change.

South Dakota.— County board adopts a uniform series for 5 years, to be furnished through designated depositaries under publishers' guaranty. Free text-books must be arranged for on petition of a majority of electors.

Utah.— A convention of superintendents (in cities, the local board of education) fixes a list for 5 years. Trustees are authorized to furnish text-books free to all, and must furnish indigents.

Vermont.— County authority fixes list for 5 years, on publishers' guaranty. Local boards furnish free text-books.

Washington.— In districts of the first class list is fixed by district text-book commission, for not less than 3 years; in districts of the second class, by the county board of education, for not less than 5 years. Local boards furnish indigents, and, on popular vote, all pupils.

West Virginia.— County school-book board fixes list for 5 years. District boards are authorized to purchase under contract (out of building fund) and sell to pupils at cost, or to arrange for free books.

Wyoming.— School directors purchase books under 5-year contract, and loan to pupils free.

APPENDIX IX — *Average total amount of schooling (expressed in years of 200 school days each) each individual of the population would receive as his equipment for life, under the conditions existing at the different dates given in the table, and counting in the work done by all grades of both public and private schools and colleges*

	1870	1880	1890	1891	1892	1893	1894	1895	1896	1897	1898
United States	3.36	3.96	4.46	4.51	4.49	4.52	4.72	4.75	4.83	4.91	5.01
North Atlantic Division	5.06	5.69	6.05	6.15	6.18	6.1[illegible]	6.35	6.47	6.52	6.64	6.76
South Atlantic Division	1.23	2.22	2.73	2.78	2.74	2.79	2.95	2.95	2.93	3.05	3.14
South Central Division	1.12	1.86	2.42	2.62	2.69	2.64	2.89	2.65	2.70	2.75	2.95
North Central Division	4.01	4.65	5.36	5.35	5.21	5.38	5.57	5.69	5.84	5.87	5.87
Western Division	3.56	4.17	4.57	4.71	5.07	4.93	5.01	5.43	5.46	5.55	5.77

Average total amount of schooling per inhabitant, etc., considering only the public elementary and secondary schools, and expressed as before in years of 200 school days each

	1870	1880	1890	1891	1892	1893	1894	1895	1896	1897	1898
United States	2.91	3.45	3.85	3.93	3.97	3.99	4.17	4.23	4.28	4.37	4.46
North Atlantic Division	4.43	4.84	4.99	5.06	5.10	5.10	5.28	5.47	5.52	5.61	5.71
South Atlantic Division	.80	1.90	2.42	2.46	2.46	2.51	2.70	2.68	2.66	2.78	2.87
South Central Division	.80	1.57	2.20	2.31	2.41	2.38	2.59	2.59	2.44	2.49	2.68
North Central Division	3.71	4.19	4.67	4.74	4.75	4.84	5.00	5.15	5.21	5.28	5.25
Western Division	2.77	3.57	3.98	4.16	4.47	4.39	4.45	4.87	4.95	5.02	5.25

NOTE.— The figures of this table for the years previous to the current year have been revised and differ slightly from those heretofore published.

DEPARTMENT OF EDUCATION

UNIVERSAL EXPOSITION, ST. LOUIS, 1904

Chief of Department

HOWARD J. ROGERS, Albany, N. Y.

MONOGRAPHS
ON
EDUCATION IN THE UNITED STATES

EDITED BY

NICHOLAS MURRAY BUTLER

President of Columbia University in the City of New York

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3 ELEMENTARY EDUCATION — WILLIAM T. HARRIS, *United States Commissioner of Education, Washington, D. C.*
4 SECONDARY EDUCATION — ELMER ELLSWORTH BROWN, *Professor of Education in the University of California, Berkeley, California*
5 THE AMERICAN COLLEGE — ANDREW FLEMING WEST, *Professor of Latin in Princeton University, Princeton, New Jersey*
6 THE AMERICAN UNIVERSITY — EDWARD DELAVAN PERRY, *Jay Professor of Greek in Columbia University, New York*
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13 COMMERCIAL EDUCATION — EDMUND J. JAMES, *Professor of Public Administration in the University of Chicago, Chicago, Illinois*
14 ART AND INDUSTRIAL EDUCATION — ISAAC EDWARDS CLARKE, *Bureau of Education, Washington, D. C.*
15 EDUCATION OF DEFECTIVES — EDWARD ELLIS ALLEN, *Principal of the Pennsylvania Institution for the Instruction of the Blind, Overbrook, Pennsylvania*
16 SUMMER SCHOOLS AND UNIVERSITY EXTENSION — GEORGE E. VINCENT, *Associate Professor of Sociology, University of Chicago; Principal of Chautauqua*
17 SCIENTIFIC SOCIETIES AND ASSOCIATIONS — JAMES MCKEEN CATTELL, *Professor of Psychology in Columbia University, New York*
18 EDUCATION OF THE NEGRO — BOOKER T. WASHINGTON, *Principal of the Tuskegee Institute, Tuskegee, Alabama*
19 EDUCATION OF THE INDIAN — WILLIAM N. HAILMANN, *Superintendent of Schools, Dayton, Ohio*
20 EDUCATION THROUGH THE AGENCY OF THE SEVERAL RELIGIOUS ORGANIZATIONS — DR. W. H. LARRABEE, *Plainfield, N. J.*

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4

SECONDARY EDUCATION

BY

ELMER ELLSWORTH BROWN

Professor of Education in the University of California

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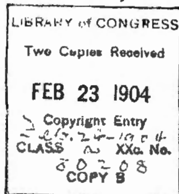
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SECONDARY EDUCATION

One could not expect to find distinctively American institutions among the colonists of the seventeenth century. There was as yet no distinctively American character. Two opposing influences were at work shaping the colonial life: the first was the spirit of protest against European institutions, which many of the colonists had brought with them from the Old World; the second was the ever-present instinct of imitation. Real American schools might be expected to develop with the development of real American nationality. In the beginning, there could be only such schools as might arise under the mingled influence of a desire to be like the mother-country and a desire to be different.

We find, as a matter of fact, the history of American secondary education presenting three pretty well-defined types and stages of development. There is, first, the colonial period, with its Latin grammar schools; secondly, the period extending from the revolutionary war to the middle of the nineteenth century, during which the attempt was made to solve the problem of American secondary education by means of the so-called academy; and, thirdly, the succeeding period down to the present time, chiefly characterized by the upgrowth of public high schools.

The specific influences which most vitally influenced the early development of secondary education in America were, on the one hand, the example of the "grammar schools" of old England; and, on the other hand, the rising spirit of democracy, in large measure Calvinistic as to its modes of thought, and in touch with movements in the Calvinistic portions of Europe.

THE BEGINNINGS

Early in the history of the colony of Virginia, funds were raised and lands set apart for the endowment of a Latin grammar school. But these promising beginnings were swept away by the Indian massacre of 1622, and the school seems never to have been opened. The town of Boston, in the Massachusetts Bay colony, set up a Latin school in 1635, which has had a continuous existence down to the present time. This school was established by vote of the citizens in a town meeting. It was supported in part by private donations, and in part by the rent of certain islands in the harbor, designated by the town for that purpose. A town rate seems also to have been levied when necessary to make up a salary of £50 a year for the master.

Other Massachusetts towns soon followed the example of Boston. The money for the support of these schools was obtained in a variety of ways. School fees were commonly but not universally collected. A town rate, which was depended upon at first only to supplement other sources of revenue, gradually came to be the main reliance; and by the middle of the eighteenth century the most of the grammar schools of Massachusetts charged no fee for tuition.

Latin schools were early established in the colonies included in the territory of the present state of Connecticut: one at New Haven in 1641, and one at Hartford not later than 1642. A notable bequest left by Edward Hopkins, sometime governor of Connecticut colony, whose later years were passed in England, became available soon after the middle of the seventeenth century. The greater part of it was devoted to the maintenance of Latin grammar schools in Hartford and New Haven, and also in the towns of Hadley and Cambridge in Massachusetts.

The Dutch at New Amsterdam — now New York — opened a Latin school in 1659. This school was continued for some years after the colony passed under English rule. Secondary schools were established in the colony of Pennsylvania in the latter part of the seventeenth century. One of these, the William Penn Charter School, at Philadelphia, has continued down to the present day. King William's school, at Annapolis, was erected by the legislature of Maryland in 1696. Similar schools were from time to time established in different sections of the same colony. The eighteenth century saw schools of like character opened, partly by legislative enactment, partly by private initiative, in these and in the remaining colonies. Some of the number, like the University Grammar School in Rhode Island and the Free School at New York, were either the forerunners or the accompaniments of colonial colleges.

Not only were these several schools opened during the colonial period: important beginnings were made also in the organization of colonial systems of secondary education. The Puritan colony of Massachusetts took the lead in this movement. In 1647 the colonial legislature decreed that an elementary school should be maintained in every town having a population of fifty families; and that in every town having one hundred families there should be a grammar school, in which the students might be fitted for admission to the university.

This liberal provision was soon copied by the neighboring colonies of Connecticut and New Hampshire. In Connecticut the provision was afterwards changed to a requirement of a grammar school in each county town. These New England colonies maintained and enforced such provisions regarding grammar schools, with varying degrees of strictness, to be sure, down to and even after the revolutionary war. Maryland established by law a system of county grammar schools, thus keeping pace with the more northern colony of Connecticut.

The interest in secondary education declined and many schools fell into decay as the revolutionary period approached. When the colonies were transformed into states, after the declaration of independence, the four systems of schools mentioned above were continued with little

hange. No other of the thirteen states had anything that ould be called a system of public instruction.

COLONIAL SCHOOLS

The chief emphasis in these schools was laid on the reparation of future collegians to pass the college entrance amination. The most of the schools were in this sense preparatory" or "fitting" schools. The requirements for lmission to college determined their course of study. In e middle of the seventeenth century, the requirements of arvard college, which fixed the scholastic standard for ew England, are stated as follows: "When scholars had far profited at the grammar schools that they could read y classical author into English, and readily make and eak true Latin, and write it in verse as well as prose; and rfectly decline the paradigms of nouns and verbs in the eek tongue, they were judged capable of admission in rvard college." A century later, the requirements of nceton college, which profoundly influenced the second- schools of the middle states, were described in these rds: "Candidates for admission into the lowest or fresh- n class must be capable of composing grammatical Latin, nslating Virgil, Cicero's Orations, and the four Evangelists Greek; and by a late order * * * must understand principal rules of vulgar arithmetic."

The colonial grammar schools taught accordingly Latin, a little Greek. They gave instruction in religion; but e else was added to the classical languages.

ocial grades were pretty sharply distinguished in the nies. The grammar schools and colleges were intended ecially for the directive and professional classes. They little if any connection with such elementary schools as e were. In Massachusetts, towns which maintained mmar schools were not required to maintain reading ols. Sometimes pupils were taught to read in grammar ols. But the grammar school teachers objected to this len; and the mixing of the two grades of instruction in

one school was recognized as an evil. There seems to have been no middle grade of school, answering to the needs of a middle class in society. And for girls there was no provision whatever beyond occasional instruction in the merest rudiments of learning.

In the colleges, the ecclesiastical spirit and purpose was paramount. The students were for the most part preparing for the clerical vocation in some one of the Protestant denominations. But naturally only a part of the students in the grammar schools showed the disposition and the aptitude to pursue classical studies and enter the profession to which they led. The grammar schools exercised a kind of selective function, discovering latent capacity for the higher studies and starting talented youth on the way to college. Those who showed capacity of a lower grade or of a different sort seem to have received but little attention or encouragement in the schools of that day.

