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A MERGING OF THE CONCEPT OF EGALITARIANISM AND THE UNIVERSAL
GUARANTEE OF MINIMUM COMPETENCE IN AMERICAN PUBLIC
SCHOOLS: A HISTORICAL SUMMARY (1700-1978)

by

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Bachelor of Science, Minot State College, 1964
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A Dissertation
Submitted to the Graduate Faculty
of the
University of North Dakota
in partial fulfillment of the requirements
for the degree of
Doctor of Education

Grand Forks, North Dakota
August
1979
This dissertation submitted by Robert H. Boyd in partial fulfillment of the requirements for the Degree of Doctor of Education from the University of North Dakota is hereby approved by the Faculty Advisory Committee under whom the work has been done.

[Signatures]

This dissertation meets the standards for appearance and conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

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Dean of the Graduate School
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Title A MERGING OF THE CONCEPT OF EGALITARIANISM AND THE UNIVERSAL GUARANTEE OF MINIMUM COMPETENCE IN AMERICAN PUBLIC SCHOOLS: A HISTORICAL SUMMARY (1700-1978)

Department Educational Administration

Degree Doctor of Education

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Signature Robert H. Boyd

Date July 26, 1979
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ACKNOWLEDGMENTS

A project of this magnitude is never totally an individual effort. Assistance from various sources is extremely important and contributes greatly to any strength the dissertation possesses. Recognition of those who so faithfully offered assistance is very important to me. I hope those recognized will comprehend how very much I appreciated their contributions.

This dissertation is dedicated to two groups. First, it is dedicated to my family—my wife, Dawn, and our two daughters, Amy and Tiffany. Without complaint, they allowed their personal lives to be disrupted and were able to make out of a hectic campus life one of the happiest years we have spent as a family. Their support and caring were constant encouragement to me. Second, it is dedicated to all of the excellent educators who have been my teachers or with whom I served during my career in education. The impossibility of listing each one individually in no way should detract from my appreciation for them and what they have done for me.

Appreciation is also expressed to my committee, Drs. Richard Hill, Richard Landry, Richard Ludtke, and Calvin Vraa who provided excellent support. Their willingness to allow me to pursue my choice of study is very much appreciated. They were truly "helpers" throughout the process.

Sincere appreciation is extended to my advisor, Dr. Donald Piper. His willingness to allow me to pursue my interest and his demand for
excellence are responsible for the success of this study. His professionalism and dedication to task served as constant sources of encouragement. The many hours he spent proofreading my writing were well beyond the "call of duty" and very much appreciated. Throughout my career in education his example will serve me as a standard of professional excellence.

I also want to thank the staff members in the Library of Congress, the National Education Association, the National Institute of Education, and the Chester Fritz Library who were so willing to assist me with my research. Special recognition goes to my friend and colleague John Andrus who did the final designing and lettering of the figures in the dissertation. In spite of the nearly impossible demands I placed upon him, the results of his work were always of the highest caliber. He is truly a friend.

No project of this magnitude could be successful without people who were willing to spend the hours necessary to type the written document. I thank Kay Dimond for the many hours she unselfishly gave in order to type the rough draft and to Mrs. Jean Clayton who graciously consented to type the final draft. Both persons are very special people.

Lastly, I wish to thank the Bush Foundation. Because of their generous financial support, I was able to devote full time to my coursework and research. I am extremely honored to be a Bush Fellow.
VITA

Robert Harvey Boyd was born in Rock Lake, a small community in north-central North Dakota. He received his elementary and secondary schooling in Rock Lake. He did his undergraduate work at Minot State College in Minot, North Dakota, completing a Bachelor of Science degree in 1964.

Mr. Boyd began his teaching career in Mohall, North Dakota where for three years he served as a high school mathematics instructor. In 1967, he entered the Armed Services and served in the U. S. Army for two years.

Following his discharge from the Army in 1969, he was employed as a high school mathematics instructor in Minot, North Dakota. During this period, he began work on the Master of Education degree, completing it in 1974.

In 1973, Mr. Boyd began work as an assistant secondary principal at Magic City Campus in Minot. He was appointed head principal of Magic City in 1976 and served in this capacity until 1978. While at Magic City Campus, he began work on the Doctor of Education degree. Since 1978, he has attended the University of North Dakota and is presently a candidate for that degree. Mr. Boyd will serve as Director of Extension and Professional Services at the University of North Dakota starting June, 1979.
ABSTRACT

The purpose of this study was to historically trace three American educational developments through five specific time periods from 1700 to 1978 and to determine how these developments were related to the origins of the concepts of egalitarianism and a universal guarantee of minimum competence in American public schools.


Three categories of questions were answered relative to each time period.

1. What were the societal expectations for the schools during this time period?

2. What was the make-up of the school population during this time period?

3. What emphasis was placed on, and what methods were used for, assessing student learning during this time period?

A number of conclusions were drawn as a result of the study.
1. The societal expectations for American public schools can be divided into three basic periods of time. The first covers the period from the colonial days to the creation of the academy concept during the middle eighteenth century. During this period the schools were dominated by various religious groups and the basic expectation for the schools was the propagation of the faith. The second period covers the time span from the middle of the eighteenth century to the second decade of the twentieth century. The societal expectations for schools during this period were represented by the concerns for citizenship and the transmission of knowledge. The last period is represented by the years from approximately 1918 to 1978. One characteristic of this period was the attempt at actually listing the specific societal expectations. Comparisons made of these lists show great similarities throughout the period. The Cardinal Principles of Secondary Education published in 1918 remained a fairly accurate representation of the societal expectations through the entire period.

2. While the specific societal expectations for schools remained very constant from 1918 to 1978, the emphasis placed on particular expectations did vary. During the years of the progressive education and life-adjustment movements (the early 1900's until the early fifties) there was a special emphasis on the development of the personality as well as the vocational and social skills. The emphasis during the fifties and again in the seventies was placed on the "command of fundamental processes." During the sixties a special emphasis was placed on
allowing the individual student to realize his own educational potential to the fullest possible degree.

3. The societal demand for schools to return to the "basics" is not unique to any one period. A demand of this nature is evident in varying degrees throughout the entire time period covered by this study.

4. The articulation and interpretation of societal expectations for schools usually was done by educators prior to the late 1960's. Since that time, little evidence was seen of strong leadership on the part of educators with regard to expectations for the schools.

5. Educational egalitarianism is not yet a reality in American public schools. While efforts to equalize educational opportunities have made significant gains, some students are still deprived of their opportunity to educationally develop to their fullest potential.

6. Tests of minimal essentials of academic subjects in American public schools have existed in some form for at least five decades.

7. Tests that certified a minimum level of competence were introduced in America as early as the middle of the nineteenth century.

8. Given the present definition of educational egalitarianism, the effort to merge this concept with a universal guarantee of minimum competence in American public schools is unique to the 1970's. The attention public education is asked to give to this merger is unprecedented in American education.
One of America's recognized and unique contributions to education is its concept of egalitarianism. A manifestation of this idea was the Common School that came into being early in America's history. A school supported and controlled by the community and open to all children living in the area was a wish and dream of the citizens of the new developing nation.

Recently another concept regarding education and joined to egalitarianism has emerged in the United States—a demand for a universal guarantee of competence. Two reasons for this latest development are the declines in scores on standardized tests and the societal feeling that educators should be held accountable for the vast sums of money being spent on education. The marriage between egalitarianism and the demand for minimum competence of all students has given rise to the minimum competency testing movement of today.

The social, financial, and educational ramifications of this movement appear to be immense. Already over thirty states have instituted some form of minimum competency testing in their schools. Decisions to do so, in some cases, were precipitated by political pressure for accountability. The results of such hastily devised plans will perhaps contribute little to the improvement of education. Even states with well-developed and implemented plans are being faced with threats of
litigation, based on racial discrimination and the withholding of diplomas from those students not passing the minimum competency examinations in their schools. Some of the states that have implemented competency testing programs now contemplate rescinding their actions. Nearly every state and school district is faced with some decision related to the minimum competency movement.

Decisions of this magnitude affecting America's educational system and particularly the lives of students require the issues surrounding the minimum competency movement to be intelligently debated by well-informed people. The debates have been numerous. The participants often debate from a defensive position or from one that is oversimplified and overcritical. The "new" expectations of the schools, some would insist, are not new at all but only appear so because educators have not recently been addressing them. Many of these same persons suggest that the demand to educate all children is a most appropriate expectation for schools and one of longstanding. These persons tend to be unsympathetic to requests from educators for more staff, facilities, and materials. As one school board director at a meeting the writer recently attended said, "Don't ask the people for more money, just do the job we have been paying you to do!" It is also implied in this statement that educators will have to be able to produce some evidence that expectations are being successfully met.

One manifestation of these demands is the competency tests spoken of earlier. It is obvious from the growth of the competency testing movement that large numbers of people view testing as one important way to assess and thereby assure competence of students. Opposition
to this concept of testing is often viewed as reluctance on the part of educators to be held responsible for their product. It appears that concerned people on both sides of the issues of egalitarianism and minimum competency testing would benefit from the careful research of America's educational history relative to the development of the concept of egalitarianism as we know it today, the assessment of student learning, and the societal expectations for the schools.

Prior to this study, no comprehensive historical study had been completed that examined the origin of this concept of education and a guaranteed minimum competence for all children. Such a comprehensive historical perspective, including a review of relevant developments and an examination of the "rocks from which it is hewn," was essential to an assessment of its present and future impact on American education.

The Purpose of the Study

In this study three specific American educational developments were traced historically through a period from 1700 to 1978 to determine how these developments were related to the origins of the concepts of egalitarianism and a universal guarantee of minimum competence in American public schools. The developments examined were: the societal expectations for the schools; the make-up of the school population; and the emphasis placed on, and the methods used in, assessing student learning. The writer then drew some conclusions.

This study might serve as one source of information to professional educators and lay persons interested in understanding the origins of egalitarianism and minimum competency testing in public schools in the
United States and might also serve as one source that can be used to assist in making future decisions regarding minimum competency testing in schools.

**The Organization of the Study**

The study consists of seven chapters. The first chapter includes an introduction, the purpose of the study, the organization of the study, and the limitations of the study.

Each of the next five chapters reports the research of one specific time period in American educational history. Three categories of questions were answered relative to each period.

1. What were the societal expectations for the schools during this period?
2. What was the make-up of the school population during this period?
3. What emphasis was placed on, and what methods were used for, assessing student learning during this period?

The titles of the five chapters and the periods examined are listed below.

Chapter II: "The Beginning: 1700-1889"
Chapter III: "The Age of Standard: 1890-1915"
Chapter IV: "The Age of Testing: 1916-1953"
Chapter V: "The Age of Egalitarianism: 1954-1971"
The titles and specific periods, with the exception of Chapter III, were chosen by the writer. Preliminary research completed by the writer served as a guide for selection. Chapter VII reports the conclusions the writer has drawn.

The scope of the study includes only the historical developments already noted. This means that countless developments of great importance in the general history of education are excluded.

The historical method of research was used in the preparation of this study. Primary sources of information were used whenever possible. In many instances, however, due to the time span of this study and to the fact that in some cases the writer preferred to rely on the judgment of an authoritative historian rather than on his own judgment, secondary sources were employed. Each source of data was externally criticized to determine the genuineness of the document—whether it is what it seems to be and reads true to the original—and internally criticized to assure that its content was accurate and truthful. An attempt was made to establish cause and effect relationships. A sincere effort was made to document and objectify throughout the study.

A vast quantity of printed material now exists dealing with the history of American education. This scattered information does not, however, appear to contain any effort that deals in a comprehensive manner with the subject of this study. The writer was able to obtain only one source that related closely to the proposed topic (Britell 1978). This document served as a catalyst for the writer's own thinking on the subject.
Limitations of the Study

Although every attempt was made to assure that the research was comprehensive and accurate, it should be noted that there were some limitations.

1. Some primary sources were unavailable to the writer because of their location or because they no longer exist.

2. Only American public education was examined by the writer. All post-secondary education, all private and parochial education, and all forms of education in other countries were not included.