A TIME OF TRANSITION

As we approach the revolutionary period, we find new social conditions giving rise to a new order of schools. In the earlier days there had been, in most of the colonies, a close connection between ecclesiastical and political functions. With the growth of sectarian differences, there appeared a decided tendency toward the separation of governmental from ecclesiastical affairs. The grammar schools and colleges had been established for the public good as represented in both church and commonwealth. They had been founded and maintained by a remarkable combination of governmental, ecclesiastical, and private agency. Some of the colonies must be reckoned among the foremost of modern societies to exemplify direct governmental participation in educational affairs. But as governmental and ecclesiastical interests drew apart, the position of educational institutions was disturbed. This change tended to lessen the prestige of colonial systems of education among the more zealous adherents of the several religious denomina-

tions. At the same time, a growing distrust of the colleges appeared among those who were most in accord with the secularizing tendency of the time. These influences combined with many others to weaken the old grammar schools. In their stead there grew up a new type of secondary school, commonly known as the *academy*. For two or three generations following the revolutionary period this type was in the ascendancy. The effort to solve the problem of secondary education by this means ultimately failed. But the academy nevertheless occupies a place of great significance in the history of our educational institutions.

THE ACADEMIES

Both the name and the character of the new institution were suggested by English precedents. In England, dissenters from the established religion were excluded from both grammar schools and universities. In the latter part of the seventeenth century, following a suggestion of Milton, the non-conformist bodies proceeded to establish so-called academies. These schools were in the main of secondary grade. Yet they undertook to prepare candidates for the clerical office in non-conformist congregations; and they offered a wide range of literary and scientific studies, in free imitation of the universities. They even afforded instruction in some studies, chiefly of a technical and practical character, not commonly taught in the universities.

The American colonists were, many of them, in close relations with various bodies of English dissenters; and the fame of the English academies would seem to have influenced their thought in the matter of public education. At one time, the strong theological bent of their English prototypes reappeared in the new American schools; at another time, the resemblance was more obvious in the range and character of the studies offered. But the American academies soon came to have a well-defined character of their own, apart from any conscious imitation of English models.

As early as the year 1726, a school for classical and theo-

logical studies was established by the pastor of a Presbyterian congregation at Neshaminy, in Pennsylvania. It was described by a visitor as an "academy"; but was more commonly known as the "Log College," in allusion to the fact that it was conducted in a small building made of logs. This school in the wilderness was the center of deep and widespread interest in classical studies as well as in the religious life. It sent out large numbers of zealous pastors and teachers, who established "log colleges" all over the highlands of the middle and southern colonies.

Through the efforts of Benjamin Franklin, a school was established at Philadelphia, legally incorporated as an academy in 1753, which was probably the first institution in America to be formally designated by that title. It was under the control of a self-perpetuating board of trustees. A fund was raised by private subscription for its establishment and maintenance. This was supplemented by a grant from the city treasury and by tuition fees. But fees were remitted in the case of those who were unable to pay. This academy was organized in three departments or schools; viz., the Latin, the English, and the mathematical. The theological element was not prominent here. Much stress was laid on the teaching of the English language and literature, and the mathematical sciences. The school ultimately developed into the University of Pennsylvania.

Within two or three decades from the founding of this school at Philadelphia, a number of schools somewhat similar in character, and some of them bearing the name *academy*, were established in the middle and southern colonies. The new movement received fresh incentive and definiteness of direction from the establishment of the two Phillips academies, one at Andover in Massachusetts and the other at Exeter in New Hampshire, incorporated, the former in 1780 and the latter in 1781. These schools, well endowed, and conducted under self-perpetuating boards of trustees, were the pioneers of a long line of similar establishments in New England. Their influence extended to

remote states, especially in the growing west; and they rank to-day among the strongest and most influential of our secondary schools.

STATE SYSTEMS

Soon after the close of the revolutionary war, new state systems of education began to be established, in which special provision was made for secondary schools. The earliest and most remarkable of these was the University of the State of New York, erected in 1784 and remodeled in 1787. This institution is a notable example of the strong and increasing influence which French thought then exercised in American affairs. The conception of a university put forth by Diderot and others of the great French writers of the latter half of the eighteenth century, was first realized in the state of New York. The New York university embraced the whole provision for secondary and higher education within the state, with the exception of schools of purely private character. It seems to have been intended at the outset to embrace elementary schools as well, but these were organized later under a separate administrative system. The university was placed under the control of a board of regents, consisting of the governor and the lieutenant-governor of the state, *ex officio*, together with nineteen others, elected by the state legislature. At first this board of regents had been identical with the board of trustees of Columbia college. But this arrangement was unsatisfactory for many reasons: because of the ecclesiastical character of the college, for one thing; and also because of the growing belief that the interests of the college were distinct from, if not opposed to, those of the new academies. The reorganization of 1787 accordingly made the board of regents a body distinct from the trustees of any institution included in the university. The trustees were to exercise control over their several institutions. But this control was made subject to the general and not at all rigorous supervision of the regents.

In 1813 the legislature of the state established a permanent fund known as the literature fund, the income of which was to be applied wholly to the support of secondary schools. The distribution of this fund was made subject to the control of the regents of the university.

This university set up by the state of New York appealed to the imagination of men by its comprehensiveness and novelty. It exercised great influence on later systems; but only one state and one territory seem to have modeled their scheme of public instruction after the New York pattern. An act of the legislature of Georgia, passed in 1785, provided that "All public schools instituted, or to be supported by funds or public moneys in this state, shall be considered as parts or members of the university." But the university of Georgia never realized the large and liberal plan proposed for it.

In the territory of Michigan, an act was passed in 1817 instituting a university of imposing character. The president and professors of this institution were empowered "to establish colleges, academies, schools, libraries, museums, athenæums, botanical gardens, laboratories and other useful literary and scientific institutions * * * throughout the various counties, cities, towns, townships, and other geographical divisions of Michigan." As may be supposed, this establishment existed mainly on paper. Yet it should be noted that before the act was repealed, in 1821, there had been opened under its provisions a college, a classical school, and several primary schools.

But although the comprehensive type of university organization was not widely adopted, there was a general desire in the early part of the nineteenth century to establish complete and well-rounded systems of public instruction. Primary education was still all too largely neglected. In the state systems which were from time to time devised, emphasis was laid at one time upon secondary schools, at another upon institutions of higher learning. Some of the best thought of our political leaders was devoted to the

roblem of devising systems which should meet the needs f our rapidly growing states in all of the several grades of astruction.

The legislature of Tennessee declared, in 1817, that, Institutions of learning, both academies and colleges, nould ever be under the fostering care of this legislature, nd in their connection with each other form a complete ystem of education."

Even more significant is the provision of the constitution f Indiana, adopted in 1816, that, "It shall be the duty of ie general assembly, as soon as circumstances will permit, provide by law for a general system of education, ascendg in regular gradation from township schools to a state niversity wherein tuition shall be gratis and equally open all."

For the most part, however, actual state agency in secadary education was as yet limited to the subsidising of ivately managed academies. In Massachusetts, the prosion for grammar schools under town control was continued ter the colony became a state. But the law was so changed at only the larger towns were left subject to this requireent. At the same time academies established by private itiative were endowed by the legislature with grants of blic lands. The state assumed no control whatever over e academies which it thus subsidised.

In Kentucky, the state legislature granted six thousand res of public lands to an academy in each county. In ennsylvania, colleges and academies received financial aid om the state for many years, culminating in 1838 in a neral state system of educational subsidies. Five years ter, such aid was discontinued. In others of the states, e granting of state subsidies, in money or in lands, to secdary and higher schools, was customary for many years. or the most part, there is but little of system or consistency servable in the distribution of such aid; and the stateled institutions were not subjected to any sort of state ntrol.

CHARACTER OF THE ACADEMIES

The type of secondary school which grew up under these conditions demands closer consideration. The old academies were generally endowed institutions, organized under the control of self-perpetuating boards of trustees or of religious bodies. They were established for the most part to serve the need of a wide constituency and not merely of a single community. They were often located in small country places. Many of them made provision for boarders as well as for day pupils.

They were not intended in any especial or exclusive sense for the training of future members of the learned professions. Many of them, to be sure, as time went on, drew near to the colleges and became known primarily as preparatory schools. In the western states, colleges were often organized with preparatory schools attached to them, and these preparatory schools were commonly called "academies." But such was not the earlier purpose of the academies. They were largely schools for the middle classes of society, and sought to give a good middle grade of instruction, with only occasional or subordinate reference to college preparation. They answered to a growing desire after learning for its own sake, or for the increased efficiency it would give in other than professional pursuits.

The training which they offered was regarded as more "practical" than that of the colleges. Their course of instruction presented a wider range of studies than that of the grammar schools; not infrequently wider than that of the colleges themselves. They laid new stress on the study of the English language, together with its grammar, rhetoric, and the art of public speaking. They gave instruction in various branches of mathematics, often including surveying and navigation. They made important beginnings in the pursuit of the natural sciences. Natural philosophy (physics) was a favorite subject, of which astronomy constituted an important division. Geography was also taught; and his-

tory, especially the history of Greece and Rome, and of the United States. French was sometimes taught; more rarely German. In the better academies, the Latin and Greek languages still constituted the substantial core of the instruction offered.

In the earlier days, the course of study in these schools was not well defined. In some subjects, especially English, Latin, and mathematics, a good degree of continuity of work was apparently maintained. In others, classes were ormed at irregular periods. Many young men who were bliged to labor on the farms during the rest of the year, vould attend an academy during the winter term, and the rder of instruction would to some extent be arranged with eference to their needs. There was necessarily great iversity among the different institutions, those in the same ate or even in the same county presenting great differences. Vhen finally definite courses of study were laid out, they aried in length from three to four or five years.

Parallel courses were offered. That including classical udies and covering the required preparation for admission some college was commonly regarded as the standard ourse of the school. Along with this might be found an nglish course. At a later date, a scientific course was ten provided in place of or in addition to the English urse.

The religious character of these schools should be noted. any of them were established by religious bodies. It as during the period which we have under consideration at Catholic secondary schools began to appear in considable numbers. These were for the most part established by e several teaching orders. The Society of Jesus founded stitutions of secondary and higher education in the United ates after the revolutionary war. The Brothers of the aristian Schools opened their first school in America at ontreal in 1838; and soon after set up establishments thin the United States, at Baltimore and New York. ese were doubtless of elementary grade at the start; but

the brethren extended their courses after a time to include secondary studies. Many conventual schools for girls were also established, and it became no uncommon thing for them to draw a large clientage from other than Catholic families.

The academies established by Protestant bodies were in some instances under direct ecclesiastical control; but more frequently their formal connection with ecclesiastical societies terminated with their legal incorporation. They were, however, generally characterized by great moral earnestness, on the part of both teachers and pupils; and many of them were remarkable for the intensity of religious life which they fostered. The religious instruction which they carried on concerned itself for the most part with the broad underlying principles of Christianity, avoiding in large measure the discussion of doctrines upon which the sects of Christendom are divided. It consisted mainly of lessons from the King James version of the Bible — both the Old and the New Testament. This was often supplemented by instruction in moral philosophy. Thus, the non-Catholic academies, even such as had arisen from the initiative of religious societies, tended toward the non-sectarian character which has been more fully exemplified in the public schools of later times.

The grammar schools had been exclusively for boys. Such was the case with many of the academies. Others of these schools were co-educational. With the increasing interest in education for women, there grew up a large number of academies for girls, which were all too often weighed down with the title of "female seminary." These two types of secondary education for girls prepared the way for two types of institution of higher education, both of which appeared in the fourth decade of the nineteenth century, viz., the co-educational college and the college for women exclusively.