The writer's objective in pursuing this study was to examine the merging of egalitarianism and a universal guarantee of minimum competence in American public schools. An examination of this type necessitated that our educational history be traced from some identifiable "roots." Chapter II is the first step in this process. It covers nearly all of the eighteenth and nineteenth centuries. These years represent the nation's growth from a set of colonies to a nation proven inseparable by a civil war.

Because it is extremely difficult to characterize the Colonies as a whole in their early stages of development, the writer chose to begin the study with 1700; however, reference is made to some events in the seventeenth century that provide necessary background information. Chapter II, therefore, provides the "beginning" from which an "American" system emerges.
CHAPTER II
THE BEGINNING: 1700-1889

The European influence on American public schools is undeniable. Prior to 1700 and for some years thereafter, the colonies attempted to adapt their basically British heritage to fit the environment found in America (see Figure 1).

According to Butts and Cremin (1953) because the ruling government was on another continent, a transfer of political authority to the American colonies was completed by a delegation of power from the English crown to stock companies, to individual proprietors, to royal governors, or to colonial legislatures. This authority included the power to initiate and control education (p. 97). While the control varied from colony to colony and even from town to town in the same colony, it can be said that civil government exerted authority over education from the beginning of this nation's educational history.

While separation of church and state later became the law of the new "United States", no such separation was true at the beginning of the eighteenth century. Butts and Cremin (1953) maintain that not only were the colonial schools widely authorized by civil government but they were also dominantly religious in purpose and content (p. 98). The reason for this dominance was noted by Butts and Cremin (1953).

... This was principally the result of the widespread maintenance of established religions. When the church
Figure 1. Timeline of Important Dates and Events Emphasized in Chapter II (1700-1889).
and the state were allies, it was natural for the state to authorize and indeed require that education be appropriately religious. Thus, in all those colonies where specific churches were established, the publicly approved education would also be concerned to perpetuate the publicly approved religion (p. 98).

An examination of the world religious events that led to the development of this philosophy between church and state is beyond the scope of this study. However, a brief mention of two religious reformers who did influence education is included.

Martin Luther and John Calvin played dominant roles in the development of religious thought concerning schools. While their influence was first felt in Europe, it was later passed on to the American colonies and manifested in the expectations for the schools.

Luther, living in the fifteenth and sixteenth centuries, had preached the idea of the "priesthood of all believers." Basic to this idea was the belief that being able to read and interpret the Bible for oneself led the way to salvation. This position obviously had implications for education. It was apparent that in order to seek personal guidance from God's word, one had to know how to read. In addition, according to Brubacher (1966), the new Protestant church service stressed responsive reading and singing by the congregation, both of which required literacy (p. 365). This prepared Protestant Europe to pass on its religious objectives for schools to the colonies in America.

However, the most persistent and lasting concept of the child found in the colonial period was an outgrowth of the Calvinistic Puritan outlook that permeated much of the religious thinking of America for 150 years. Butts and Cremin (1953) wrote about this Puritan influence on the expectations for schools.
... It stemmed directly from the religious orthodoxy of Calvinism with its emphasis upon God's power and wrath, original sin, reverence and fear of God, obedience to His commandments, and obedience to the authority of parents and elders. An authoritarian education was seen as the only possible way to implement beliefs that the child's nature was inherently evil. Since the child was prone to sin, the best way to keep him under control was to instill in him a fear of breaking God's laws and a fear of the awful and dreadful consequences of sin. Fear, discipline, and obedience were the by-words of this conception of child nature. These formed the staples of educational method throughout the colonial period for those who fully accepted this view of religious orthodoxy (p. 66).

One person who accepted this religious view with zeal was the Puritan spokesman and famous New England minister, Cotton Mather. In 1706, he described in detail the techniques he used in the day-by-day education of his children. In a book written by Mather's son Samuel (1729), these techniques were listed.

1. He pour'd out continual Prayers to the GOD of all Grace for them, That He would be a Father to them, bestow His Son & Grace upon them, guide them by his Counsel and bring them to Glory. And in this Action, He mentioned them distinctly; every one by Name, to the LORD.

2. He began betimes to entertain them with delightful Stories, especially Scriptural ones: And he would ever con­clude with some Lesson of Piety; bidding them to learn that Lesson from the Story. And thus every Day at the Table, He used himself to tell some entertaining Tale before he rose; and endeavor to make it useful to the Olive-Plants about the Table.

3. When his Children accidentally at any Time came in his way, it was his Custom to let fall some Sentence or other, that might be monitory or profitable to them. This Matter occasioned Labor, Study and Contrivance.

4. He betimes try'd to engage his Children in Exercises of Piety; and especially secret Prayer: For which he gave them very plain and brief Directions, and would suggest unto them the Petitions which he would have them make before the LORD, and which he would therefore explain to their Apprehension and Capacity. And he would often call upon Them; Child, Don't you forget every Day to go alone and pray as I have directed you.
5. He betimes endeavored to form in his Children a Temper of Benignity. He would put them upon doing Services & Kindnesses for one another, and for other Children. He would applaud them when he saw them delight in it. He would upbraid all Aversion to it. He would Caution them to return good Offices for Evil ones. He would show them, how they would by this Goodness become like the Good GOD and the blessed JESUS. He would let them discern he was not satisfied, except when they had a Sweetness of Temper shining in them.

6. As soon as possible, he would make the Children learn to Write: And when they had the Use of the Pen, he would employ them in Writing out the most instructive and profatable Things he could invent for them. In this way he proposed to fill their Minds with excellent Things, which he hop'd would make a deep Impression upon their Minds.

7. He incessantly endeavoured, that his Children might betimes be acted by Principles of Reason and Honour.

He would first beget in them an high Opinion of their Father's Love to them, and of his being best able to judge, what shall be good for them.

Then he would make them sensible, it was Folly for them to pretend to any Wit or Will of their own: They must resign all to Him, who would be sure to do what is best; his Word must be their Law.

He would cause them to understand, that it is an hurtful and shameful Thing to do amiss. He would aggravate this on all Occasions; and let them see how amiable they will render themselves by well-doing.

The first Chastisement which he would inflict for any ordinary Fault, was to let the Child see and hear him in an Astonishment, and hardly able to believe that the Child could do so base a Thing; but believing that they would never do it again.

He would never come to give a Child a Blow, except in case of Obstinacy, or something that is very criminal.

To be chased for a while out of his Presence, he would make to be look'd upon as the sorest Punishment in his Family.

He would with all possible Insinuations come upon them to gain this Point, That to learn all great Things, was the noblest Thing in the World. He was not fond of proposing Play to them as a Reward of any diligent Application, to learn what is good; lest they should think Diversion to be a better and nobler thing than Diligence. He would have them to propound and expect at this rate, "I have done well; and now I will go to my Father, who will teach me some thing curious for it." He would have his Children account it a Privilege to be taught; and would sometimes manage the matter so, that Refusing to teach them something should be looked upon as a Punishment. The Strain of his Threatenings therefore was; You shall not be allowed to read, or to write, or to learn such a thing, if you do not as I have hidden you.
The Slavish way of Education, carried on with Raving & Kicking & Scouraging (in Schools as well as Families) he looked upon as a dreadful Judgment of GOD on the World; he tho' the Practice abominable, and express'd a mortal Aversion to it.

8. Tho' he found a vast, a wonderful Advantage in having his Children strongly byassed by the Principles of Reason & Honour; (which he observed that Children will feel and understand sooner than is commonly tho' for;) yet he would not neglect any Means and Endeavours to have higher Principles infused into them.

He would therefore betimes awe them with the sense of the Eye of GOD upon them in the Ways which they take.

He would show them how they must demonstrate it, by doing what their Parents require of them.

He would often tell them of the good Angels, who love them. Help them, guard them from Evil and do many good Offices for them; who likewise take a very diligent Notice of them, and ought not be disobliged.

He would not say much to them of the evel Angels, because he would not have them entertain any frightful Fancies about the Apparitions of Devils: But yet, he would briefly let them know, that there are Devils, who tempt them to Wickedness, who are glad when they do wickedly, and who may get leave of GOD to kill them for it.

HEAVEN and Hell he set before them clearly and faithfully, as the Consequences of their good or bad Behavior here.

9. When the Children were capable of it, he would take them alone one by one; and after many affectionate, loving, strong Charges unto them, to fear GOD, to serve CHRIST and shun Sin; he would pray with them in his Study, and make them the Witnesses of the Agonies and Strong Cries, with which he, on their behalf, addressed the Throne of Grace.

10. He found much Benefit, but a particular Method as of Catechising the Children, so of carrying on the Repetition of the public Sermons unto them.

The Answers of the Catechism he would explain, with Abundance of brief Questions which make them to take in the whole meaning; and he found by this Way that they did so.

And when the Sermons were to be repeated, he chose to put every Truth into a Question, to be Answered with Yes or No. In this way he would awaken the Attention as well as enlighten the Understanding of his Children. And in this way he would take the Opportunity to ask, Do you desire such or such a Grace of GOD? And the like: And in this way, he had Opportunity to demand, and perhaps to obtain their early and frequent (and why not sincere?) Consent unto the glorious Articles of the New-Covenant. He tho' the Spirit of Grace might fall upon them in this Action, and they might be seiz'd by Him and held as His Temples thro' Eternal Ages. Blessed be GOD it was so with several of them.
Thus I have recited the usual Methods, which Mr. Mather observed in bringing up his Children: There are several other Things which were very praiseworthy in his Carriage towards Them, but not of that Consequence with those I have written; and therefore I shall omit them (pp. 15-19).

According to Butts and Cremin (1953), Mather visualized fear, obedience, discipline, and absolute authority as the essential ingredients of the teaching methods in schools as well as in the home, church, and the state (p. 69). It is important to note that Mather's views were not simply the ravings of a morbid and irritable minister. If one examines the New England Primer which was widely read in American schools for 100 years—the best estimate is made that some 3,000,000 copies were sold from 1700 to 1850—evidence of the acceptance of views similar to Mather's will be obvious (p. 69).

Because the child was sinful it was imperative that he, according to Puritan beliefs, be educated and taught to read in order to fully understand his sinful nature and seek salvation. This concept of original sin and the need for salvation helps to explain why the Puritan New England Colonies and specifically the Massachusetts Bay Colony led the way in establishing laws regarding schools in the American Colonies. Atkinson and Maleska (1964) report that "As early as 1635 the town of Boston voted to establish an apprenticeship school to be supported from the income of a parcel of land set aside for that purpose as well as from private subscriptions" (p. 102).

A short time later in 1647, Massachusetts passed the "Old Deluder Act" which specifically required towns to establish schools. Callahan (1961) cited the law.
It being one chiefe project of that old deluder, Satan, to keepe men from the knowledge of the Scriptures, as in former times by keeping them in an unknown tongue, so in these latter times by persuading from the use of tongues, that so at least the true sence and meaning of the originall might be clouded by false glosses of saint seeming deceivers, that learning may not be buried in the grave of our fathers in church and common wealth, the Lord assisting our endeavors,...

It is therefore ordered that every township in this jurisdiction, after the Lord hath increased their number to 50 householders, shall then forthwith appoint one within their towne to teach all such children as shall resort to him to write and reade, whose wages shall be paid either by the parents or masters of such children, or by the inhabi­tants in general, . . . and it is further ordered that where any towne shall increase to the number of 100 families or householders they shall set up a grammar schoole, the Master thereof being able to instruct youth so farr as they shall be fitted for the University, provided that if any towne neglect the performance hereof above one year, that every such towne shall pay five pounds to the next school till they shall perform this order (pp. 114-115).

Atkinson and Maleska (1964) note that many towns chose to pay the fine rather than to go to the greater expense of establishing a school (p. 103). According to Meyer (1967), attempts were made to make dis­sidents comply with the law as is evidenced by new legislation in 1718 that raised the fines for non-compliance to heights never heard of before. However, as the eighteenth century approached the revolutionary period, probably not more than half the towns were fulfilling their statutory obligation (p. 49). While not all towns did comply with the law of 1647, it did serve as the legal basis for a system of public schools that carried into the next two centuries.