The academies aroused and ministered to a strong and widespread desire for education. They greatly broadened the intellectual horizon of families and communities. They

reinforced the protest which was arising against the too narrow curriculum of the American colleges. In many other ways they rendered a timely and most efficient service in the betterment of American thought and life.

One specific service must receive separate mention. In the absence of special schools for the training of teachers, the better elementary schools were for a long time in the hands of teachers who had studied in the academies. In New York and Pennsylvania, this service of the academies received recognition at the hands of the state legislature. Special classes were organized in these schools for instruction in the art of teaching. A seminary for teachers was opened in connection with the Phillips academy at Andover. When state normal schools began to be established, in Massachusetts in the year 1839, suggestions for their organization and management were drawn from this seminary and from the current practice of the academies.

THE HIGH SCHOOL MOVEMENT

In the early part of the nineteenth century, there appeared in the several American states a strong demand for schools under the exclusive control of the state government. Various influences contributed to this sentiment. The Calvinistic view of the civil power had apparently prepared the way for state agency in education. The spirit which drove the Jesuits from France and during the French revolution made education a part of the program of democracy, roused an answering spirit in America. The steadily advancing separation between church and state kept alive the question as to the relation of the schools to both. So far as the higher education was concerned, it seemed to be the well-established theory that the state should grant charters to colleges, authorizing them to manage their own affairs under close corporations, with incidental aid from the state in the shape of gifts of land or money. And this had come to be the prevalent method of meeting the demand for secondary education. But the notion of higher institutions chiefly

supported and directly controlled by the state now began to get abroad.

The University of Virginia, under the guidance of Thomas Jefferson, led the way to the realization of this idea. In New Hampshire, the legislature undertook to transform Dartmouth college into Dartmouth university, without the consent of the college corporation. The attempt was frustrated by a decision of the United States supreme court. This decision was of the utmost importance in the history of American education as well as of American jurisprudence. It declared, in effect, that an institution founded and administered as was Dartmouth college was a private corporation; that the charter granted it by the state was in the nature of a contract, and accordingly could not, under the constitution of the United States, be altered by the legislature without the consent of the board of trustees. This decision established the inviolability of chartered rights. It thus gave security and stability to all incorporated institutions; it drew also a sharp distinction between "public" and "private" institutions, and placed the most of the then existing higher and secondary schools in the latter class. These schools served a public purpose and were open to public resort. They were in all but the legal sense public schools. But the clear definition of their legal status served to strengthen the rising demand for schools which should be public in every sense of the word. The growth of cities and many other causes combined to reinforce this demand.

The first step in the establishment of public secondary schools to supplement or fill the place of the academies was taken by the larger towns and municipalities, under the lead of Boston. The new institutions were a direct outgrowth of the system of elementary schools. The course of study in these schools was becoming better defined and was slowly extending. In Boston, it was extended downward in the year 1818 to include primary schools in which the first steps in reading were taken. The same system was extended upward in 1821 by the establishment of an "Eng-

ish classical school," which soon took the name of "English
igh school." The name seems to have been adopted in
nitation of the high school of Edinburgh. There had been
or many years close intellectual sympathy between the Mas-
achusetts town and the Scotch capital. The new Boston
chool differed, however, in important particulars from its
amesake in Edinburgh. The ancient languages were not
ncluded in its curriculum. It did not employ the moni-
orial method of instruction, then in vogue in Edinburgh.
ut the two schools were alike in this: that each was sup-
orted and controlled by the municipality and was an object
f municipal interest and pride.

The English high school was established to meet the needs
f the middle, and especially the commercial, classes. Its
ourse of study was three years in length, embracing the
nglish language and literature, mathematics, navigation
nd surveying, geography, natural philosophy (including
tronomy), history, logic, moral and political philosophy.
atin and modern languages were added later, and the
ourse extended to four years. Students were received into
e high school from the elementary schools of the city, but
ere not at the first prepared in the high school for admis-
on to college. That was still the function of the Latin
hool. But with the addition of foreign languages to its
ourse of study, the English high school has fitted its stu-
nts for admission to certain higher institutions, and particu-
rly to the Institute of Technology.

Boston was still a town when she set up her English
assical school, but became a city in the following year.
he new school was proposed by the school committee, and
as approved by the people, assembled in town meeting.
ther Massachusetts towns soon followed the lead of Boston
this matter. Philadelphia, in 1838, established the Cen-
l high school, under special authorization from the Penn-
lvania legislature. Baltimore followed, with the establish-
ent of a "city college." Providence opened a public high
hool in 1843. Hartford, in 1847, transformed her old

grammar school into a school of the newer type. New York opened a "free academy" in 1848, the name of which was afterwards changed to "the College of the City of New York." This school was established in accordance with a special act of the state legislature, ratified by vote of the people of the city. Other high schools sprang up in various parts of the country before the year 1850 — in Connecticut, in New York, in Ohio. Since that time the movement has steadily continued, until now these schools are found in every state in the union, in cities, in smaller towns, and even occasionally in thickly populated country districts.

The zeal of communities in the establishment of these schools not infrequently outran the express provision of state school laws. But the movement encountered hostility from various sources, notably from those who regarded the academy as the final or best solution of the problem of public secondary education, and from those who were opposed on principle to the recognition of secondary education as a proper field for governmental agency. The legal questions involved in this latter contention were brought to a settlement in the supreme court of Michigan, in what is commonly known as the "Kalamazoo case." The decision of the court in this case was prepared by one of the most eminent of American jurists. It was summed up in the words, "Neither in our state policy, in our constitution, nor in our laws do we find the primary school districts restricted in the branches of knowledge which their officers may cause to be taught, or the grade of instruction that may be given, if their voters consent, in regular form, to bear the expense and raise the taxes for the purpose."

This case not only settled the question which it raised within the territorial limits of the state of Michigan. It settled also the general policy of the American commonwealths in this matter. The opinion of the court, in its ample setting-forth, made clear the fact that American thought and purpose were moving steadily toward a complete system of education, under full public control, its

several parts well knit together so as to form an organic whole.

But in several of the states the people were not left to work out the problem of secondary education in the isolation of scattered communities. In these states, well ordered systems of secondary schools were established by statute. As early as 1798, Connecticut authorized the opening of higher schools by the local authorities ("school societies"). In Massachusetts, the law requiring grammar schools in the towns was so far weakened, in 1824, that towns having a population of less than 5,000 were allowed to substitute therefor an elementary school, if the people should so determine by vote at a public election. This marks the lowest ebb of public school sentiment in the Bay state — at east so far as secondary education was concerned. The cademies were then at the height of their prosperity. But wo years later the return movement set in. It was enacted hat every town having five hundred families should provide master to give instruction in history of the United States, ookkeeping, geometry, surveying and algebra; and every own having four thousand inhabitants, a master capable of iving instruction in Latin and Greek, history, rhetoric, and gic. The young state of Iowa adopted a provision in 849 expressly permitting the adding of higher grades to e public schools; and in 1858 authorized the establishent of county high schools. In New York, the systematic rading of the schools went steadily forward; and the academic departments" of these schools, corresponding to e high schools of other states, formed a part of the unirsity of the state of New York and received financial aid om the literature fund. In Maryland, the county academies, which had displaced the grammar schools of colonial ays, continued for many years to receive financial aid from e state, and only in comparatively recent times were erged into a state system of high schools.

Other important state establishments have taken shape at recent a date that they will be described later under the count of present-day systems of schools.

THE OLD AND THE NEW

We have seen that by the middle of the nineteenth century a great change had come over secondary education in the United States. Two aspects of the new order of things are worthy of note: First, the position in which it placed the old academies; secondly, the tendency which it marked toward a closing up of gaps in the system of public instruction.

The academies had long been the ordinary and accepted agency for secondary education. They had provided a general training for the great body of students. They had also drawn near to the colleges, and now prepared a large proportion of the candidates for admission to the freshman class. Private schools had grown up which paid especial attention to fitting boys for college; and from the earliest times many had received such preparation at the hands of private tutors, and particularly under the personal direction of clergymen. But the academies were now *par excellence* the preparatory schools of the country. The growth of high schools had taken away from them the character of the ordinary provision for secondary education. Many of them declined as the high schools advanced; many were given over to the communities in which they were conducted and became high schools, under public management. Those that survived laid more and more stress on their function of preparing for college. A goodly number of these are stronger now than ever before; and new schools of this type are founded from time to time. In recent years the increase of wealth, the rise of new social distinctions, dissatisfaction with the colorless religious character of the high schools, and many other causes, have caused a new demand for such schools to arise. They prepare for college, but do not in general look upon this as their sole function. They are recognized as constituting a highly important part of American provision for public education. While the high schools are for day pupils only, the acade-

mies are generally boarding schools. They afford favorable ground for the deep rooting and vigorous growth of traditions of culture and scholarship. The more famous of them draw students from long distances, and accordingly exercise a widespread influence upon American educational standards.

The high schools, on the other hand, are an evidence of the widespread desire in America for complete systems of education under public management. The impulse which resulted in their establishment is closely related to that which, especially in the southern and western states, led to the founding of state universities. The organic connection between the high schools and schools of elementary grade has already been noted. At the first there was a recognized gap between the high schools and institutions of higher learning. The earliest high schools were intended specifically for those who were not preparing for college. But here soon appeared a disposition on the part of the public chool authorities to close up this gap. Studies regarded as listinctively preparatory to college were from time to time ntroduced into high school courses. Of these, Greek ad and still has the most precarious hold upon public avor. Yet there were and still are even small communities remote from the great centers of wealth and learning, here Greek has an assured and honored place in the igh school curriculum.

A CONTINUOUS SYSTEM OF PUBLIC INSTRUCTION

It should be stated here that well-established American sage now recognizes three consecutive stages of instruction, ommonly distributed as follows: Eight years are assigned the elementary school; four years to the high school or cademy, following directly upon the elementary course; nd the four years next following to the college, which offers nally the bachelor's degree. The whole course from the imary school to the first degree is accordingly sixteen ears in length. It should be noted, however, that there is growing disposition to recognize the first two years of the

college course as offering instruction which is essentially of secondary grade. And there is also a growing demand for the introduction of secondary studies and secondary methods into the upper grades of the elementary school course.

The tendency of public high schools to assume the function of preparation for college met with strong opposition. It was claimed that this service could best be rendered by special schools conducted for that express purpose. The discussion of this question has brought out two contrasting ideals of American life, and has shown more clearly the nature of the movement which called the high school into being.

The colonial period was a time in which distinctions of rank were still fairly well defined in American society. The higher schools of that time, intended especially for the ruling class, had no organic connection with the lower schools. The secondary schools were a part of the higher system, and had little or nothing to do with the lower.

The first fifty years or more of independence was a time of readjustment. The earlier system of social levels was gradually transformed into a continuous series of gradations. Society became an inclined plane, as it were, with free and open passage up and down the scale. Every school child was taught to consider himself as started on a way which might lead to the highest places.

It seems inevitable that public education should in turn have been influenced by the sentiments which it had helped to form. An unlimited system of public schools was necessary to the realization of the unlimited aspiration of the people. The prevalent instinct slowly rose to a conscious determination that there should be no *cul-de-sac* in the educational systems of the republic.

THE SCHOOLS AND THE COLLEGES

Even when the high schools had begun to prepare their more favored students for college, the connection between the secondary and the higher institutions was not so close as

vas desired. In some of the leading states of the east, the
hief, or indeed the only, provision for higher education was
n institutions managed by private corporations. In many
f the newer states, there were growing up universities under
ll state control. But these universities were supported out
f funds separate from those devoted to the common schools,
nd were controlled by separate administrative boards. The
equirements for admission to college were determined by
he college faculties, with only incidental reference to the
urely educational problems confronting the secondary
hools. The fitness of candidates for admission was deter-
ined by an examination, conducted at the college, by col-
ge instructors, and covering the requirements which the
llege had prescribed.

This system, to be sure, possessed great advantages. It
mpelled all schools which undertook preparation for a
ven college to come up to a definite scholastic standard
posed from without. It exercised no authority over the
hools, but exerted an influence which a preparatory school
uld not escape. Besides, the standard set for classes pre-
ring for college had an indirect influence on classes in the
me school which were pursuing other lines of study. So
e most powerful single agency affecting the course and the
thods of instruction in the better high schools, as in the
demies, was for many years the entrance examinations of
several colleges.

But there were evils attendant upon this system. When
excellence of a four-year course of school instruction was
be tested by a single examination at the end of the course
his examination being conducted by the instructors in
ther, and often a remote institution, with sole reference
he plans and purposes of that institution,—it was inevi-
le that the lower school should become merely tributary
ll essential particulars to the higher. The college exam-
ion became the chief end and aim of much of the work
our secondary schools. There appeared a marked ten-
cy to substitute a cramming process for real educational

procedure. Teachers in secondary schools were too largely turned aside from independent investigation of the essential problems of secondary education, to the more petty inquiry into the exact nature of the entrance examinations at certain colleges. It was clear that such a state of things did not answer to the organic continuity of instruction which American social conditions seemed to demand.

The attempt to correct this evil has taken several different directions. Some of the most interesting movements affecting our secondary education within the past three decades have had this origin. How may a more vital relation be established between secondary schools and colleges, which shall conserve the highest educational interests of both? Such is the general question for which a solution has been sought.

THE "ACCREDITING SYSTEM."

One of the earliest and most noteworthy attempts at its solution is the so-called accrediting system, introduced by the University of Michigan in 1871. Under this system, the university admits to its freshman class, without examination, such graduates of approved secondary schools as are especially recommended for that purpose by the principals of those schools. This system has met with great favor and has had widespread application. The United States commissioner of education reported in 1896, that there were then 42 state universities and agricultural and mechanical colleges, and about 150 other institutions in which it had been adopted. It depends upon a purely voluntary agreement between the secondary schools and the higher institutions. The college or university satisfies itself that the secondary school applying for such recognition is properly taught. Usually a committee of the faculty is sent to inspect the school, and the school agrees to submit itself to such inspection. It is the school rather than the individual that is examined; and the inquiry relates chiefly to the vitality, intelligence, and general effectiveness of the instruction.

Hardly any two institutions follow exactly the same method in the practice of accrediting schools. The Michigan system provides for inspection of each school by a committee of the faculty, consisting of one or two members. On a favorable report from this committee the school is accredited for one, two, or three years, according to the degree of established excellence which it presents. With the spread of the system to other institutions, it has differentiated on the one hand in the direction of a more frequent and thorough-going inspection of the schools, and on the other hand in the direction of less thorough inspection or none at all. Perhaps the lowest outcome of this differentiation is represented by the announcement of the authorities of one college that "Students bearing the personal certificates of a former teacher, concerning studies satisfactorily completed, will be given credit for the work they have done."

On the other hand, the highest grade of efficiency in university inspection is found in such a system as that maintained by the University of California. Here the accrediting of schools is in the charge of a committee of the academic senate, representing the chief departments of instruction. All secondary schools within the state which apply for accrediting — public high schools, private schools, and institutions under corporate or ecclesiastical management — are visited each year under the direction of this committee by several members of the teaching force of the university. A given school is commonly so visited and inspected in the course of each year by instructors from each of the university departments of English, Latin, history, mathematics, and physics. In some instances, the departments of Greek, modern languages, chemistry, and the biological sciences, or any one or more of them, may be added to the list. In other cases, the visitor from the department of English, for example, may, by special arrangement, examine the school for the Latin department; and other economical combinations are made from time to time.

The heads of departments visit many schools in person; university instructors of various subordinate grades share in this labor; but so far as possible the assignment to such duty is limited to persons of considerable scholastic experience, and experience as a teacher in secondary schools is regarded as a qualification of no small importance. The men who go out for the purpose of such visitation are at the time engaged in ordinary university instruction. The loss to their classes from the interruptions to continuous work which their occasional absence must cause, is minimized by various devices. The expense of the visitation is borne by the university. A school may be "accredited" without a favorable report in all subjects, but the report must be favorable in a sufficient number of lines to indicate that the school is a real educational institution. Superior excellence in a single isolated department is not regarded as constituting a claim to a place on the university list.

The purpose of a well-considered accrediting system is not primarily to provide a means whereby applicants for admission to college may escape a dreaded examination. It is rather to encourage and build up strong and efficient schools of secondary grade. This result the system has undoubtedly tended to bring about. It has drawn our secondary and higher grades of instruction into closer articulation and sympathy one with the other. It has tended to release the teachers in secondary schools from the domination of merely formal examination requirements, and has turned their attention to vital matters in the domain of education.

On the other hand, the system has had and still has serious disadvantages. It tends to foster a too prevalent disposition to dispense with or evade all tests of accurate scholarship in the shape of definite examinations. It entails a heavy burden upon the higher institution; it demands large expenditures of money and of the time of university instructors. In the University of California, the actual cost in money for the traveling expenses of the inspec-

tors is about equal to the salary of an assistant professor. The aggregate of the time required each year by all departments for the purposes of the examination of schools is not far from three full academic years. Counting the average salary of the inspectors as that of an associate professor, we have here an approximate total cost for services and traveling expenses of between $8,000 and $9,000 annually. It is, moreover, impossible so to conduct the inspection that all departments of all schools shall be tried by uniform or even consistent standards of excellence. Nor does the accrediting system wholly obviate the evil of subjecting the secondary schools to tests and influences somewhat foreign to the real purposes of secondary education. It cannot be regarded and is not generally regarded as a final solution of the problem with which it deals. But it marks a very great advance toward that end; and it is safe to say that its present advantages greatly outweigh its obvious disadvantages.

SCHOOL AND COLLEGE ASSOCIATIONS

Parallel with the later development of the accrediting system, there have grown up important voluntary associations of instructors, in which representatives of the colleges meet with representatives of the secondary schools for the discussion of topics of common interest. The parent society of this sort is the New England association of colleges and preparatory schools, organized at Boston in 1885. The object of this association was declared to be, "The establishment of mutually sympathetic and helpful relations between the faculties of the colleges represented and the teachers of the preparatory schools, and the suggestion to that end of practical measures and methods of work which shall strengthen both classes of institutious by bringing them into effective harmony."

This organization grew out of a previously existing state association of secondary school teachers in Massachusetts. It in turn prompted the establishment of the commission of colleges in New England on admission examinations. This

commission, formed by agreement among the several New England colleges, and possessing no authority, has by its recommendations done much to unify the requirements for college matriculation. Its most notable achievement has been the mapping out of requirements in the English language and literature. It has made important recommendations also with reference to courses in the ancient classics and the modern languages.

The example of New England has been followed by other sections of the country. The association of colleges and preparatory schools in the middle states and Maryland came into existence in 1892, growing out of the college association of Pennsylvania, established five years earlier. The north central association of colleges and secondary schools was formed at Evanston, Illinois, in 1895; and the association of colleges and preparatory schools of the southern states, at Atlanta, Georgia, later in the same year. State organizations somewhat similar in character are found in a number of the states, as in New York, Ohio, Tennessee, Colorado, Michigan, and both Dakotas.

These various societies, through their discussions and recommendations, have exercised a vast influence upon the development of our secondary education.

THE COMMITTEE OF TEN ON SECONDARY SCHOOL STUDIES

But the chief landmark in the recent history of this grade of school is the work of the committee on secondary school studies, appointed by the National educational association in 1892, and commonly known as the "committee of ten." This committee was the outcome of a movement within the national association in the direction of uniformity of college entrance requirements. Its chairman was the president of Harvard university. In its membership were included the United States commissioner of education and some of the foremost representatives of both secondary and higher education in America. Not limiting itself to the mechanical adjustment of relations between the high school and the col-

choice of studies. With reference to requirements for admission to college, the committee recommend "that the colleges and scientific schools of the country should accept for admission to appropriate courses of their instruction the attainments of any youth who has passed creditably through a good secondary school course, no matter to what group of subjects he may have mainly devoted himself in the secondary school." Describing more exactly what might be considered "a good secondary school course" for this purpose, they propose that it shall consist of any group of studies from those considered by the sub-committees, "provided that the sum of the studies in each of the four years amounts to sixteen, or eighteen, or twenty periods a week,— as may be thought best,— and provided, further, that in each year at least four of the subjects presented shall have been pursued at least three periods a week, and that at least three of the subjects shall have been pursued three years or more."

This report called forth a very active discussion, which has not yet come to an end. The definite courses of study which it suggested have not been widely adopted; nor have college admission requirements been made uniform in the manner which it proposed. But its influence has been far-reaching and, in the main, highly beneficial.

THE ELECTIVE SYSTEM

Since the early days of the academies, it has been customary in many schools to offer alternative courses; one of them classical, the other "modern." Other options have been added from time to time, so that now a large school commonly offers several parallel courses. But especially within the last twenty years, there has appeared a strong demand that instead of a choice of courses the students be offered a wide range of choice in particular subjects.

Several influences have combined to bring about this demand. The general adoption of an elective system in the colleges may be mentioned. Teachers have objected to close prescription in high schools when freedom is increasing

in the higher institutions. The conviction that the secondary schools should not be merely tributary to the colleges is gaining ground. What is good education in the high school, it is maintained, is good preparation for the higher schools. The independence of the secondary school carries with it independent responsibility for the supply of the actual educational needs of the youth attending such a school. And the students in the high schools are thought to have reached the stage of differentiation of educational needs. The need of the state, moreover, which education must satisfy, is the need of full spiritual unity underlying the utmost diversity of talent and culture. The elementary schools, with their single course of study, are conservators of spiritual unity. The secondary schools can and ought to serve a different purpose. Their instruction should be adapted to the cultivation of the diverse talents of the youth enrolled in them. No two students have exactly the same aptitudes; so far as possible, every student should pursue a different course of instruction from every other student.

It will be seen that one tendency of this doctrine is to substitute a quantitative for a qualitative consideration of the curriculum. The most diverse subjects are held to be equivalent for the purposes of general culture, if pursued for equal periods of time under equally favorable conditions. A high school curriculum, under this system, would consist of a fixed number of units of study, to be chosen at will from the whole number of studies taught in the school. Certain utterances of the committee of ten have tended to strengthen this quantitative view of the curriculum. It has received reinforcement, also, from some prominent institutions of higher instruction, as the Indiana and the Leland Stanford Junior universities, which have stated their admission requirements for the most part in quantitative terms.

In the attempt to reduce this doctrine to practice, certain modifications necessarily enter. The choice of studies cannot be left simply to the immature pupil. He must have the advice of parents or guardians, and particularly the

advice of the principal of the school. Even if other subjects may be given over to absolute freedom of election, studies in English are found to be indispensable in every course. Little by little, other subjects are acknowledged to be essential; until it appears that there is little difference in practical working between a system of parallel courses rendered flexible by the allowing of occasional substitutions, and an adequately supervised elective system. The committee of ten enunciated an important regulative principle in proposing that each secondary school curriculum should provide an outlook into the several domains of language, mathematics, history, and natural science. From whichever side the problem of the course of study is approached, the discussions seem to tend toward a requirement in each of several broad fields of knowledge, together with large freedom in the choice of particular subjects within those fields.

COLLEGE ENTRANCE REQUIREMENTS

The latest attempt at an adjustment of the relations of econdary schools and colleges, to the educational advantage f both, is contained in the report of the committee on colege entrance requirements. It seems not unlikely that this eport may be more fruitful of tangible results than any of the apers relating to the same subject which have preceded it.