These beginning steps in establishing schools can be considered impressive. It is important to note that the schools in the New England Colonies were established and organized in order to meet the people's basic expectation of education. Thayer (1960b) states that
the accepted expectation was to ensure the perpetuation of the religious faith of the community without contamination (p. 7). This view of education changed very little in New England until the middle of the nineteenth century.

Societal Expectations for the Schools

In a book by Orlich and Shermis (1965), Shermis states that the beginning of the eighteenth century found the New England schools deeply influenced by Puritan thought, but this was not true of the Middle Colonies. This is not to say, however, that the schools in the Middle Colonies were not dominated by religious thought. Education in the Middle Colonies was basically parochial and generally controlled by the dominant religion in the area. Because there were so many different religions in the Middle Colonies, there were many different patterns of education (p. 15).

The Dutch Reformed Church—somewhat linked to Puritan thought—and the Quakers both dominated certain areas of the Middle Colonies, but the greatest religious influence was exhibited by the Church of England. The Anglicans were aggressive in their establishment of churches and schools in colonial America. This is probably best exemplified by the Society for the Propagation of the Gospel in Foreign Parts, established in 1701 as a missionary outreach program by the Anglican Church. Atkinson and Maleska (1964) report that the Society organized schools in all thirteen colonies, aiming specifically at teaching reading, writing, and enough arithmetic to equip poor children for apprenticeships (p. 123). The major aim of the schools was again religious. Students were discouraged from lying, swearing, and pro-
fanning the Sabbath. Skills such as knitting, sewing, and spinning were later added to the educational offerings with the hope that these skills would make the "poor children" self-supporting. Curti (1935) also points out that during this same period of time the Catholic Church was establishing convent schools taught by Jesuits and Ursulines. These schools were quite widely scattered. Most of them instructed the young in the doctrines of Roman Catholicism (p. 13).

Generally speaking, the schools of the Middle Colonies were more humane in tone than those in New England. While Mather in New England had stressed sin and the fear of God in his educational ideas, the Anglican approach in the Middle Colonies placed greater emphasis on wisdom, justice, goodness, kindness, and the mercy of God. Similar ideas were expressed by smaller Protestant sects, such as the Moravians, Dunkards, and Mennonites.

Schools in the Southern Colonies were different from those in both the New England and Middle Colonies. The Southern Colonies had neither the Calvinistic influence of New England nor the diversity of ideas of the Middle Colonies. In many ways the Southern Colonies were the most "English" of all of the thirteen. Since the Anglican Church in England had been given great authority over the schools in England and few allowances were provided for civil control, this church-dominated concept of schools was carried intact to the Southern Colonies. Schools were basically private—reserved for certain children.

Monroe (1940) reports that a 1724 survey taken in Virginia found that private schools existed in at least half or more of the parishes (p. 59). The students in these schools were instructed on how to read, write, and
do some arithmetic. While it is true the private schools were dominated by the Church of England, it is also true that some other schools were under civil government control. The principal function of these government-controlled schools was to see that orphans and poor children were properly apprenticed and taught a trade.

In summary, it can be said that for the first half of the eighteenth century American colonial schools were dominated by religious influence: the New England Colonies by the Puritans; the Middle Colonies by a variety of religious faiths, but mostly Protestant; and the Southern Colonies by the Church of England. Civil government control of schools was most evident in New England where the church and state were nearly one. Some civil authority was exercised over schools in the other two groups of colonies but only when and where religious groups permitted it.

Cremin (1970) suggests that it is difficult, however, to generalize with any degree of accuracy about the extent of schooling in eighteenth century America. It is especially difficult because of the variation in types and modes of instruction and the consequent difficulty of determining exactly what constitutes a school. There did exist teachers of reading, writing, ciphering, grammar, bookkeeping, surveying, navigation, fencing, dancing, music, modern languages, embroidery, and every conceivable combination of these subjects. Still other variations should be noted.

... teachers taught part time and full time, by day and by evening, in their homes, in other people's homes, in rented rooms, in churches and meetinghouses, in abandoned buildings, and in buildings erected especially for their use ... they were self-employed and employed by others (acting as individuals or through self-constituted, self-perpetuating, or
elected boards) . . . they were paid with funds obtained from employers, patrons, subscriptions, lotteries, endowments, tuition, rates, and taxes (pp. 499-500).

Apprenticeship schools for the poor and orphaned children were still common in the colonies during the 1700's. Economically, the schools provided the skilled workers necessary for the growing commercial and urban society. There were, however, other reasons for a continued interest in maintaining such schools. While the schools were found in all of the colonies, proportionally greater numbers were found in the New England Colonies. According to Butts and Cremin (1953), religious motivation was often the reason for the establishment of schools both because the "sinful child" needed salvation and because people were concerned about providing better care for the sake of the children themselves (p. 116).

The apprenticeship masters were expected to produce results. Butts and Cremin (1953) give evidence of this.

A regulation of Petsworth Parish in Virginia in 1724 provided that all orphan children who were bound out by the parish and who could not read by the age of 13 should be set free from their masters or taken from them and assigned to another (p. 117).

Elementary education in the eighteenth century in the American colonies had one thread of commonality running through it. Butts and Cremin (1953) report that the staples of the curriculum were reading, writing, and arithmetic. This was true for the private schools of the South, the denominational schools of the Middle Colonies, and the town schools of New England (p. 119).
Secondary education during the early 1700's consisted of two types, the Latin grammar schools and the private English schools. The Latin grammar schools concentrated on the study of Latin and to a lesser degree on the study of Greek. Only boys attended the schools. Starting as early as seven or eight years of age the children were sent to prepare for the Colonial College which usually meant preparation for the ministry. This course was normally seven years in length.

The Latin grammar schools with their humanistic rather than naturalistic and classical rather than scientific approach were never very successful in the frontier-type atmosphere of America. The "Old Deluder Act" of 1647 which directed towns of a certain size to establish schools also required towns of 100 persons to establish a Latin grammar school or face a fine. Again, most communities chose to pay the fine. Every colony except Georgia, however, did have a Latin school.

While the Latin grammar schools were designed to prepare young men for college entrance, another type of secondary school with a much broader function emerged in the American colonies. These schools were private and were called "English grammar schools" or just "English schools." Butts and Cremin (1953) described these schools.

The English schools, responding to the growing commercial interests of the middle classes, were designed to give a practical and vocational education that would prepare young people for the new occupations that were attracting more and more persons. Teachers in these schools were not bound by college entrance requirements although some of them taught the classics. They taught what the young people wanted; they charged fees for specific courses; they held classes early in the morning or in the late afternoon or evening to serve young people who had jobs during the day; and they held classes at regular daytime hours for everyone else. The clientele of such schools was thus much broader
The schools were almost entirely secular in nature. The schools were private and the teachers attracted their pupils by advertising. The teachers were not above "guaranteeing" results. Butts and Cremin (1953) note that, "one teacher guaranteed that his students would be so well prepared in navigation that they could sail as mates on their first voyage" (p. 125). Perhaps the most significant contribution the English schools made to the development of education in America was the establishment of English as the language of instruction. Butts and Cremin (1953) report that prior to this time, the Dutch Reformed schools taught in Dutch, the German sects taught in German, the Huguenots in French, the Swedish Lutherans in Swedish, and so on (p. 119). This step toward a common language was one of the first the colonies took on their way to becoming a nation.

Other factors also contributed to the move toward an American revolution. A strong middle class was emerging and with this a capitalist economic system. Gradually the established religions were beginning to weaken, partly because the freedom of religion encouraged great diversity. Finally, as the people began to have some voice in government, they demanded more.

Atkinson and Maleska (1964) maintain that even though churches continued to set up schools all during the eighteenth century, the concept of education gradually became more liberal. The curriculum, in time, became less narrow and less dominated by religious aims. Some
schools even began to emphasize gracious manners, elegant speech, and familiarity with the best of ancient authors (p. 108). Also apparent were movements to establish schools of vocational training which later replaced the apprenticeship system.

Several additional events, some of major importance, took place during the next century and one-half. As a result of these changes, education in America became even more uniquely American. Some efforts, however, were made to slow the pace of change. According to Curti (1935), in 1742 Connecticut enacted a law which addressed this situation.

... the erecting of any other schools, which are not under the establishment and inspection aforesaid, may tend to train up youth in ill principles and practices, and introduce such disorders as may be of fatal consequence to the public peace and weal of this colony (p. 10).

But in spite of these efforts colonial America was changing and so would its schools.

The Latin grammar school had proven to be of little value except for preparing men for the ministry. With the growth of the colonies the demand grew for training in surveying, navigation, bookkeeping, and a knowledge of history, geography, and of government. During this same time a religious movement swept over the colonies. It was called the "Great Awakening." Monroe (1940) maintained that this movement precipitated a less formal approach to religion and consequently the education desired was broader in scope than the formal training of the Latin school (p. 160).
As a result of this broader concept of education, a new educational institution, the academy, appeared. The first such school, a creation of Benjamin Franklin, opened in 1751. Although this particular academy was not the most successful of those established—it later became the University of Pennsylvania in 1755—it did initiate a new approach to secondary education, one that continued until the middle of the nineteenth century. The new academies offered a wide range of studies designed to serve a variety of purposes, including college preparation. Most academy curricula offered courses such as: penmanship, drawing, arithmetic, accounts, geometry, astronomy, English grammar and composition, history, geography, chronology, logic, languages, civil government, natural history, sports, and physical training. There was, however, no uniform design which all academies followed. Some were little more than primary schools while others were college-like in their training. Until the coming of "high schools" almost all colonies had some form of the academy. The most general acceptance of the academy concept came from New York and Massachusetts. The Phillips Academy in Andover, Massachusetts, beginning in 1778, was probably one of the most successful started anywhere in the colonies.

Brubacher (1966) suggests that the rapid growth in the number of academies and the growth in the number of courses offered provides proof that the academy concept met very urgent needs in American life (p. 407). Two of these needs were an expanded curriculum and—perhaps just as important—the need and desire for girls to be educated. With regard to both of these needs—curriculum and education for girls—the academy was an extension and modification of the English school.
The development of the academy had been one more step toward a more secular approach to education. Gradually the society of the colonies was beginning to see a closer relationship between education and preparation for a life's work. Following the American Revolution, education began to take on yet another purpose and meaning. Education had a special function in a nation which was controlled by the masses of the people. If this new experiment in nations was to be successful, schools would have to be expected to properly train people capable of making the kinds of decisions a democratic type of government required. This was a new expectation for American schools.

The primary responsibility for education and meeting the expectations for the schools was clarified in 1791 with the adoption of the Tenth Amendment to the Constitution. Power over schools was not delegated to the United States by the Constitution; therefore, this power was reserved for the states (Callahan 1961, p. 214).

Earlier in 1785 and again in 1787, the federal government had encouraged state school systems. The new United States, operating under the Articles of Confederation, adopted the Ordinance of 1785 which set aside land which could be used to finance common schools in the vast public lands in the West. The Ordinance of 1787 established the government principles under which the Ordinance of 1785 was to operate as the Northwest Territory was settled. Atkinson and Maleska (1964) comment on these two ordinances.

These two ordinances marked the establishment of a new principle of federal aid to education—they represent the eighteenth century's greatest legacy to American free public education in the centuries to follow (pp. 110-111).
Callahan (1961) notes that during this same time period individual states through their own state constitutions were beginning to take some responsibility for their schools, including the bill Thomas Jefferson presented to the Virginia legislature in 1779 (p. 122). This bill will be discussed later in this chapter.

Probably the most significant state actions during this period were the Laws of 1789 and 1801 passed in Massachusetts. These bills established the district system as the basic pattern of organization on the local level. They also placed responsibility for operating schools in the hands of local committees. These committees, similar to boards of education today, had authority to raise funds by taxation, hire teachers, and supervise the operation of the schools (Callahan 1961, p. 123).

The paragraphs above are evidence that a great deal of activity was taking place on both state and federal levels regarding education. It has also been stated that a new expectation for schools—that of preservation of American institutions—had begun to emerge. It is important, however, to reemphasize that through all of this period and until the middle of the 1800's there was a fairly general conviction that a chief aim of schooling was to provide the necessary basis of instruction in religion. Curti (1935) discussed this point.

No great educational leader before the Civil War would have denied that intellectual education was subordinate to religious values. None would tolerate any non-Christian beliefs in the schools (p. 20).

Several events occurred in America between 1800 and the Civil War which greatly influenced American education. One of the most important took place in 1821 with the establishment of the English Classical
School in Boston. Three years later this boy's school changed its name to "English High School." It was the first public comprehensive high school in educational history. This school was soon followed by a high school for girls in 1826 in the same city. Later in 1827 Massachusetts passed a law requiring towns of 500 families to establish schools. While the law does not contain the term "high school", it does provide that schools such as those in Boston be established. Monroe (1940) explains the law.

... it provides that every town or district containing five hundred families should maintain a school for at least ten months of each year, in which should be taught in addition to the subjects of the elementary school, the history of the United States, bookkeeping, geometry, surveying, and algebra. Every town or city containing four thousand inhabitants was compelled to add to this curriculum Latin, Greek, general history, rhetoric, and logic (pp. 414-415).

It should be noted that again many towns chose not to comply with the law.

Brubacher (1966) suggests that the private academy system born in the middle of the eighteenth century was the result of a dissatisfaction with the formal and narrow curriculum of the Latin grammar school, but the high school starting nearly 100 years later was not the result of dissatisfaction with the academy. On the contrary, the originators of the high school were so greatly attracted by the program of the academy that they wished to copy and improve on its opportunities (p. 409). Grizzel (1923) states that the Boston School Committee which developed the high school idea was convened by public pressure to consider the advisability of setting up a school that satisfied certain expectations.
... furnish the young men who are not intended for a collegiate course of studies, and who have enjoyed the usual advantages of the public schools, with the means of completing a good English education, and of fitting themselves for all the departments of commercial life (p. 42).

The first high school was soon evaluated as a success. Three main reasons why the high school proved successful have been suggested by Brubacher (1966): it was a natural and continuous extension of the elementary school, it was open to the children of all the inhabitants at public expense, and it provided a curriculum predicated on the interests of the masses (p. 410). Other states did adopt the idea but no great growth in the number of high schools occurred until after the Civil War.

Atkinson and Maleska (1964) report that in the same year Massachusetts passed the first state "high school" law, 1827, it also through legislative action directed school committees not to purchase or use, in any of the schools under their jurisdiction, school books calculated to favor any particular religious sect or tenet (p. 159). Horace Mann, the state's school superintendent, in compliance with this legislation insisted that controversial sectarian religious materials be kept out of the public school curriculum. The Massachusetts legislation was an initial step in relating the First Amendment (separation of church and state) to the exclusion of religious instruction in the public schools.

While the first free public high school was born in 1821, De Young and Wynn (1968) state that it was not until 1834 that the first free public elementary schools came into being. In that year, under the
leadership of Thaddeus Stevens, Pennsylvania adopted a state program of free elementary schools (p. 156).

A brief examination of some forces influencing America's society is necessary before discussing another major educational development in the middle nineteenth century—the rise of the common school. Shermis (Orlich and Shermis 1965) suggests that changes taking place in education during the nineteenth century were largely the result of the following forces.

1. The increasingly democratic nature of other American political and social institutions, particularly those associated with Jacksonian democracy in the mid-nineteenth century.
2. The arrival of a torrent of European immigrants who needed to be rapidly enculturated.
3. The increase in industrialism, which demanded a much higher level of literacy skills.
4. Related to the above, an increased urban population. City life is inherently more complex than rural and requires more skills to provide for the interdependence growing out of the need for sanitary facilities, judicial institutions, specialized occupations, and greater interaction.
5. The growing sensitivity of the Americans. Eventually, education was viewed as something that went beyond individual or state concern. Education was considered a necessity that society should guarantee to everyone.
6. The importation of rather unique educational theories, the views of Jean Jacques Rousseau, an eighteenth-century French writer and philosopher, generated a great number of later educational philosophies, including those of Johann Heinrich Pestalozzi and Friedrich Froebel. The practical effect of their writings was to make education in general considerably more pleasant and effective (pp. 17-18).

Cremin (1951) would also add "the rise of nationalism" to the above list (p. 28). Historically speaking, these forces had brought rapid change to America and therefore to its schools. Consequently, American education at the start of the nineteenth century did not reflect a uniform or national-in-scope approach. Tyack (1967) suggests that
schools were a "hodgepodge," founded for profit or charity, for propagating the faith or selling town lots in a new village on the frontier, or for advancing learning or keeping children off the streets. By the time the high school concept emerged in the 1820's Americans had begun to wonder if American schools were good enough or systematic enough to meet society's expectations (p. 120).

During this period of criticism and questioning of the schools another major educational development emerged. Tyack (1967), wrote about this development.

Out of decades of criticism and reform—the ferment called the common school crusade—emerged a basic democratic institution. From the clash of new social conditions and old articles of faith, interpreted by eloquent and determined reformers, came the American common school (pp. 120-121).

The concept of the common school of course was not new in the nineteenth century. As discussed earlier in this chapter, New England had established a form of the common school before 1700. The "revival" of the common school idea was simply the result of the changing conditions of the nineteenth century. The common school, it should be recognized, was common not in the sense of inferior, not as a school for the poor, but as a school open to all and supported by public funds (Brubacher 1966, p. 366).

The crusades for and against the revival of the common school started in the settled older regions of the East, but opposition came from several sources. Tyack (1967) identified some of the sources of opposition.
... taxpayers—urban landlords and dirt farmers alike—who could see no reason to educate the children of others; sectarian groups who attacked public schools; laborers who opposed education beyond the three R's as a subsidy of the wealthy; and patricians who clung to an elitism which was going out of style in Jacksonian America (p. 121).

Existing common schools had their critics as well. Weeks (1835) prepared a list of "Defects of our Common Schools" in 1831. The following "defects" and "evils" were discussed.

1. Too many studies are pursued in the same school.
2. Too many pupils are crowded together in the same school, and under the same teacher.
3. The need for suitable books was great.
4. Unqualified teachers were being employed.
5. Frequent changes of teachers was a problem.
6. The schools did not have adequate apparatus such as globes, maps, and blackboards.
7. The best methods of instruction were not being used (pp. 154-160).

In 1837 those who supported the common school gained a strong spokesman, Horace Mann. Atkinson and Maleska (1964) relate that in 1837 Carter from Massachusetts wrote a lengthy pamphlet in which he pointed a finger of shame at the schools whose inefficiency was so contrary to the New England tradition (p. 114). With the assistance of Mann in 1837, Carter secured passage of a law creating a state board of education (p. 114). Mann was later named as superintendent of the board and used this office to speak strongly for the common school. Mann's crusade for public education spread to nearly every other American state. Atkinson and Maleska (1964) suggest that Mann may be the foremost educational statesman that America has ever produced (p. 115).
Cremin (1951) described the basic elements of the "ideal" school as viewed by Mann and others of the same persuasion.

1. A common school was a school ideally common to all, available without cost to the young of the whole community.
2. A common school was a school providing students of diverse backgrounds with a minimum common educational experience, involving the intellectual and moral training necessary to the responsible and intelligent exercise of citizenship. It was carefully to avoid in the process those areas which in terms of conscience would prove so emotionally and intellectually divisive as to destroy the school's paramount commitment to universality.
3. A common school was a school totally supported by a common effort of the whole community as embodied in public funds.
4. A common school was a school completely controlled by the whole community (usually through its representatives) rather than by sectarian political, economic, or religious groups (p. 219).

American education was in a period of transition. In spite of the opposition to the common school Callahan (1961) asserts that by 1860 the free public elementary school (the common school) was firmly established in America (p. 130). Earlier the Boston Schools, in 1848, introduced a graded system of instruction. From Boston, this graded system spread rapidly all over the country where the schools were of any size (Callahan 1961, p. 130).

To digress a bit, it is interesting to note that Fraser (1866) mentions two school issues in his report on schools of this period that still are issues with present day schools.

It is the Boston Rule that no home lessons should be given to children in the primary schools, and none also to girls in the grammar schools; nor is a longer lesson to be assigned daily "than a boy of good capacity can acquire by an hour's study;" and out-of-school lessons on Saturday are prohibited (p. 113).
Fraser (1866) continues by reporting the remarks of an unidentified school superintendent of Worcester, Massachusetts.

Compact, well-arranged, carefully-worded, elementary text books, thoroughly mastered, would be a great improvement over the crammed and cumbrous-treatises, superficially studied, and poorly comprehended (p. 139).

Pre-elementary education was also being addressed by the middle 1800's. De Young and Wynn (1968) report that the first kindergarten in America was founded in Watertown, Wisconsin, in 1855, and the first English-speaking kindergarten was opened in Boston in 1860 (p. 135). It was not until thirteen years later in 1873, however, that the first permanent kindergarten was established as part of the St. Louis public school system (p. 135). The number of kindergartens grew rapidly following the Civil War and basically emphasized health, physical exercise, and moral training.

Callahan (1961) reports that by 1860 every state in the union had a state superintendent of schools (p. 130) and by the 1860's, according to Thayer (1960b), the principle of maintaining high schools at public expense had been thoroughly established in practice (p. 55).

While the principle was established in practice it was yet to be tested in the courts. The most serious test came in Kalamazoo, Michigan. Brubacher (1966) explains the case by reporting that an objection was made to paying taxes for the support of a high school. The objection was based on the grounds that a high school was not properly a part of the system of common schools recognized by law. It was claimed that the term "common school" historically applied to only elementary grade schools (p. 410).
The case was decided in 1874. The court held that the state had ample power to provide an intermediate school between the common school and the university (Brubacher 1966, p. 410). Following this decision, the number of high schools increased greatly.

Vocational training programs gradually spread during the 1800's (Atkinson and Maleska 1964, p. 119). In 1884 a manual training high school was established in Baltimore and according to Atkinson and Maleska (1964), the first regularly established public vocational secondary school was created in Minnesota in 1888.

America's schools during the latter part of the nineteenth century were characterized by Wickersham (1881) in an address to the National Educational Association.

1. The schools provided are open to children of proper age without regard to sex, race, rank, color, or religion.
2. The public schools are free.
3. The schools are nonsectarian.
4. The children are seldom admitted into the public schools under the age of five years.
5. The national government exerts no control in matters of education.
6. The schools are managed and supported locally (pp. 94-104).

While number one on the list above could be debated, the list does give some indication of how far the free public school concept had advanced.

Even though great strides had been made, the schools were not without criticism during the latter part of the nineteenth century. During the national convention of the National Educational Association in 1888, no fewer than four addresses were given criticizing some element of the schools: "The Schools Fail to Give a Proper Preparation for Active
Life" (Sheldon 1888); "The Schools Fail to Give a Reasonable Mastery of Subjects Studied" (Martin 1888); "The Schools Fail to Give a Proper Preparation for Active Life" (Irish 1888); "The Schools Fail to Teach Morality or to Cultivate the Religious Sentiment" (Cook 1888).

Following Sheldon's (1888) call for the school to include in the curriculum moral instruction, manners, physical education, and industrial training (pp. 148-155), Campbell from California responded in a tone of frustration.

I wish to say, first, that it has been my observation, in a very extensive connection with public-school work on the coast, that wherever the church or the Sunday school fails in its mission, people look to the public schools. If the mechanic finds it impossible to give his boy a trade on account of the guilds that have been organized, he will turn to the public school and ask that the public school teach his boy a trade. If the farmer finds a destroying insect at work on his crops, he turns to the public schools, and wants us to teach all about plant-destroying insects. If the doctor finds that the people are dying all around him on his hands, he wants the public school to do his work, and teach physiology and hygiene in its minutest details. And so on. These gentlemen tell us of the ills of society that exist in spite of the public schools, but they could not--any of them--paint with the most eloquent tongue the dire calamities there would be if it were not for the public schools (Sheldon 1888, p. 164).