In 1895, the National educational association, through its epartments of secondary education and higher education, ppointed a committee to consider the specific question of e unification of college entrance requirements. This comittee, as finally constituted, consisted of fourteen members, presenting the high schools and universities of different ctions of the country, under the chairmanship of the perintendent of high schools of the city of Chicago. The st important service rendered by the committee was the eparation and publication of a table showing the actual trance requirements of sixty-seven representative colleges, iversities, and higher technical schools in the United tes.

The committee's final report was presented at the meeting of the National educational association in July, 1899. This report is mainly devoted to the attempt to establish "national units, or norms," in the several subjects taught in the secondary schools as preparatory to the college course. The fundamental problem, in the language of the committee, "is to formulate courses of study in each of the several subjects of the curriculum which shall be substantially equal in value, the measure of value being both quantity and quality of work done. It is not to be expected, nor is it desired, that all colleges should make the same entrance requirements, nor is it to be expected that all schools will have the same program of studies. What is to be desired, and what the committee hopes may become true, is that the colleges will state their entrance requirements in terms of national units, or norms, and that the schools will build up their program of studies out of the units furnished by these separate courses of study." This hope is reinforced by experience with college entrance requirements in English, which have within the past few years become nearly uniform throughout the country, on the basis of the recommendations of the commission of colleges in New England on admission examinations.

In the determination of these norms, the committee received assistance from several bodies of expert scholars in the several branches of instruction. The American philological association proposed courses of study in Latin and Greek. The modern language association of America rendered a like service with reference to the French and German languages. The American historical association and the Chicago section of the American mathematical society reported on courses in history and mathematics. And the department of natural-science instruction of the national educational association presented recommendations relating to physical geography, chemistry, botany, zoology, and physics. These several supplemental papers are published in connection with the committee's report. The committee express

general approval of the courses recommended in these papers, suggest some slight modifications, and offer an independent report on the subject of English. Their further recommendations are summed up in fourteen resolutions, of which the following seem to be of the greatest general significance:

I. That the principle of election be recognized in secondary schools.

IV. That we favor a unified six-year high school course of study beginning with the seventh grade.

VI. That while the committee recognizes as suitable for recommendation by the colleges for admission the several studies enumerated in this report, and while it also recognizes the principle of large liberty to the students in secondary schools, it does not believe in unlimited election, but especially emphasizes the importance of a certain number of constants in all secondary schools and in all requirements for admission to college.

That the committee recommends that the number of constants be recognized in the following proportion, namely: four units in foreign languages (no language accepted in less than two units), two units in mathematics, two in English, one in history, and one in science.

XII. That we recommend that any piece of work comprehended within the studies included in this report that has covered at least one year of four periods a week in a well-equipped secondary school, under competent instruction, hould be considered worthy to count toward admission to ollege.

The committee disclaim any implication that different ubjects may be regarded as educationally equivalent. "This roposition" [resolution XII], they say, "does not involve f itself, necessarily, the idea that all subjects are of equal ultural or disciplinary value, * * * yet the advantages o our educational system of the adoption of this principle ill be so great as far to outweigh any incidental disadvange which may accrue from accepting as of equal value for

college purposes the more or less unequal values represented by these studies."

COURSES OF STUDY

The actual courses of study in our secondary schools show great diversity. There is here, as in other portions of the American educational system, no semblance of national control. There are but few states if any where the course of study is prescribed by state authority. This matter is generally left to the discretion of municipal or district boards of education. Yet the differences between neighboring schools, or between the schools of different sections of the country, are not so great as one might suppose. Owing to the extensive circulation of all sorts of educational publications, and the frequent meeting of teachers one with another in educational conventions, there is a surprising approach toward uniformity in the educational provisions found in all parts of the country. Even the poorer and more backward sections are often found striving consciously and earnestly after the ideals proposed by more favored districts. High schools may be found having courses ranging all the way from one to six years in length; but the four-year course is the generally recognized standard. Twenty years ago, it was common to find courses weighed down with a large number of subjects, many of them pursued for only a fraction of a year. This was notably true of subjects in natural science; but it is true to a much less extent at the present day. In spite of all assaults made upon the classical studies, they are apparently growing in favor. It would perhaps be fair to say that in many of the better schools, public as well as private, the classical course is commonly regarded as the standard, from which the other courses pursued in the same school are looked upon as variants. But the classical course now commonly includes one or two years of natural science.

The courses given below represent three different types of school:

1. Courses in Phillips academy, Andover, Massachusetts. — an incorporated and endowed boarding school for boys.

[The figures in the columns indicate the number of recitation periods a week devoted to the several subjects. Figures in parentheses indicate that the subjects for which they stand are alternative with others in the same column.]

	CLASSICAL COURSE				SCIENTIFIC COURSE			
	Class IV	Class III	Class II	Class I	Class D	Class C	Class B	Class A
English	4	2	2	Eighteen hours selected from the foregoing subjects, with the addition of physics, trigonometry, mechanical drawing and zoology.	4	2	2	Eighteen hours selected from the foregoing subjects, with the addition of trigonometry, mechanical drawing, zoology, political economy and physics.
Latin	6	5	5		6	4	(2)	
Greek	....	4	5		....	....	....	
French	....	(4)	(1)		....	(4)	(2)	
German	....	(4)	(1)		....	(4)	(2)	
Algebra	2	2	2		2	3	3	
Geometry	2	....	....		2	3	3	
History	....	....	3		....	....	4	
Natural Science	2	....	..		2	....	....	
Chemistry	....	....	....		....	2	(4)	
Botany	....	....	...		....	....	(2)	

2. Courses recommended for the high schools of Minnesota by the state high school board.

	LATIN SCIENTIFIC COURSE			
	First year	Second year	Third year	Fourth year
English	5	5	5	5
Latin	5	5	5	5
Mathematics	5	5	....	5
History	....	5	5	......
Natural science	5	....	5	5

In Latin, first year, grammar; second year, Cæsar; third year, Cicero; fourth year, Virgil. In mathematics, first year, algebra; second year, plane geometry; fourth year, solid geometry and higher algebra. In natural science, first year, zoology or botany; third year, physics; fourth year, chemistry.

Literary Course: as above, substituting four years of German for Latin.

Classical Course: as above, substituting Greek grammar and Anabasis for equivalents.

English Course: as above, substituting for Latin four credits chosen from botany, physiography, bookkeeping, civics, history, political economy, and senior common branches.

3. Course for Public Latin school, Boston, Massachusetts:

	Class VI	Class V	Class IV	Class III	Class II	Class I
English	3	3	3	3	3	3
Latin	5	5	7 [4]	4	5	4
Greek	......	......	[4]	5	5	5
French	......	......	[3]	3	2	......
German	......	......	......	......	......	5
Arithmetic	4 [5]	4	......	......	......	......
Algebra	......	......	4 [3]	3	3	......
Geometry	......	......	......	......	......	4
History	3	3	2	2	2	......
Geography	3	3	1	......	......	......
Physics	......	......	......	......	......	4
Gymnastics	2	2	......	......	......	......
Military Drill	......	......	2	2	2	2

The brackets indicate an assignment of hours for the spring term which differs from that in the same subjects for the remainder of the year. Botany, physiology and hygiene are studied during the spring term in the hours assigned to geography in the table. Objective geometry is studied in connection with arithmetic in classes VI and V. Plane geometry is begun in the hours assigned to algebra in class II.

DIFFERENTIATION OF SCHOOLS

The differentiation which appears everywhere in our secondary education is not limited to the diversifying of studies within the several schools; it appears also in the erection of special schools for special classes of students. In the first place, we may note the provision for separate schooling of

boys and girls. The grammar schools of the seventeenth and eighteenth centuries were for boys alone. A number of the old academies were co-educational. Early in the nineteenth century, academies for girls exclusively were established, and large numbers of such schools have flourished down to the present day. A public high school for girls was established at Boston in 1826, but it was short-lived, owing to the large expense which it entailed. At Providence, Rhode Island, in 1843, a co-educational high school was opened; and the most of the high schools established since that time have been for both sexes.

The report of the United States commissioner of education for 1896–97 showed a total of 5,109 public high schools in the whole country, of which 35 were for boys only, 26 for girls only, and the remainder co-educational. The same report showed a total of 2,100 private high schools, academies, etc., of which 351 were for boys only, 537 for girls only, and 1,212 co-educational.

Another special type of school, the evening high school, has been established in a number of our larger cities. These schools have offered very elastic courses of study, suited to the varied needs of their clientage; and have been a great boon to many who have been obliged to work by day after the completion of an elementary school course.

In the northern and western states, white and colored students, where there are colored students of secondary grade, commonly attend the same schools. In the southern states, separate schools are provided for those of African race. The report of the commissioner of education for 1896–97 showed 169 schools in the United States for the secondary and higher education of colored youth exclusively. In many of these schools both grades of instruction were provided in the same institution. About 20 of the number were public high schools. The remainder were private or denominational institutions. In these 169 schools, 15,203 colored students were receiving instruction of secondary grade.

The European manual training exhibits at the centennial exhibition in Philadelphia, in 1876, gave a strong impetus to a movement already begun toward the establishment of manual training schools in American cities. St. Louis took a step forward, in 1879, in the establishment of such a school in connection with Washington university. Within a few years, similar schools were established, some under private and some under public control, in Baltimore, Chicago, Toledo, New York, Philadelphia, and other cities. In these schools, the idea of manual training for the purposes of general culture was usually uppermost, their projectors disclaiming any intention of establishing schools for the teaching of trades. More recently trade schools have been established in the largest cities, but for the most part under private initiative and control.

The commercial spirit of this country finds expression in the frequent appearance of such subjects as bookkeeping and commercial arithmetic in general courses of study. Special schools for distinctively commercial training are usually private ventures. These are found in great numbers in all parts of the country, generally going by the name of "commercial college" or "business college." In 1896–97, the commissioner of education presented reports from 341 such schools, with 77,746 students in attendance. Within the past decade there has been a growing demand for public commercial high schools in the larger cities. Thus far, comparatively slight provision has been made to meet this demand, but there is reason to expect that there will in the near future be a considerable expansion of our public education on this side. The business high school in Washington, D. C., may be mentioned as one illustration of the serious interest which has begun to appear in this side of secondary instruction.

The recognition of the importance and need of purely vocational schools of secondary grade puts a new aspect on the problem of the school curriculum. As has been shown, Americans are loath to recognize any necessity of a bifur-

cation of courses, such that the student taking one road finds the way open to indefinite advancement in higher studies, while one taking the other alternative finds a definite limit a little way before him. We have commonly failed to recognize the need of turning aside at some point, early or late, to master a distinct occupation in life. We have been willing to sacrifice expertness in one's calling to the hope of unlimited progress in higher culture. With the growing interest in technical training of a commercial or mechanical sort, there appears a set of difficult problems. A purely vocational course in a trade school presents no educational outlook beyond the mastery of the trade. If a final choice must be made between the highway of learning and the *cul-de-sac*, how shall it be so far postponed as to give to each pupil his full share of general culture, without reducing unduly his chance of full preparation for his life work? Still more difficult are the questions relating to certain semi-vocational courses, such as those of the manual training high school. The tendency is to regard these as primarily courses for general culture, with an outlook into the college or the higher scientific school. It is possible that at times their service as preparatory to the mastery of certain trades has been somewhat obscured in this view. But questions such as these are still before us for settlement.