Morgan (1886) in an address before the National Educational Association's national convention in 1885 indicated that better teachers were needed and then stated what he felt an "ideal" school-master should be like.

1. a "manly man"
2. a patriot
3. a "giving" kind of person
4. a scholar
5. a philosopher
6. an artist (who works on bodies and souls)
7. a Christian (pp. 69-80)
As the last decade of the nineteenth century was approaching some educators were looking back over the last century in an attempt to characterize schools and specify the expectations of schools for the present. One of those persons was Soldan (1881) who shared his expectations of schools in his address entitled "The Century and the School."

There are two distinct classes of demands, which the century makes upon the school. The one is, that the school shall be in harmony with the practical aims and with the spirit of the times; and the other, that it shall help to guard those interests which are as old as the human race itself, namely, the ethical interests which alone constitute—make or render a man a civilized being, and make uprightness and charity part of his nature (p. 146).

While Soldan stressed practical and ethical demands of the schools, Packard (1882) in an address to the American Institute of Instruction in 1881 emphasized citizenship.

Its mission (the common school) is to produce the honest and reasoning citizen, clean-handed, clear-minded, with the development of each child so grounded in morality and intelligence, a new foundation stone is laid, and the country has an additional guaranty for its preservation. . . the common school is not ordained to prepare individuals, primarily, to buy and sell, and get gain, to appear properly in reputable society, to be free from the shame of ignorance. The reason of its being lies deeper: it is to perpetuate and purify citizenship (p. 253).

This same opinion was voiced earlier in an address before the National Educational Association (Harrington 1873, p. 222).

Some educators during the latter part of the nineteenth century recognized that if the expectations for schools were ever to be uniform for the nation, some effort had to be made to present, if not uniform, at least similar courses of study for the schools. Coy (1889) spoke
about this problem in an address before the National Educational Association. He emphasized that while some uniformity was desirable, it was going to be difficult to achieve (pp. 524-533).

Uniformity was not one of the characteristics of American schools in 1889, but it was clear that the American society expected more of their schools now than in colonial times. While the curricula were not uniform in their offerings, basic courses were being offered by nearly all schools. Although the common schools were secular, moral education was still seen as important. Butts and Cremin (1953) in summarizing the ideal common school stated the new tasks it would have to assume.

... that the public school would have to undertake certain important social tasks which could no longer be haphazardly entrusted to the family, the church, or even simple participation in the life of the community. In effect, the school would now be entrusted with a responsibility involving the very perpetuation and progress of the republic (p. 194).

The need for some set of standards for education was being recognized, and effort in this direction would be made in the 1890's. In addition to the setting of standards, new child-centered approaches to education were advocated by Francis Parker, John Dewey, and others. Both educational standards and the child-centered approach will be discussed in Chapter III.

Make-up of the School Population

Callahan (1961) maintains that determination of the exact number of colonial children who attended elementary schools is impossible. Children who lived in towns and were from upper or middle class families more than likely attended some school for several years, while
children from the poorer families were fortunate if they learned to read. In the rural areas, most children received no formal education (p. 116).

Curti (1935) agrees with Callahan and further suggests that there existed two distinct schemes of education in the colonies. One scheme of education served the children of the well-to-do families—the merchants, planters, clergy, and lawyers—while the other served the common people (p. 21).

Opportunities for education also varied from colony to colony depending upon laws or in some cases compactness of settlements. Callahan (1961) suggests that children living in New England, where settlements were close together, had more educational opportunities than those in the South where settlements were far apart (p. 116). New England, as indicated earlier in this chapter, also had religious motivation for establishing schools and tended to have an economic climate more conducive to the establishment of educational institutions.

Children from poorer families were usually neglected, unless they were orphans or paupers in which case they were put in apprenticeship schools or pauper schools (Callahan 1961, p. 117).

Formal education of Negro and Indian children was almost nonexistent. Only isolated attempts were being made to supply even the most basic religious instruction to non-white groups of people, and those, only by religious organizations. One of the most aggressive religious organizations active at the beginning of the eighteenth century in setting up schools throughout the colonies was the Society for the Propagation of the Gospel in Foreign Parts (S. P. G.). Humphreys (1730) wrote an
account of the success of the Society's missionaries in the American colonies and described the problems that arose when attempts were made to educate the Negroes.

... but the Difficulties the Clergy meet with in this good Work are exceeding great. The first is, the Negroes want Time to receive Instruction. Several Masters allow their Negroes Sundays only for Rest; and then the Minister of a Parish is fully employed in other Duties, and cannot attend them: Many Planters, in order to free themselves from the Trouble and Charge of Feeding and Cloathing their Slaves, allow them one Day in a Week, to clear Ground and plant it, to subsist themselves and Families. Some allow all Saturday, some half Saturday and Sunday; others allow, only Sunday. How can the Negro attend for Instruction, who on half Saturday and Sunday is to provide Food and Rayment for himself and Family for the Week following? The Negro will urge in his own Excuse, that the Support of himself, and all that is dear to him, doth absolutely depend upon this, his necessary Labour, on Saturday and Sunday. If this be not strictly justifiable, yet it is true, the miserable Man's Plea, will engage the Reader's Compassion. ... But the greatest Obstruction is, the Masters themselves do not consider enough, the Obligation which lies upon them, to have their Slaves instructed. Some have been so weak as to argue, the Negroes had no Souls; others, that they grew worse by being taught, and made Christians. ... (pp. 234-235).

Further apprehension about educating slaves was raised when in 1712 slaves in New York City set fire to a house and proceeded to stab and shoot people when they attempted to put the fire out. The uprising was unsuccessful but did convince many persons that slaves must be kept ignorant (Humphreys 1730, pp. 240-242).

The S. P. G. was also attempting to instruct some groups of the Iroquois Indians but met with similar difficulties (Humphreys 1730, pp. 276-311).

Regardless of race or color, few colonial children were attending schools. Callahan (1961) asserts that until well into the nineteenth
century only a small percentage of American children attended school and further suggests that those who did attend found the instruction poor and the program limited (p. 117).

Until the middle of the eighteenth century girls rarely received formal schooling other than in an elementary school. After the academy schools were started in 1751, some were established for girls. Only boys attended the Latin schools and only if they were from wealthier families. Even when the English schools were established in the first quarter of the nineteenth century, many were not co-educational. None of the schools mentioned—the elementary, Latin school, academy, English school—were free. Free education was identified with pauper education.

By the second half of the eighteenth century several events changed the make-up of the American educational system. The Declaration of Independence had spoken about freedom and the equality of man and this had obvious educational implications. The New Republic needed leaders and those making decisions needed to be educated, both conditions which required that education be more available to the people.

As one response to this need for a more educated populace, Thomas Jefferson in 1779 presented to the Virginia legislature a bill which called for a more general diffusion of knowledge (Henderson 1890, p. 114). It was the first such plan for a state-wide school system in the western world. Monroe (1940) describes the plan as being a system of free education in which elementary schools at state expense were to be provided throughout Virginia and secondary schools provided at state expense for the more able students. The most successful students from the secondary schools would be given a state college education (p. 203).
Primarily because of opposition from religious groups, Jefferson's bill did not receive approval. It was, however, a step toward the concept of free education in America, in spite of the fact that Jefferson did not believe in the absolutely equal abilities of all men; rather, his educational scheme provided for recruiting from the masses those individuals who were exceptionally gifted for leadership (Curti 1935, p. 41).

Atkinson and Maleska (1964) report that some critics claim that education of the masses had largely been a defensive measure by property-owning classes because they felt it would be cheaper to keep children under control in school than to let them run the streets and pay for the damage they did (p. 169).

In response to the need to help those children who were running the streets as well as those working in factories, Robert Raikes established the Sunday School in England in 1780 (Callahan 1961, p. 124). When the idea was brought to America early in the nineteenth century, it was a great success. According to Tyack (1967) the Sunday School initially gave secular instruction to children but was rapidly taken over by the Protestant churches (p. 120).

The demand for universal education did not die with the defeat of Jefferson's bill nor with the establishment of Sunday Schools. By the start of the 1800's the movement toward mass education was encouraged by the establishment of public high schools in Massachusetts and an example of special concern—the establishment of the first school for the deaf in America in Hartford, Connecticut in 1816 by Thomas Gallaudet. The first public school for the deaf was established in
Boston in 1869 (Atkinson and Maleska 1964, p. 148). But perhaps most significant was the revival and wide acceptance of the common school in the first half of the nineteenth century. The common school and the high school combined in one system in many states gave America the basic unit for mass education.

Still, not all students could or did attend school. Tyack (1967) reports that Robert Owen, the famous labor leader and social commentator, suggested that all children be taken from their parents and educated in boarding schools (p. 123). While this idea did not receive great acceptance, descriptions of the conditions of child labor in the labor journals did affect people. In 1832, it was found that 1,600 children between seven and sixteen years of age were working in the mills of New York. Most of them worked thirteen and fourteen hours a day, and had no opportunity for schooling except after eight thirty in the evening on Sunday (Tyack 1967, p. 123).

Massachusetts was the first state to pass a compulsory school attendance law (Thayer 1960b, p. 11). Passed in 1852, it required parents to send children between the ages of eight and fourteen to a public school within the town or city in which they had resided for at least twelve weeks. Violation of this law carried a fine of not more than twenty dollars (Hall 1951, p. 365). Other states gradually adopted similar laws with Mississippi being the last in 1918 (Thayer 1960b, p. 11).

De Young and Wynn (1968) suggest that the idea of the compulsory school was very much opposed by some people for such reasons as: it deprived the parents of their inalienable rights, it was not necessary
to secure attendance, it was an assumption of powers by the state governments, it was unfriendly to the spirit of free democratic institutions, and it was an obstacle in the employment of child labor (p. 156).

In spite of the compulsory attendance laws and perhaps because of their absence in some states, school enrollments from 1850 to 1890 indicate that at no time during those forty years did the percentage of enrollment reach 60 percent for either white boys or girls (Table 1). Fraser (1866) in his report relates: "In spite of legal enactments and penalties, 'absenteeism and truancy' continue to be the great, and, indeed, the increasing evil of American schools" (p. 35). In the same report Fraser (1866) indicates that tens of thousands in New York left school without entering the grammar departments and some never finished the primary classes (p. 90).

Even with school enrollment figures as low as they were for white children, they were worse for other races. As late as 1890, only 32.9 percent of all Negro and other minority races were enrolled in schools. According to Shermis (Orlich and Shermis 1965), Negro education developed only after the Civil War (p. 25). Laws making it a crime to educate Negroes were still in effect in some southern states even after the Civil War (p. 25). One example is Virginia's law enacted in 1831.

... if any white person or persons assemble with free Negroes or mulattoes, at any schoolhouse, church, meeting-house, or other place for the purpose of instructing such free Negroes or mulattoes to read or write, such person or persons shall, on conviction thereof, be fined in a sum not exceeding fifty dollars, and moreover may be imprisoned at the discretion of a jury, not exceeding two months (Knight and Hall 1951, p. 665).
TABLE 1

SCHOOL ENROLLMENT RATES PER 100 POPULATION, BY SEX AND RACE: 1850 TO 1970

<table>
<thead>
<tr>
<th>Year</th>
<th>Both sexes</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>White</td>
<td>Negro and other races</td>
</tr>
<tr>
<td>1850</td>
<td>433</td>
<td>434</td>
<td>435</td>
</tr>
<tr>
<td>1770</td>
<td>90.0</td>
<td>90.8</td>
<td>89.4</td>
</tr>
<tr>
<td>1860</td>
<td>90.9</td>
<td>91.1</td>
<td>89.3</td>
</tr>
<tr>
<td>1870</td>
<td>90.9</td>
<td>91.0</td>
<td>89.4</td>
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<tr>
<td>1880</td>
<td>90.1</td>
<td>91.0</td>
<td>89.7</td>
</tr>
<tr>
<td>1890</td>
<td>89.7</td>
<td>89.9</td>
<td>88.5</td>
</tr>
<tr>
<td>1900</td>
<td>89.6</td>
<td>88.8</td>
<td>88.3</td>
</tr>
<tr>
<td>1910</td>
<td>89.6</td>
<td>88.8</td>
<td>88.3</td>
</tr>
<tr>
<td>1920</td>
<td>89.6</td>
<td>88.8</td>
<td>88.0</td>
</tr>
<tr>
<td>1930</td>
<td>89.6</td>
<td>88.8</td>
<td>88.3</td>
</tr>
<tr>
<td>1940</td>
<td>89.6</td>
<td>88.8</td>
<td>88.3</td>
</tr>
<tr>
<td>1950</td>
<td>89.6</td>
<td>88.8</td>
<td>88.3</td>
</tr>
<tr>
<td>1960</td>
<td>89.6</td>
<td>88.8</td>
<td>88.3</td>
</tr>
<tr>
<td>1970</td>
<td>89.6</td>
<td>88.8</td>
<td>88.3</td>
</tr>
</tbody>
</table>

Some concern, however, was being shown for non-whites. From 1880 to 1889, no fewer than seven addresses covering education of Negroes, Indians, Chinese, and Mexicans were given before the National Educational Association: "The Education of the Negro—Its Rise, Progress, and Present Status" (Orr 1880); "Education of the Indian" (Armstrong 1885); "The Results of Education in the Indian Territory" (Owen 1887); "Educational Work Among the Colored Race" (Bartholomew 1887); "Education of the Mexican" (Ashley 1887); "Education of the Mongolian, or Chinese" (Baldwin 1887); "Educational Progress of the Colored People in the South" (Burrus 1889).

Burrus (1889) in his address quoted W. H. Baker, superintendent of public schools in Savannah, Georgia.

I desire to have to known that, as a result of my observation, which has been extensive, I am convinced that the colored people are exceedingly anxious to educate their children. The colored children in the schools of this city are making rapid progress. They not only show ability for learning what are termed the elementary branches, but seem to grasp without difficulty those studies which are included in the curriculum of what is classed as secondary education. I write this, adds he, because for many years I held a contrary opinion (Burrus 1889, p. 205).

Much remained to be done before America would have an egalitarian system of education. However, America had set upon an irreversible course toward mass education. Morgan (1889) spoke of this before the American Institute of Instruction in 1889.

The theory upon which the American public school system rests is precisely that enunciated by the words quoted from the act of the Massachusetts legislature of two hundred years ago. It is the education of the masses. "All children are to be educated irrespective of social distinctions."
No scheme of universal education, without regard to sex, race, color, or social distinctions, such as that now being tried on so magnificent a scale in the United States, has ever been attempted in the history of the world (p. 110).

Assessment of Student Learning

Schools during the eighteenth century and for half of the nineteenth assessed student learning through the use of oral recitation and examination. Written examinations were not evident in the United States until the middle of the nineteenth century (Kandel 1936, p. 22).


The vast majority of schools remained ungraded, and most instruction was therefore individual, with pupils approaching the master's desk or lecturn seriatim and reciting orally and displaying their work for praise or correction (p. 505).

Even during the last half of the nineteenth century practices similar to the one described above were being used. The recollections of a Mrs. D. S. Domer concerning her experiences in a school in Pennsylvania in 1879, as told by Thomas Woody in a book of readings compiled by Orlich and Shermis (1965) supply such an example.

Promiscuous asking of questions was taboo; the child had no right to think; he was to do just what the teacher said. . . . In arithmetic the pupil solved his problem, read it from the board, was excused, another was called on, and so on to the end; a new lesson was assigned, and the class was dismissed, either by taps on a bell or counting one, two, three—stand, pass, sit. Seldom did the teacher explain the lesson; his object was to get through the day and cover all the ground . . . there were no "grades" or "promotions" then. You were placed by the book you were reading . . . tests or
examinations were never held. If we did what was in the book, it was a mark of perfect scholarship, and that was all that was required (p. 75).

This is not to suggest that the assessment of competence was regarded lightly by educators during the eighteenth and nineteenth centuries. In fact, Britell (1978) reports that terms such as "proficiency," "sufficiency," and "competence" were used to describe the objectives of public education (p. 8).

The first step in "accountability" to the constituents of the schools appears to have taken place in 1709 when Boston established a committee with that general purpose.

... Gentlemen of Liberal Education, Together with some of the Reverend Ministers of the town ... to Visit ye school from time to time, when and as Oft, as they Shall think fit, to Enform themselves of the Methodes Used in Teaching of the Schollars and to Inquire of their Proficiency ... the Master being before Notified of the Comeing (Kandel 1936, p. 22).

According to Kandel (1936), the Massachusetts General Court appointed a visiting committee in 1789 "to examine the scholars" (p. 22). Such examinations were oral with the masters choosing the students to be examined. Britell (1978) reported that the significance of the examinations for the future and the level of proficiency were neither specified nor debated (p. 8).

Kandel (1936) reported that in the secondary schools, the academies, and later in the high schools, examinations were conducted quarterly or annually by committees and were open to the public (p. 23). Kandel (1936) mentions that by the middle of the nineteenth century
these public oral examinations were generally still held once a year but had become more like public displays or exhibitions that showed off brilliant students or were simply held to glorify the teachers (p. 24). As a result of these abuses, written examinations were introduced and the public examinations were replaced by graduation exercises and the distribution of diplomas to those students who had passed the examination conducted by the teachers (p. 24).

Annual examinations on the elementary level were also oral and conducted by committees. But as enrollments increased with the revival of the common school this method of conducting examinations became impossible. Brubacher (1966) records that in 1845 Boston substituted a written examination for the oral ones that had been used previously when a decision was made to appraise the educational conditions in the whole public school system (p. 218). According to Britell (1978) the examinations were in history, astronomy, arithmetic, and geography (Appendix A), and it was the first time that the masters and teachers did not have prior access to the examinations (p. 9).

The results were disappointing. According to Caldwell and Courtis (1924), only 45 percent of the students met the desired proficiency level in history, 39 percent in astronomy, 35 percent in arithmetic, and 34 percent in geography (pp. 49-50). Britell (1978) suggests the actual results were even worse because only the best scholars, as determined by the masters, had been examined. The school committee consequently recommended changes in the method of instruction, higher qualifications for teachers, greater accountability from the masters, and an examination of a larger sample of students (p. 9).
In 1845 Horace Mann, writing in *The Common School Journal*, discussed the value of written examinations and predicted, as reported by Knight and Hall (1951), that the mode of examination, by printed questions and written answers, "will constitute a new era in the history of our schools" (p. 493). Mann then gave a variety of reasons for the superiority of the written examination over those orally administered.

1. It is impartial.
2. It is far more just.
3. It is more thorough.
4. It prevents the officious interference of the teacher.
5. It does determine, beyond appeal or gainsaying, whether the pupils have been faithfully and completely taught.
6. It takes away all possibility of favoritism and all ground for the suspicion of favoritism.
7. It is a transcript, a sort of Daguerreotype likeness, as it were, of the state and condition of the pupils' minds, that can be taken and carried away, for general inspection (pp. 493-498).

According to Britell (1978), the public demand for some evidence of educational competence continued while written examinations at both the elementary and secondary levels proliferated during the second half of the nineteenth century. In 1856, Boston adopted written examinations for admission to the public high school and later used them for promotions (p. 9).

The written examinations were not without opposition. Martin (1874) addressed the National Educational Association's Elementary Department and shared a view held by many.

But the chief objection to our Examinations in Elementary Schools comes not so much from their insufficiency as a test, but, as I have already hinted, from the very nature of childhood itself. In the upper schools and the college, the student is learning to divide his knowledge into accurate and inaccurate, and to judge of it; he is fitting himself to meet
crises in life, to which he must summon for instant use all his power and all his acquirements. In such a work the stated Examinations are no doubt a necessary, a valuable help. The want of such a training is one of the losses which the pupil who leaves school at fourteen must suffer. What he gets of that training he must get for himself in the experience of life, but any attempt to give it to him before his mind is mature enough for it, is as foolish as to expect the manly strength of forty from the beardless boy (p. 279).

Fraser (1866), following a visit of American Schools, commented on some of the examination processes being used.

In some schools, as at Chicago and Providence, I found examinations largely conducted in writing. I glanced over some of the papers, which appeared to be carefully done, but still not without traces of this habit of "memorizing," which, as everybody knows, when too absolutely relied on, will not save an exercise from serious occasional blunders. As far as my judgment goes, all these examinations need to be freer, dealing more with real knowledge and less with conventional phraseology, and more completely emancipated from the fear of text books and the limitations of routine. It is a miserable thing that students who are supposed to be acquainted with a subject should be able to look at it only from one side, and express their knowledge in no more than one prescribed memorized form of words (p. 83).

In the same report Fraser (1866) commented on the admission examinations given in Philadelphia (Appendix B).

At Philadelphia there was put into my hands the report of a committee appointed to investigate certain charges which had been preferred, chiefly by teachers of grammar schools, against the Principal of the Girls' High and Normal School, principally with reference to questions set at the admission examinations. Many of the questions instanced in the report certainly are objectionable, and some are silly. But what struck me was that the objections to them turn chiefly on two points: either (1) that "the question is out of limits," or (2) that "the answer is not in the text books." Thus, certain words are given to be defined, a prominent exercise in American schools, and an objection is raised to the list, because the words, with the exception of three, are not to be found in the "Scholars' Companion" within the established
limits. An objection is taken to a question in interest, it being shown that the arithmetic used in the schools contained only two rules in banking, and under neither the principle required for the solution of this problem, which proves the imperfection of the text-book. The question, "Why does the sun never set on the British dominions," notwithstanding Daniel Webster's eloquent explanation, is excepted to, not by reason of its difficulty, but because it is not legitimate, "lying out of the limits." Examples also are given of inappropriate questions--"When, where, and by whom was 'Yankee Doodle' written?" "Was Washington ever wounded? If so, "when and where" (p. 83).

Strong opposition to the written examinations began in the last twenty years of the nineteenth century, according to Kandel (1936, p. 27). Some students were apparently studying just to receive good marks on the examinations and the very nature of the examination, some suggested, stressed uniformity. At the same time, others were beginning to question the value of marking and how just the examination system was. What had appeared to Horace Mann and others, in the middle of the century, as a welcomed change in examining student scholarship was now beginning to be recognized as being inadequate. As people began to critique written examinations used for admission and promotion, changes were also taking place in the grading systems being used in the schools.

Prior to the middle of the nineteenth century most of the elementary and high schools used either a pass-fail or number system of grading. Britell (1978) writes that after 1875, high schools were no longer using these systems but instead moved to a five (A-B-C-D-F) or three-point (E-P-F) scale. Elementary schools used similar patterns after the turn of the century (p. 10). Brubacher (1966) maintains that the letter grading was partially the result of teachers having serious
doubts about the dependability of the fine discriminations in pupils' achievement resulting from the use of 100 as the basis of marking (p. 163).

Some form of "report card" or system of notifying parents of their child's progress in school was generally used during the nineteenth century. One example of a report of "Scholarship" from 1848 can be seen in Appendix C.

But Britell (1978) suggests that the precision of the evidence of competence was far less than what might appear.

There were few efforts to examine the content of the public expectation, to achieve consistency across evaluations, or to consider the comparative or absolute nature of the standard of competence. From contemporary reports, one can conclude that the standard represented both a comparative assessment (based on others' performance) and the judge's ideal of performance. Grades also reflected the teachers' opinion of an individual's appearance, behavior, and family background (p. 10).

Kandel (1936) reported that as the last decade of the nineteenth century was approaching, the domination of college entrance examinations and elementary school examinations for promotion were being attacked. In both cases, the attacks were for the same reason.

... the burden of the criticisms were based on the recognition that "uniformity of conditions in pupils does not exist"; pupils are unequal in mental ability, vigor, ambition, application, home advantages, and health (p. 28).

Kandel (1936) notes that in the leading cities the written examinations for promotion were gradually replaced by frequent examinations by the teacher, which were used for instructional purposes, and
cumulative records of the pupils' standing (p. 29). By the close of the nineteenth century examinations given by outside committees, with few exceptions, had disappeared (p. 34).