THE STUDY OF ADOLESCENCE

One movement should be mentioned which is part cause and part result of the increased attention which is now paid to problems of secondary education, in themselves considered. Reference is made to the study of the several aspects of adolescence, as a stage in the mental development of individuals. Secondary education being essentially the education of adolescents, whatever throws light upon the peculiar psychology and natural history of this period of youth is of value to the educator. Many studies of particular phases of adolescent development have been made within the past few years, under the stimulus of investigations begun at

Clark university. These studies are as yet fragmentary; and they cannot be said to have led to well-defined reforms. Yet their influence has been manifest in the general tone and spirit of secondary education. They have prompted to a more sympathetic treatment of our youth in their time of spiritual reconstruction; to a better appreciation of the difficulties attending the passage from the intellectual dependence of childhood to the individual convictions of manhood and womanhood. They have led to a more careful observation of individual differences of development, and have strengthened the demand for greater freedom in both courses and methods of instruction. Such results warrant the hope that further researches in this field may lead to generalized knowledge of the needs and aptitudes of youth, which will be of the highest significance in educational practice.

METHODS OF INSTRUCTION

Methods of instruction in all secondary school subjects have been profoundly influenced of late from the side of the natural sciences. Laboratories have become common in high schools and academies. College entrance requirements have been extended to include laboratory work in physics, and, in some instances, in chemistry or in the biological sciences. In Massachusetts, in 1897, it was reported that 66 high schools were provided with good laboratory facilities, 80 had fair or limited facilities, and 98 had poor facilities or none.

In these laboratories, students perform representative experiments in the science they are pursuing, under the guidance and subject to the criticism of the instructor. These experiments are commonly regarded as illustrative of or preparatory to the statement of principles in a text-book. The "method of re-discovery" has influenced the practice of the schools; yet there are probably few school laboratories in which the students are expected to re-discover on their own account the laws of physics or chemistry, or of any other of the sciences. A fine blending of discovery, verification,

and correction seems to be the ideal of our best teachers of natural science. Much stress is laid on the accurate recording of observations and experiments. The students' note-books serve as one of the chief tests of the excellence of their work.

This is different from the prevailing method of a generation ago: the text-book was then the main reliance in school instruction, even for classes in the natural sciences.

The lecture system has never occupied a large place in our secondary schools. Clearness of exposition has always been, and will doubtless always be an important element in a teacher's equipment for teaching. Skillful instructors have at all times exercised themselves to help their pupils over difficulties in such manner as would prepare them to surmount future difficulties for themselves. And we read of old-time masters who were famous for their ability to ask searching and stimulating questions. But set lectures have not found favor here. Oral and written recitations by students, on the other hand, fill a large place in the work of our schools.

The recent extension of laboratory exercises, together with the proportionate reduction of text-book study, represents a notable change of view as to the function of instruction in general. We find accordingly that a like change appears in the treatment of other branches than the natural sciences. The attempt is now made to put the student in touch with first-hand materials of knowledge; and to guide and stimulate him to the end of making over these crude facts into real knowledge for himself. This procedure seeks to give full recognition to both the ideal and the sensuous elements in knowledge; and it indicates some appreciation of the fact that the ideal element to be truly ideal must be supplied by the active agency of the student's own thought, exercised upon the products of his own experience.

In the practice of the schools, we find these principles applied, for example, to the teaching of history. While text-books are not dispensed with, the effort is made to give the student some acquaintance with the sources of our historical

knowledge. In the study of literature, less attention is paid to historical summaries than was formerly the case, and more time is devoted to the study of literary masterpieces. In grammar and rhetoric, the study of principles is closely connected with the study of passages from literature which embody those principles in living forms; and with composition exercises upon topics which invite free expression. In the study of modern languages, facility in conversation is not commonly sought; though there are schools here and there which lay great stress upon this acquisition. The ability to read the languages readily and with understanding, and to enter into an appreciation of their literatures, are the ends chiefly striven for. To these ends, grammatical study is of course necessary. But the grammar is studied, on the whole, less abstractly than formerly, and more in its actual embodiment in literature. Greater effort is made now than a generation ago to secure a reading knowledge of the ancient classics. More hope is held out to classes in Latin and Greek, that they may, with attentive effort, attain to such mastery. There is much difference of opinion among leading teachers as to the proportionate attention to be paid to "sight reading;" and as to the value of the inductive method in the mastery of grammatical principles: but actual practice seems to be tending slowly toward a middle course, which retains much of the old-time thorough discipline in Latin and Greek grammar, but brings this training into more vital connection with the study of classic literature. The writing of Latin verse is generally discarded. Prose composition is receiving increased attention, and is now more imitative in its character than formerly, being commonly based on the Latin or Greek masterpiece which the class is studying at the same time. The question of approaching Attic through modern Greek has been warmly discussed, but the proposed change finds little, if any, acceptance in actual practice. In mathematics, much stress is laid upon the original demonstration of theorems, particularly in plane and solid geometry. It appears from time to time that instruction in mathematics is

weakened by a failure to insist upon the use of accurate language in demonstrations; and from time to time fresh efforts are put forth to strengthen the work on this side. At the present day, especial stress is laid in some quarters upon the need of more careful and accurate English expression in all school exercises. The attempt to teach English expression, oral and written, wholly through the medium of instruction in other branches does not promise well; but there is, fortunately, a growing recognition of the fact that all teachers must have at least some share in the responsibility for such instruction.

MORAL VALUES

The moral influence of secondary schools is undoubtedly the most important topic to be considered in this paper, but it is at the same time the most difficult to reduce to accurate statement. The religious background of moral instruction has already been referred to. It should be added that even in public high schools, from which all instruction in sectarian dogmas is strictly excluded, there is not uncommonly found a pervasive religious atmosphere, an influence emanating from the personal character of the instructors. In many of these schools, it is still customary to open the daily session with the reading of a passage from the Bible or the repetition of the Lord's prayer; or with the singing of a devotional or patriotic hymn. But whatever there may be of religious tone and spirit in these schools is of a very general and unobtrusive sort, and far removed from ecclesiasticism. Teachers wholly indifferent to dogmatic religion or in known opposition thereto are freely employed in the schools; but would probably be found to constitute only a small minority of the teaching force of the country. In some schools, elementary ethics is taught, along with elementary psychology, or perhaps economics. But this is unusual. The moral force of the high schools depends, then, mainly on the personal influence of the teachers in their instruction in the ordinary school subjects; on the government of the school; and on the relations of the students one with another.

Some subjects of instruction offer especial advantages as regards the formation of high ideals of conduct. The teaching of literature, and particularly the literature of the mother tongue, is found to be of great value in this respect — the more so, doubtless, when untimely moralizing is dispensed with, and noble sentiments are permitted to make their appeal through the charm of their artistic presentation. Choice works of plastic and pictorial art are rapidly finding their way into our school rooms. There is no systematic study of æsthetics in the school programs. These works of art are expected to accomplish their mission by their mere presence, sometimes supplemented by an informal discussion of their merits; or they serve to reinforce the æsthetic side of instruction in literature and in drawing. In some schools music is steadily cultivated, and holds an honored place.

History is probably, on the whole, the most neglected of the main lines of study in secondary schools; and the moral loss resulting from such neglect is serious. Greek and Roman history is commonly taught, at least in classical courses; but too often in a scrappy and inadequate fashion. Later European history receives some attention. The history of the United States is, perhaps, the most seriously slighted of all. The reason for this seems to be that the history of our own country is studied in the grammar schools; and it is not emphasized by the colleges as an admission subject. But a change for the better is slowly coming over the historical side of our school programs.

Skillful teachers, however, make instruction in all subjects moral — by arousing a pure desire for truth, a spirit of intellectual honesty, a will to work and to overcome difficulties, and a long line of modest and every-day virtues.

The government of our best secondary schools, and even of many of the smaller schools, which are comparatively unknown, presents much which may be regarded with genuine satisfaction. The relations of teachers and students are comparatively informal. There is little consciousness of official or artificial barriers between them. While strict dis-

ciplinary measures are often found necessary and are often enforced with vigor, the prevalent type of high school and academy government is that which treats the students as if they were already ladies and gentlemen, and throws them as far as possible on their own responsibility. Some interesting and successful experiments have been made in the organization of regular systems of self-government among students. It would seem, however, that only a principal who has the strength and skill to govern well is capable of making a school into a truly self-governing body.

Under any system of government, the social life of the school is the chief teacher of morals. It is one of the glories of American high schools that the children of rich and poor, of high and low, meet there on common ground. The fact that tuition in these schools is free to all, helps to bring about this result. It is unnecessary to point out the numberless bearings of this democratic spirit in the schools upon the pupils who are subject to its influence.

There is undoubtedly a growing disposition among families of wealth and high social position, to send their children to private schools; and this fact has tended of late to the increase of such schools. This disposition is, however, by no means universal. And while the atmosphere of a private boarding school is necessarily different from that of a public high school, it may be questioned whether in the great endowed schools of the country there is any marked encouragement given to purely aristocratic tastes and tendencies. The principals of boarding schools find it necessary at times to protest against providing students with too lavish a supply of spending money. And the fact that such protests are heard seems to indicate that there is a serious effort on the part of school authorities to minimize distinctions based on wealth.

STUDENTS

The social organization of the students in these schools calls for further notice. High schools and academies are much alike in this respect. The instinct of association is strong in our youth, and it finds expression in all sorts of clubs, leagues, societies, and fraternities. The example of the colleges has been influential in the schools in this particular. The several classes are commonly organized, with class officers, and have occasional gatherings of a social character. The offices of the highest class in school are sought for with keen competition. Athletic associations, foot-ball and base-ball clubs, and the like, are usually maintained. Match games are played with neighboring schools, which call forth unbounded enthusiasm. Several schools are often joined in an athletic league; and the annual field days of these leagues are great occasions in the school year. The athletic records and trophies of a school are very highly prized. Well-equipped gymnasiums are now common in the larger schools, and provision for military drill is sometimes found; but formal exercises do not take the place of free competitive games. Debating clubs and other literary societies are maintained with much interest. Contests in debate with neighboring schools call forth a spirit of emulation like that displayed in athletic struggles. Musical organizations are perhaps less common, but are among the most pleasing of school societies. Annual publications by successive classes present a record of the varied interests of the larger schools, and afford a field for budding literary and artistic genius to show its quality. Secret, Greek-letter societies are sometimes formed after the fashion of the colleges. Not unfrequently, too, voluntary associations for religious culture and observance are maintained by the students. All of these organizations are commonly under the immediate control of the students themselves; teachers frequently attend the various meetings, but more as friendly advisers than as governors.

The completion of the course of study in a secondary school is celebrated in public with "graduation" exercises and the conferring of diplomas upon the members of the class. The graduates of a flourishing school will usually be found organized in an alumni association. The monthly or annual meetings of such an association become of increasing significance as the years pass and its numbers and influence are enlarged.

TEACHERS

A committee of the National educational association—the so-called committee of fifteen on elementary education—reported in 1895, among other topics, on the training of teachers for secondary schools. This committee declared that, "The degree of scholarship required for secondary teachers is by common consent fixed at a collegiate education." They proposed a course of special training for such teachers, consisting of instruction during the senior year of the college course in psychology, methodology, school systems, and the history, philosophy, and art of education; and a graduate year of practice in teaching, under close supervision, supplemented by advanced studies in educational theory.

This proposal is far in advance of common practice or requirement. Very few of the American states make any specific requirement for the high school teacher's certificate beyond that for a license to teach in the elementary schools. There are, on the other hand, many secondary schools in which teachers rarely obtain employment, if at all, unless they are college graduates; and there are large sections of the country in which common usage is rapidly tending in this direction.

The most of the leading universities and some of the higher normal schools are devoting especial attention to the professional training of teachers for schools of this grade. A committee of university professors, appointed for this purpose, has recently published a report, setting forth the existing legal provisions for the certification of high school teachers in the several states, and recommending practicable reforms.

A Massachusetts report for the year 1897 shows that one per cent of the high school teachers then employed in that state were graduates of scientific schools, 13 per cent of normal schools, 66 per cent of colleges, and the remaining 20 per cent unclassified.

In the state of New York, in 1898, 32 per cent of the

teachers in secondary schools (not including principals) were college graduates, 39 per cent were normal school graduates, 19 per cent were high school graduates, and 10 per cent had had other training. Of the principals, 51 per cent were college graduates, 35 per cent normal school graduates, 8 per cent high school graduates, and 6 per cent had had other training. These figures include private academies as well as public high schools. They include also one-year, two-year, and three-year schools, as well as fully-developed high schools and academies.

An inquiry into the preparation of teachers in the secondary schools of California, in October, 1897, showed that of 522 teachers then employed in the public high schools of the state, 308, or 59 per cent, were college graduates.

These figures may be taken as representing the conditions which obtain in some of the more favored sections of the country.

STATE SYSTEMS

The several states have been slow to organize general systems of secondary schools. In this respect secondary education stands in marked contrast with that of elementary grade. But a few of the states have made considerable progress in this particular.

The early history of secondary schools in Massachusetts has already been told. This state is the foremost in the union in the universality of its provision for secondary education. Every "town" (township) in the state is required by law to provide free high school tuition for all students who are prepared for that grade of instruction. Inasmuch as the whole state is divided into towns, this means that free secondary education is offered to every child in the commonwealth. Of the 353 towns in the state, 185 are required by law to maintain high schools; 70 others maintain high schools, though not required to do so; and those not maintaining such high schools are required to pay the tuition fees of qualified students within their limits who go elsewhere for high school instruction—and may pay for their trans-

portation also. The poorer towns receive help from the state in paying for tuition in outside schools. The high schools must offer a four-year course, of forty weeks to the year. They must prepare pupils for the state normal schools, and for higher scientific schools and colleges. There are 262 of these high schools in the state, employing 1,312 teachers. In 1897 Massachusetts paid $12,390,638 for public schools, of which $2,400,000, or 19 per cent, was for high schools. In 1896, the total municipal tax in the state was $15.23 on $1,000. Of this, $4.72 was for public schools, $0.91 of which was for high schools. These figures include the cost of school buildings along with the current expense of schools.

The organization of the university of the state of New York has been mentioned. Only so much of the varied activity of this great institution calls for notice here, as has to do with secondary schools. This, however, presents the most thoroughly organized state system of secondary education which has yet been developed on American soil. All incorporated secondary schools in the state and all other secondary schools which may, after official inspection, be admitted to membership by the regents, are institutions of the university. One of the six departments into which the work of the regents is divided is the high school department, which has to do with high schools, academies, and all interests of secondary education. Both the college and the high school department are under one department director. He is assisted by nine inspectors of schools, one of whom is employed as an inspector of apparatus, and by a large staff of examiners.

On the basis of reports made by this department, the regents distributed in 1898 a total of $209,250.48 in state funds to the secondary schools of the state. The method of distribution is as follows: (a) $100 is allotted to each school approved by the regents, without regard to its size or special attainments. (b) One cent is allowed for each day's attendance of each student in such schools; provided that

each student so counted must hold a "regents' preliminary certificate" for admission to the school, or the school must be approved by two university inspectors, as having a higher entrance requirement than the minimum prescribed for the preliminary certificate. (c) The state duplicates the amount raised by the schools for the purchase of approved books and apparatus up to the sum of $500 a year for any one school. (d) Grants are made on the basis of credentials obtained by pupils in the school who pass the regents' examinations—a method of "payment by results". In 1898, of the money distributed by the regents to secondary schools, about 25 per cent came under item (a); 22 per cent under item (b); 19 per cent under item (c); and 34 per cent under item (d).

The regents' examinations are held three times a year. They were taken in 1898 by 608 of the 645 secondary schools in the university. The diplomas issued by the regents to graduates of secondary schools are accepted by Cornell university and by other institutions of higher education in the state, in lieu of entrance examinations in the subjects which they cover. The report of the director of the high school department for 1898 says of the examinations: "In June 1898 the secretary stated to the regents that 10 years' experience had confirmed his views, given to the board in 1889, that examinations have the highest educational value and that the small minority which would abolish them are extremists. It is believed, however, that these tests would be more valuable if they were used for their educational value and not at all as a guide in distributing public money. Inspection will enable us in most cases to determine satisfactorily without regents examinations whether a school is maintaining a standard deserving aid from state funds."

A syllabus is issued by the regents for the guidance of instruction in university institutions. There is free consultation between the officers of the university and the instructors in the schools with reference to the contents of this syllabus. An annual university convocation, in which the representatives of all divisions of the university meet for

public discussion, forms one of the notable educational gatherings of the country.

In Maryland, a law of the year 1865 swept away the old academy system, and substituted for it a system of county high schools. This radical change was followed by a reaction. Later legislation took a middle course. A law enacted in 1872 provided for the establishment of high schools in the several counties, to be under the control of the boards of county school commissioners, or of district boards appointed by them. Each of these high schools must be "visited and examined annually by the principal of the State normal school, or a professor thereof," and must also be visited once in each term by the county examiner. The support of these high schools is provided for by the county school commissioners, who set apart for that purpose a portion of the ordinary school funds received from the state and the county. At the same time, a number of academies, about twenty in all, continue to receive direct donations, in various fixed amounts, from the treasury of the state.

We find in Indiana what is virtually a system of university accrediting of high schools, the administration of which has been turned over to the state board of education. In July, 1873, the board of trustees of Indiana university adopted a resolution to the effect that a certificate "from certain high schools" should entitle the bearer to admission to the freshman class. In August of the same year, the state board of education adopted plans under which the high schools which were worthy of such recognition should be designated and commissioned. In 1888 the following order was passed: "That hereafter no high school commission be granted except on a favorable report in writing, to be made to the state board of education, by some member of the state board, who shall visit the high school in question as a committee of the state board for that purpose.

"That all the high schools now in commission be visited by committees of the board as soon as may be, and that the present list be modified by the reports from such visitation.

"That in case of change of superintendent in any commissioned high school, the commission then existing shall be in force until a visitation shall be made by a committee of the state board."

The territory of the state was divided up among the members of the board for the purposes of such visitation.

By such simple means and without specific legal enactment, an important system of high schools has been built up. These schools rest upon a statutory provision authorizing local school authorities to provide for the teaching, not only of the elementary branches, in English, but also of "such other branches of learning and other languages as the advancement of the pupils may require." They are supported in the same manner as the elementary schools.

The supervisory power of the state board of education is secured by the broad provision that, "said board shall take cognizance of such questions as may arise in the practical administration of the school system not otherwise provided for, and duly consider, discuss, and determine the same."

This board consists of the governor of the state, the state superintendent of public instruction, the respective presidents of the State university, Purdue university, and the State normal school, the school superintendents of the three largest cities in the state, *ex officio*, and "three citizens of prominence actively engaged in educational work in the state, appointed by the governor." A four-year course of study for high schools, prepared by this board, is recommended for adoption by all schools which seek to be placed on the "commissioned high schools" list. The board announces that commissions will be granted to those high schools only which meet the following requirements:

1. The character of the work must be satisfactory.
2. The high school course must be not less than thirty months in length, counting from the end of the eighth year.
3. The whole time of at least two teachers must be given to the high school work.
4. The course of study must be at least a fair equivalent of that recommended by the state board.

It will be seen that this system provides for inspection of the schools only at long and irregular intervals. In practice, this defect is partially overcome by the close oversight which the universities exercise over those members of their freshman classes who enter on certificates from the schools. Such students are understood to be admitted to the university for a probationary period, in which they may show whether or not they have been properly prepared for the work they have undertaken.

The interest in secondary education which has grown up under this system has extended to all sections of the state. There are now 151 high schools on the "commissioned" list, including those of the more populous centers. There is growing up, also, a large number of "township high schools" in the more sparsely settled portions of the state. In 1891, there were 125 such schools with an enrollment of 920 pupils. In 1898, the number had grown to 389, with an enrollment of 8,459 pupils. Seven of these schools have been placed on the "commissioned" list.

The Wisconsin state system of free high schools was established in 1875. It provides for the maintenance of high schools by towns, incorporated villages, cities, or school districts or sub-districts containing incorporated villages or two-department graded schools within their limits. Two or more adjoining towns, or one or more towns and an incorporated village, may unite in establishing and maintaining a high school. These schools are managed by local high school boards, which are commonly, but not always, identical with the boards for elementary schools. They are supported primarily by local taxation; but a district is entitled to receive from the general fund of the state a sum not exceeding one-half the amount actually expended for instruction in the high school of such district, and not exceeding five hundred dollars in any one year; provided the school has been kept in accordance with certain requirements prescribed by law, and provided further that the total amount paid from the state treasury for this purpose in any one year shall not

exceed fifty thousand dollars. Such a school is under the direct inspection and oversight of the state superintendent. To receive state aid, a school must establish and maintain a course of study prescribed, or at least approved, by that official; and must be taught by teachers whose certificates he has approved. The state superintendent issues a manual for the guidance of these schools, containing general suggestions, courses of study, an outline of subjects and methods of instruction, and the text of the high school law. He is assisted in the visitation and supervision which the law prescribes by an inspector of free high schools, whom he appoints.

An effort has been made in Wisconsin to encourage the building up of high schools in the less thickly settled portions of the state. This undertaking has met with only a moderate degree of success. Here as elsewhere it has been found difficult to promote the general establishment of such schools by other units of civil administration than those which establish and maintain elementary schools. In Wisconsin the elementary schools are governed and supported by district school authorities, and not by township boards.

In the cities and towns of Wisconsin, the high schools are making marked progress, under the system of state supervision. Within the past few years, many of them have been housed in fine, new buildings, provided with excellent laboratories for instruction in the natural sciences. Important beginnings have been made also in the equipment of some of the schools for courses in manual training. State aid, to the amount of $250 a year for any one school, is extended to such courses by special provisions of the high school law. In the spring of 1899 six schools were receiving such special aid. At the same time there were in all 211 state-aided high schools in Wisconsin. Of these 56 had a three-year course and 155 a course four years in length. Of the four-year schools, 110 were accredited to the University of Wisconsin. The accrediting system was introduced by the university in 1878, and is carried on independently of the state system of

inspection. About a dozen of the largest and strongest high schools in the state are not included among those receiving state aid.

The courses of study are commonly designated as the English, the general science, the modern classical, and the ancient classical course. A given school will ordinarily establish the English course first, and will from time to time add the others in the order named. There were in 1899 ten schools in the state which carried the full classical course.

Minnesota has maintained a state system of high schools since 1881. At the head of this system stands the state high school board, consisting of the governor, the superintendent of public instruction, and the president of the University of Minnesota, *ex officio*. This board appoints a high school inspector and a graded school inspector. Any public high school in the state may become a state high school, and is then entitled to receive from the state the sum of eight hundred dollars annually. To be a state high school, it must admit students of either sex from any part of the state without charge for tuition, must provide a course of study covering the requirements for admission to the University of Minnesota, and must be subject to the rules and open to the inspection of the state high school board. This board determines, on the basis of the reports of its inspector, what schools are entitled to the bounty of the state; but not more than five schools may receive such aid in any one county in any one year. Provision is also made for state graded schools, of lower rank than the state high schools; and for the promotion of such schools to the rank of state high schools when they have attained such a degree of advancement as to entitle them to that designation.