According to Kandel (1936), the most pressing problems, relative to the written examinations, were those used for determining college entrance. Those examinations were the chief preoccupation in the last decade of the nineteenth century (p. 35).

New York attempted to use written examinations for college entrance. It was here that the Board of Regents in 1878, in response to a request of the principals of the academies, began to examine secondary schools. Kandel (1936) relates that among other purposes the examinations were to "furnish a suitable standard for graduation from academies and academic departments of union schools, and of the admission to the several colleges of the state" (p. 37). Earlier in 1865, elementary school examinations had been developed to be used as a basis for distribution of funds. All of these examinations which were used for selection, Britell (1978) suggests, may have been some of the very first that were used to certify a minimum level of competence (p. 3).

As the last decade of the nineteenth century was approaching, the process of the certification of competence continued to be debated. Scientific approaches to testing in the next decade attempted to speak to the issues surrounding examinations.

**Summary**

In 1889, America's educational system differed in many respects from the one in 1700. From a few private and pauper schools in the
early colonial days, there emerged free public schools from kindergarten through high school, open to both boys and girls. From the religiously dominated schools of the colonies, there had arisen a school system secular in nature, still emphasizing morality, but controlled by state governments, not by churches. Propagation of the faith as a basic expectation for schools had been essentially replaced with concern for citizenship and the transmission of knowledge to supply the skills needed by the new nation.

While few children attended schools in 1700, the enrollments had nearly doubled every decade during the nineteenth century, so that by 1889 over 12 million attended (Table 2). In 1700 few non-white children were given educational instruction, but by 1889 nearly 33 percent of that population were attending schools, although many were attending institutions separate from those of the white students.

By 1889 attempts were being made to evaluate the competence of the students and testing had moved from oral to written examinations.

In many ways the years from 1700 to 1889 had been exciting educationally. Much progress had been made, but there were new challenges ahead. During the next two and one half decades further attempts would be made to set "standards" for the schools. The testing of students would take on new dimensions because of the work of Alfred Binet, Edward Thorndike, and others. Serious efforts would be made to set national expectations for schools and to move the instruction and methods used in schools toward a more child-centered approach. These challenges give reason for Chapter III to be entitled "The Age of Standard."
## TABLE 2

### ELEMENTARY AND SECONDARY SCHOOLS, ENROLLMENT, AND ATTENDANCE, AND HIGH SCHOOL GRADUATES: 1870 TO 1956

<table>
<thead>
<tr>
<th>School year ending</th>
<th>Total</th>
<th>Public school days</th>
<th>Average daily attendance (all grades)</th>
<th>Average length of school term (days)</th>
<th>Average number of days of school attended per enrolled pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Kindergarten and 1st to 12th grades</td>
<td>Nonpublic school</td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>1870</td>
<td>510</td>
<td>11,626,045</td>
<td>8.1%</td>
<td>24,393,255</td>
<td>8,745,546</td>
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<tr>
<td>1871</td>
<td>532</td>
<td>11,599,722</td>
<td>8.1%</td>
<td>24,748,607</td>
<td>8,972,289</td>
</tr>
<tr>
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<td>521</td>
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<td>8.1%</td>
<td>24,720,051</td>
<td>9,011,169</td>
</tr>
<tr>
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<td>24,860,430</td>
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<td>522</td>
<td>11,763,100</td>
<td>8.1%</td>
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</tr>
<tr>
<td>1875</td>
<td>523</td>
<td>11,819,003</td>
<td>8.1%</td>
<td>25,128,001</td>
<td>9,499,600</td>
</tr>
<tr>
<td>1876</td>
<td>524</td>
<td>11,875,892</td>
<td>8.1%</td>
<td>25,264,001</td>
<td>9,689,600</td>
</tr>
<tr>
<td>1877</td>
<td>525</td>
<td>11,932,780</td>
<td>8.1%</td>
<td>25,396,001</td>
<td>9,889,600</td>
</tr>
<tr>
<td>1878</td>
<td>526</td>
<td>11,989,664</td>
<td>8.1%</td>
<td>25,524,001</td>
<td>10,090,600</td>
</tr>
<tr>
<td>1879</td>
<td>527</td>
<td>12,046,543</td>
<td>8.1%</td>
<td>25,652,001</td>
<td>10,300,600</td>
</tr>
<tr>
<td>1880</td>
<td>528</td>
<td>12,103,415</td>
<td>8.1%</td>
<td>25,780,001</td>
<td>10,510,600</td>
</tr>
<tr>
<td>1881</td>
<td>529</td>
<td>12,160,280</td>
<td>8.1%</td>
<td>25,908,001</td>
<td>10,720,600</td>
</tr>
<tr>
<td>1882</td>
<td>530</td>
<td>12,217,145</td>
<td>8.1%</td>
<td>26,036,001</td>
<td>10,930,600</td>
</tr>
<tr>
<td>1883</td>
<td>531</td>
<td>12,274,003</td>
<td>8.1%</td>
<td>26,164,001</td>
<td>11,140,600</td>
</tr>
<tr>
<td>1884</td>
<td>532</td>
<td>12,330,857</td>
<td>8.1%</td>
<td>26,292,001</td>
<td>11,350,600</td>
</tr>
<tr>
<td>1885</td>
<td>533</td>
<td>12,387,701</td>
<td>8.1%</td>
<td>26,420,001</td>
<td>11,560,600</td>
</tr>
<tr>
<td>1886</td>
<td>534</td>
<td>12,444,532</td>
<td>8.1%</td>
<td>26,548,001</td>
<td>11,770,600</td>
</tr>
<tr>
<td>1887</td>
<td>535</td>
<td>12,501,347</td>
<td>8.1%</td>
<td>26,676,001</td>
<td>11,980,600</td>
</tr>
<tr>
<td>1888</td>
<td>536</td>
<td>12,558,139</td>
<td>8.1%</td>
<td>26,804,001</td>
<td>12,190,600</td>
</tr>
</tbody>
</table>

CHAPTER III
THE AGE OF STANDARD: 1890-1915

The careful observer of American education in 1890 might have foreseen some of the developments the next quarter century would bring to that institution (see Figure 2). In 1890 no national system of education existed; each state had developed its own school system and established schools which varied in quality from state to state and within a given state. Consequently, it was understandable, even predictable, that as these United States truly became more united in effort and direction "uniformity" among the states would become imperative and education would be affected.

Prior to the Civil War, universal schooling as envisioned by Horace Mann in Massachusetts, Henry Barnard in Connecticut, John Pierce in Michigan, and Samuel Lewis in Ohio, had closely related education and national progress. Each local school district was seen as the supporter of the Republic and the container of popular hopes and aspirations (Cremin 1961, p. 8). This vision, however, was not reality as long as few standards for education were set and even fewer enforced. Max McConn, an educational reformer during the 1920's and 30's, made the following observation about education in the 1890's in a book by Hawkes, Lindquist, and Mann (1936).

. . . American education in the nineties was a variegated hodgepodge of uncoordinated practices, which had never undergone any scrutiny from anyone, and many of which were
Figure 2. Timeline of Important Dates and Events Emphasized in Chapter III (1890-1915).
shoddy, futile, and absurd beyond anything we now conceive of; and the Age of Standards, as the period from 1890 to 1915 may come to be called, brought some order out of that chaos, eliminated many dishonest schools and incompetent teachers, and vastly improved equipment, curricula, and methods (p. 447).

As McConn (Hawkes and others 1936) continued to describe the time period covered by this chapter, he spoke of how involved various groups of people were in setting standards for education.

To set Standards, and enforce Standards, and raise Standards, and raise them ever more, was nearly the whole duty of teachers and principals and presidents (p. 447).

This preoccupation with setting standards precipitated one writer to declare that the word "standards" had been used more than enough.

Perhaps no word has been so overworked during the last decade, by those who have to do with professional schools, colleges and secondary schools as the word "standards" (Pritchett 1915, p. 336).

In spite of Pritchett's observation, the period from 1890 to 1915 was a time of change and attempts at standardization. It was a time in which the principle of quality control was developed, uniformity was seen as a necessity, the importance of good record keeping was recognized, and structure and consistency were increasingly valued. Education was expected to conform to these new ways (Britell 1978, p. 10). While no serious and respected educators proposed the establishment of a national school system or even a specific and uniform set of course offerings that had to be offered by all schools, attempts were made to assure more uniformity in the educational experiences of elementary students.
Societal Expectations for the Schools

In the last decades of the nineteenth century the concept of the "common" school had become well established. The basic 3 R's and concentration on citizenship as well as morality had become well accepted as the main emphasis of elementary education; equally important were courses in grammar and geography. Tyack (1967) notes that "the purpose of the common school was 'to give the pupil the great arts of receiving and communicating knowledge'" (p. 315). Great importance was given to punctuality, regularity, attention, and silence because these habits were seen as important for the life-long association of the person and an industrial and commercial civilization (p. 315).

This overly regimented approach to the education of elementary children often led to extremes where rote memorization and a military-like precision overshadowed the concern for the individual child. America was faced with the realities of such a system through the efforts of an irate muckraker and reformer, Joseph Rice. In 1892, from January 7 to June 25, Rice observed more than twelve hundred teachers in the schools of thirty-six cities in the United States. A pediatrician by vocation, he had studied education in Germany and was appalled at what he found during the six months he visited American classrooms. He was particularly critical of the "unscientific" or mechanical schools he found during his journey. His definition of an unscientific school described most elementary schools in America.

... one that is still conducted on the antiquated notion that the function of the school consists primarily, if not entirely, in crowding into the memory of the child a certain number of cut-and-dried facts— that is, that the school
exists simply for the purpose of giving the child a certain amount of information. As, in such schools, the manner in which the mind acquires ideas is naturally disregarded, it follows that the teachers are held responsible for nothing beyond securing certain memoriter results. Consequently, the aim of the instruction is limited mainly to drilling facts into the minds of the children, and to hearing them recite lessons that they have learned by heart from textbooks (Rice 1893, p. 20).

While he did find some schools that spent much time in leading pupils to observe, to reason, and to use their hands with facility, most were found to be "unscientific." One New York principal whom Rice observed felt that "when a child enters upon school life his vocabulary is so small that it is practically worthless, and his power to think so feeble that his thoughts are worthless" (Rice 1893, p. 30). One teacher in Baltimore with a history of nervousness had moved from high school teaching to elementary teaching "because teaching primary children does not tax the mind" (p. 59). In St. Louis, students in one school were lined up with their toes touching the edge of a floorboard preparing for recitation when Rice heard one teacher say "How can you learn anything with your knees and toes out of order" (p. 98). Rice (1893) also found some evidence that students were not learning.

In one of the poorer districts of Boston I found a primary school of very inferior order both as regards to methods and tone. I visited one of the highest classes of this school just after the children had a written examination in arithmetic. I saw the examination papers lying on the desk, and I asked the teacher's permission to glance over some of them. She answered my request by clutching the papers for dear life, then she looked at the first one and said: "This is the poorest scholar in the class." I was not permitted to examine it. After looking over a second one she remarked, "This is also the poorest scholar in the class." She then looked at some twenty more and put them all aside with the remark that they all seemed to be the poorest scholars in the class (p. 129).
The worst of what Rice found can perhaps be best described by the remark of one teacher in Chicago who said to one child "Don't stop to think, but tell me what you know" (Rice 1893, p. 175).

Rice's findings were first described in a series of articles in The Forum and created a great deal of controversy. While the schools Rice visited were located in cities, there is little evidence that schools elsewhere were a great deal different. However, he did point out that he had observed some very fine schools in Illinois, Indiana, and Minnesota.

Rice was not the only person criticizing American education; in fact, others may have had a more profound effect on the shape of education in the United States than he. One such person was Charles Eliot, then President of Harvard University. In an address he gave before the National Educational Association in 1892, he spoke about the "uniformity" in schools and pointed out that while some efforts toward uniformity were necessary and desirable, others were not. He condemned the practice of uniformity which required all students to be treated alike.

... the same lessons in the same books, at the same times, under the same teacher, throughout the year; who are to make as nearly as possible the same progress each day in each subject, and to submit to the same tests at the same intervals (Eliot 1893b, p. 82).