The state high school board conducts a written examination of classes in the schools twice a year. Students who successfully pass such examinations, in any of the high school subjects, receive certificates for the subjects so covered; and these certificates are accepted by the university and the normal schools of the state in lieu of entrance examinations in the subjects specified. The taking of this state examination is ordinarily optional with the school; and no grants of money are based on examination results. The state board may, however, require a school to take an examination as a part of the annual inspection. "The main purpose of state examinations", as stated by the inspector of high schools in his report for 1898, "is not to test the students, but to promote the general efficiency of the schools."

Perhaps the most significant thing about the Minnesota system is the encouragement it gives to high schools in the smaller towns. Communities all over the state tax themselves freely to supplement the bounty distributed by the state board.

Laboratory apparatus for the high schools is made at the state prison and sold to the schools at cost. For the year 1898–99, there were 110 graded schools and 97 high schools, under the supervision of the state high school board.

Several other states have made marked advance within the past few years in the direction of improved systems of secondary schools. These improvements have been gained through the untiring efforts of devoted friends of education, and should receive notice in such a place as this. But lack of space forbids. There is reason to regret, along with this omission, the unavoidable passing over of influential movements and important institutions which are in every way deserving of mention along with those which have been noticed; but the time has been wanting to consider fully the proportionate importance of these things, as well as the space for a full exposition of them all.

STATISTICS

Through the courtesy of the United States commissioner of education, the following statistics for the whole country for the year 1897–98 are presented in advance of their publication by the bureau of education:

TABLE I

STATISTICS OF SECONDARY SCHOOLS FOR 1897–98

	Public high schools	Private high schools	Public and private high schools
Number of schools reporting	5 315	1 990	7 305
Teachers of secondary students	17 941	9 357	27 298
Male	8 542	4 075	12 617
Female	9 399	5 282	14 681
Secondary students	449 600	105 225	554 825
Male	189 187	52 172	241 359
Female	260 413	53 053	313 466
Secondary students preparing for college	51 066	26 693	77 759
Classical course	27 935	16 361	44 296
Male	13 575	11 128	24 703
Female	14 360	5 233	19 593
Scientific courses	23 131	10 332	33 463
Male	12 056	7 429	19 485
Female	11 075	2 903	13 978
Graduates in the class of 1898	53 022	12 148	65 170
Male	19 247	6 302	25 549
Female	33 775	5 846	39 621
College preparatory students in the graduating class	14 552	5 388	19 940
Male	6 699	3 628	10 327
Female	7 853	1 760	9 613

TABLE II

STUDENTS IN CERTAIN COURSES AND STUDIES IN PUBLIC HIGH SCHOOLS IN 1897–98

COURSES, STUDIES, ETC.	Number students	Per cent to total number secondary students	Male students	Per cent to total number male students	Female students	Per cent to total number female students
Students preparing for college:						
Classical course	27 935	6.21	13 575	7.18	14 360	5.52
Scientific courses	23 131	5.15	12 056	6.37	11 075	4.25
Total preparing for college	51 066	11.36	25 631	13.55	25 435	9.77
Graduating in 1898	53 022	11.79	19 247	10.17	33 775	12.97
College preparatory students in graduating class[1]	14 552	27.45	6 699	34.81	7 853	23.25
Students in						
Latin	223 307	49.67	87 529	46.27	135 778	52.14
Greek	14 021	3.12	7 656	4.05	6 365	2.44
French	33 917	7.54	12 006	6.35	21 911	8.41
German	59 577	13.25	23 336	12.34	36 241	13.92
Algebra	252 358	56.13	106 676	56.39	145 682	55.94
Geometry	121 813	27.09	49 787	26.32	72 026	27.66
Trigonometry	10 200	2.27	4 966	2.63	5 234	2.01
Astronomy	17 170	3.82	6 351	3.36	10 819	4.15
Physics	93 038	20.69	39 493	20.88	53 545	20.56
Chemistry	37 329	8.30	16 450	8.70	20 879	8.02
Physical geography	112 133	24.94	47 074	24.88	65 059	24.98
Geology	19 646	4.37	7 725	4.08	11 921	4.58
Physiology	134 785	29.98	57 392	30.34	77 393	29.72
Psychology	12 325	2.74	4 355	2.30	7 970	3.06
Rhetoric	161 724	35.97	66 949	35.39	94 775	36.39
English literature	180 156	40.07	74 014	39.12	106 142	40.76
History (other than United States)	169 478	37.70	69 636	36.81	99 842	38.34
Civics	102 242	22.74	43 997	23.26	58 245	22.37

[1] Per cent to number of graduates.

TABLE III

STUDENTS IN CERTAIN COURSES AND STUDIES IN PRIVATE HIGH SCHOOLS AND ACADEMIES IN 1897–98

COURSES, STUDIES, ETC.	Number students	Per cent to total number secondary students	Male students	Per cent to total number male students	Female students	Per cent to total number female students
Students preparing for college:						
Classical course	16 361	15.54	11 128	21.33	5 233	9.86
Scientific courses	10 332	9.82	7 429	14.23	2 903	5.47
Total preparing for college	26 693	25.36	18 557	35.56	8 136	15.33
Graduating in 1898	12 148	11.54	6 302	12.08	5 846	11.02
College preparatory students in graduating class[1]	5 388	44.35	3 628	57.57	1 760	30.11
Students in						
Latin	50 986	48.45	27 908	53.49	23 078	43.50
Greek	10 973	10.43	8 983	17.21	1 990	3.75
French	24 248	23.04	8 682	16.64	15 566	29.34
German	19 417	18.45	9 719	18.63	9 698	18.28
Algebra	54 397	51.70	29 470	56.49	24 927	46.99
Geometry	25 702	24.43	14 791	28.35	10 911	20.57
Trigonometry	5 519	5.25	3 447	6.61	2 072	3.91
Astronomy	7 263	6.91	2 188	4.19	5 075	9.57
Physics	20 612	19.59	10 230	19.61	10 382	19.57
Chemistry	10 119	9.62	4 991	9.57	5 128	9.67
Physical geography	22 849	21.79	10 555	20.23	12 294	23.17
Geology	6 205	5.90	2 506	4.80	3 699	6.97
Physiology	28 205	26.80	12 561	24.08	15 644	29.49
Psychology	7 873	7.48	2 814	5.39	5 059	9.54
Rhetoric	34 124	32.43	15 164	29.07	18 960	35.74
English literature	35 654	33.88	15 709	30.11	19 945	37.59
History	39 556	37.59	18 346	35.16	21 210	39.98
Civics	16 565	15.74	7 975	15.29	8 590	16.19

[1] Per cent to number of graduates.

TABLE IV[1]

STUDENTS IN CERTAIN COURSES AND STUDIES IN PUBLIC AND PRIVATE HIGH SCHOOLS AND ACADEMIES IN 1897–98

COURSES, STUDIES, ETC.	Number students	Per cent to total number secondary students	Male students	Per cent to total number male students	Female students	Per cent to total number female students
Students preparing for college:						
Classical course	44 296	7.99	24 703	10.24	19 593	6.25
Scientific courses	33 463	6.03	19 485	8.07	13 978	4.46
Total preparing for college	77 759	14.02	44 188	18.31	33 571	10.71
Graduating in 1898	65 170	11.75	25 549	10.59	39 621	12.64
College preparatory students in graduating class[2]	19 940	30.60	10 327	40.42	9 613	24.26
Students in						
Latin	274 293	49.44	115 437	47.83	158 856	50.68
Greek	24 994	4.50	16 639	6.89	8 355	2.67
French	58 165	10.48	20 688	8.57	37 477	11.96
German	78 994	14.24	33 055	13.70	45 939	14.66
Algebra	306 755	55.29	136 146	56.41	170 609	54.43
Geometry	147 515	26.59	64 578	26.76	82 937	26.46
Trigonometry	15 719	2.83	8 413	3.49	7 306	2.33
Astronomy	24 433	4.40	8 539	3.54	15 894	5.07
Physics	113 650	20.48	49 723	20.60	63 927	20.39
Chemistry	47 448	8.55	21 441	8.88	26 007	8.30
Physical geography	134 982	24.33	57 629	23.88	77 353	24.68
Geology	25 851	4.66	10 231	4.24	15 620	4.98
Physiology	162 990	29.38	69 953	28.98	93 037	29.68
Psychology	20 198	3.64	7 169	2.97	13 029	4.16
Rhetoric	195 848	35.30	82 113	34.02	113 735	36.28
English literature	215 810	38.90	89 723	37.18	126 087	40.22
History (other than United States)	209 034	37.68	87 982	36.45	121 052	38.62
Civics	118 807	21.41	51 972	21.53	66 835	21.32

[1] Result of combing tables II and III.
[2] Per cent to number of graduates.

TABLE V

NUMBER AND PER CENT OF STUDENTS PURSUING CERTAIN STUDIES IN PUBLIC AND PRIVATE SECONDARY SCHOOLS, 1890 TO 1898, IN FOUR-YEAR PERIODS.

	1889–90		1893–94		1897–98	
	Number of students	Per cent to total	Number of students	Per cent to total	Number of students	Per cent to total
Total number of secondary students...	297 894	....	407 919	....	554 814	
Number studying						
Latin	100 144	33.62	177 898	43.59	274 293	49.44
Greek..............	12 869	4.32	20 353	4.99	24 994	4.50
French	28 032	9.41	42 072	10.31	58 165	10.45
German............	34 208	11.48	52 152	12.78	78 994	14.24
Algebra	127 397	42.77	215 023	52.71	306 755	55.29
Geometry	59 789	20.07	103 054	25.25	147 515	26.59
Trigonometry	....	....	15 500	3.80	15 719	2.83
Physics............	63 644	21.36	97 974	24.02	113 650	20.48
Chemistry.........	28 665	9.62	42 060	10.31	47 448	8.55

SELECTED BIBLIOGRAPHY

Reports of the commissioner of education. Washington, annual publication.

These reports include a great deal of statistical information relating to secondary education. Since 1871 they have presented statistics of private high schools, academies, etc.; since 1876, of city high schools; since 1886–87, of students pursuing each of the more common secondary school studies; since 1889–90, of public high schools not included in city school systems.

Adams, Herbert B. (Editor). Contributions to American educational history. Washington, 1887–.

Published as circulars of information of the United States bureau of education. Nineteen monographs have already appeared in this series, the most of which contain matter relating to the history of secondary schools.

Boone, Richard G. Education in the United States, its history from the earliest settlements. New York, D. Appleton and Company, 1893.

Contains several chapters on the history of secondary education.

Report of the committee on secondary school studies appointed at the meeting of the National educational association, July 9, 1892, with the reports of the conferences arranged by this committee and held December 28–30, 1892. Washington, 1893.

Better known as the report of the committee of ten. It has been republished by the American Book Company (New York) for the National educational association.

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These volumes contain a great amount of matter relating to the history of American secondary schools.

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School and college, devoted to secondary and higher education. One volume only, Boston, 1892.

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The educational review. Vols. 1–(current publication). New York, 1891–.

To these should be added the annual reports of the several school systems mentioned in this monograph, the volumes of proceedings of the various associations of teachers to which reference has been made, and the annual catalogs and occasional anniversary publications of the more important schools.

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Total number of secondary students...	297 894	....	407 919	....	554 814	
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German...........	34 208	11.48	52 152	12.78	78 994	14.24
Algebra	127 397	42.77	215 023	52.71	306 755	55.29
Geometry	59 789	20.07	103 054	25.25	147 515	26.59
Trigonometry	....	....	15 500	3.80	15 719	2.83
Physics...........	63 644	21.36	97 974	24.02	113 650	20.48
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To these should be added the annual reports of the several school systems mentioned in this monograph, the volumes of proceedings of the various associations of teachers to which reference has been made, and the annual catalogs and occasional anniversary publications of the more important schools.