Perhaps because of the position he held, Eliot's greatest concern was for high school curriculum and how often high school students were not adequately prepared to enter college (Eliot 1893b, p. 83). Even colleges, however, were not exempt from his criticism because many colleges, in his opinion, were not offering programs that adequately pre-
pared students for the world of work (p. 84). Eliot (1893b) summarized his feelings toward undesirable uniformity in one sentence in his address.

I have thus far urged that a strictly graded grammar school, a high school or academy with a single limited programme, or a college with a uniform prescribed curriculum must suppress individual differences instead of developing them, and must leave individual capacities undiscovered and untrained, thus robbing the individual of happiness and serviceableness, and society of the fruits it might have enjoyed from the special endowments of thousands of its numbers (p. 86).

In the last paragraph of his address there is found a suggestion and opinion about desirable uniformity that had a tremendous impact on American schools.

And, finally, I believe that the most hopeful way of bringing about that desirable uniformity is through recommendations as to selection, definition, time allotment, and method, which proved from judicious experts acting under the sanction of a national association like this. . . (Eliot 1893b, p. 95).

Three days prior to this address, on July 9, the National Council of N E A had established a committee, the Committee of Ten, with Eliot as chairman, that attempted to do what Eliot and others had suggested.

. . . a committee, duly representative of colleges and secondary schools and of the different sections of the country, be appointed, with authority to call conferences, similarly representative, of experts in each of the several subjects or groups of subjects required for admission to college, and that the committee so constituted after receiving and digesting the reports of these conferences should make a final report to the national council (Krug 1969, p. 37).

The Committee of Ten on Secondary School Studies, generally referred to as "The Committee of Ten," submitted their report, edited by
Eliot, in 1893. While the members of the Committee recognized that secondary schools, taken as a whole, did not exist for the purpose of preparing boys and girls for college, they also recognized that not all students entering high school knew at that time if they would attend college or not; therefore, they suggested the attitude a college should have about students seeking admittance after finishing the Committee's suggested program.

We will accept for admission any group of studies taken from the secondary school programme, provided that the sum of the studies in each of the four years amounts to sixteen, or eighteen, or twenty periods a week . . . 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 or more years (Report of the Committee of Ten 1894, p. 52).

As a result, the concept of "equivalents" had been created by the Committee. The common interpretation of the Committee's report was that any subject on the approved list would be as acceptable as another as long as it was studied for an equal length of time. This attempt at uniformity proved to be helpful and harmful. While it did provide a method of assessing the separate courses taken by a student, it also allowed high schools and colleges to become satisfied with "how many" courses a student had taken rather than "what the student knew." The equivalents concept of the Committee was further reinforced with the establishment of the Carnegie Unit in 1909. Raubinger and others (1969), quoting a study done in 1954, supply a definition of the Carnegie Unit.

It is a unit representing a year's study in any major subject in a secondary school, constituting approximately a quarter of a full year's work. Under ordinary circum-
stances, it assumes that a satisfactory year's work in any major subject cannot be accomplished in less than 120 sixty-minute hours, or their equivalent (p. 77).

The argument concerning the Carnegie Unit and its effect, good and bad, continues yet today.

Equally as important as the concept of equivalents suggested by the Committee were their recommendations for the development of programs for the secondary school. Table 3* indicates the demands for program time by all of the nine conferences representing the nine categories of studies. Table 4* indicates the total amount of instruction that should be given in a high school during each of the four years. Table 5* is a modification of Table 4* allowing for a variety of secondary school programs. Table 6* supplies a suggested plan for developing four separate "tracks" each to be used by students having a particular intention upon completion of high school.

The Committee's report had an enormous influence on education until it was overshadowed by the Commission on the Reorganization of Secondary Education and its Seven Cardinal Principles in 1918. (This report will be discussed in the next chapter.) The Committee of Ten promoted uniformity in the high school programs by identifying categories of studies that were important in satisfying the expectations of schools as understood at that time. Preparation for college was one aim of the high school, but for most students high school was their "college" and the

*These tables are commonly referred to by the numbers given to them in the Report of the Committee of Ten. The writer's Tables 3, 4, 5, and 6 correspond to the Committee's Tables I, II, III, and IV, respectively.
### TABLE 3

RECOMMENDATIONS OF THE COMMITTEE OF TEN ON SECONDARY SCHOOL STUDIES—
PROGRAM TIME FOR ALL NINE CATEGORIES OF STUDIES

<table>
<thead>
<tr>
<th>Subject</th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
<th>6th Year</th>
<th>7th Year</th>
<th>8th Year</th>
<th>9th Year</th>
<th>10th Year</th>
<th>11th Year</th>
<th>12th Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age 6-7</td>
<td>7-8</td>
<td>8-9</td>
<td>9-10</td>
<td>10-11</td>
<td>11-12</td>
<td>12-13</td>
<td>13-14</td>
<td>14-15</td>
<td>15-16</td>
<td>16-17</td>
<td>17-18</td>
</tr>
<tr>
<td>1. Latin</td>
<td></td>
<td></td>
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<tr>
<td>2. Greek</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>3. English</td>
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<td></td>
</tr>
<tr>
<td>4. Modern Languages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Elementary Grades—Primary and Grammar School

1. **Latin**
   - 5p. a wk.

2. **Greek**
   - Latin to be begun a year before Greek.
   - 5p. a wk.

3. **English**
   - Pupils to reproduce orally stories told them, to invent stories and describe objects.
   - Supplementary reading begun—and continued through all the grades.
   - Composition begun—writing narratives and descriptions—oral and written exercises on forms and the sentence.
   - From this grade no reader to be used.
   - Grammar, 3p. a wk.

4. **Modern Languages**
   - Elective German or French, 5p. a wk.
   - Elective German or French, 4p. a wk.
   - Elective German or French, 4p. a wk. at least.
   - Elective German or French, 3p. a wk. at least.
   - The language begun below, 4p. a wk.

### Secondary School—High School or Academy

1. **Latin**
   - 5p. a wk.

2. **Greek**
   - 5p. a wk.

3. **English**
   - Literature, 5p. a wk.
   - Grammar, 3p. a wk.
   - Composition, 2p. a wk.

4. **Modern Languages**
   - The same language, 4p. a wk.
   - Second language, 4p. a wk.
   - Second language, 4p. a wk.
<table>
<thead>
<tr>
<th>5. Mathematics</th>
<th>Arithmetic during first eight years, with algebraic expressions and symbols and simple equations—no specific number of hours being recommended.</th>
<th>Concrete Geometry, 1p. a wk.</th>
<th>Concrete Geometry, 1p. a wk.</th>
<th>Concrete Geometry, 1p. a wk.</th>
<th>Concrete Geometry, 1p. a wk.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Physics, Chemistry, and Astronomy</td>
<td>Study of natural phenomena 5p. a wk. through first eight years by experiments, including physical measurements and the recommendations of Conferences 7 and 9.</td>
<td>Elective Astronomy, 5p. a wk.</td>
<td>Chemistry, 5p. a wk.</td>
<td>Physics, 5p. a wk.</td>
<td></td>
</tr>
<tr>
<td>7. Natural History</td>
<td>Through first eight years 2p. a wk., of not less than 30 minutes each, devoted to plants and animals; the instruction to be correlated with language, drawing, literature, and geography.</td>
<td></td>
<td></td>
<td></td>
<td>One yr. (which yr. not specified) 5p. a wk. for botany or zoology. Halfyr. (late in course) anatomy, physiology, and hygiene, 5p. a wk.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>American History, 5p. a wk.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A special period intensively and civil government, 3p. a wk.</td>
</tr>
<tr>
<td>9. Geography</td>
<td>Time allotted in first eight years to equal that given to number work. The subject—the earth, its environment and inhabitants, including the elements of astronomy, meteorology, zoology, botany, history, commerce, races, religions, and governments.</td>
<td>Physical Geography.</td>
<td></td>
<td></td>
<td>Elective Meteorology, ½ this year or next.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Physiography, geology, or meteorology at some part of the high school course. Possibly more than one of these where election is allowed.)</td>
<td></td>
<td>Elective Meteorology,</td>
<td></td>
</tr>
</tbody>
</table>

*Abbreviations: p. = a recitation period of 40-45 minutes; wk. = week; yr. = year.

Source: Raubinger, Frederick M.; Rowe, Harold G.; Piper, Donald L.; and West, Charles K. The Development of Secondary Education. London: Collier-Macmillan Ltd., 1969, pp. 54-55.
<table>
<thead>
<tr>
<th>1st Secondary School Year</th>
<th>2nd Secondary School Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin .....................</td>
<td>Latin .....................</td>
</tr>
<tr>
<td>5 p.</td>
<td>5 p.</td>
</tr>
<tr>
<td>English Literature, 3 p.</td>
<td>Greek ....................</td>
</tr>
<tr>
<td>Composition, 2 p.</td>
<td>5 p.</td>
</tr>
<tr>
<td>German or French ..........</td>
<td>German ...................</td>
</tr>
<tr>
<td>4 p.</td>
<td>4 p.</td>
</tr>
<tr>
<td>Algebra ...................</td>
<td>French ...................</td>
</tr>
<tr>
<td>5 p.</td>
<td>4 p.</td>
</tr>
<tr>
<td>History ...................</td>
<td>Algebra,* 2½ p.</td>
</tr>
<tr>
<td></td>
<td>Astronomy (12 weeks)</td>
</tr>
<tr>
<td></td>
<td>Botany or Zoology</td>
</tr>
<tr>
<td></td>
<td>History ..................</td>
</tr>
<tr>
<td></td>
<td>37½ p.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Secondary School Year</th>
<th>4th Secondary School Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin .....................</td>
<td>Latin .....................</td>
</tr>
<tr>
<td>5 p.</td>
<td>5 p.</td>
</tr>
<tr>
<td>Greek .....................</td>
<td>Greek ....................</td>
</tr>
<tr>
<td>4 p.</td>
<td>4 p.</td>
</tr>
<tr>
<td>English Literature, 3 p.</td>
<td>English Literature, 3 p.</td>
</tr>
<tr>
<td>&quot; Composition, 1 p.</td>
<td>&quot; Composition, 1 p.</td>
</tr>
<tr>
<td>5 p.</td>
<td>5 p.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>German ...................</td>
<td>German ...................</td>
</tr>
<tr>
<td>4 p.</td>
<td>4 p.</td>
</tr>
<tr>
<td>French ...................</td>
<td>French ...................</td>
</tr>
<tr>
<td>4 p.</td>
<td>4 p.</td>
</tr>
<tr>
<td>2½ p.</td>
<td>½ yr.</td>
</tr>
<tr>
<td>Chemistry ................</td>
<td>Physics ..................</td>
</tr>
<tr>
<td>5 p.</td>
<td>5 p.</td>
</tr>
<tr>
<td>History ...................</td>
<td>Anatomy, Physiology, and</td>
</tr>
<tr>
<td>3 p.</td>
<td>Hygiene ½ yr.</td>
</tr>
<tr>
<td></td>
<td>History ..................</td>
</tr>
<tr>
<td></td>
<td>3 p.</td>
</tr>
<tr>
<td></td>
<td>Geology or Physiography,</td>
</tr>
<tr>
<td></td>
<td>3 p. ½ yr.</td>
</tr>
<tr>
<td></td>
<td>Meteorology, 3 p. ½ yr.</td>
</tr>
<tr>
<td></td>
<td>37¼ p.</td>
</tr>
</tbody>
</table>

* Option of bookkeeping and commercial arithmetic.

### TABLE 5

RECOMMENDATIONS OF THE COMMITTEE OF TEN ON SECONDARY SCHOOL STUDIES—POSSIBLE MODIFICATIONS OF TABLE 4 WHICH ALLOWS FOR A VARIETY OF SECONDARY SCHOOL PROGRAMS

<table>
<thead>
<tr>
<th>1st Secondary School Year</th>
<th>2nd Secondary School Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Literature, 2 p. { Composition, 2 p. } ................ 4 p.</td>
<td>Greek ........................................... 5 p.</td>
</tr>
<tr>
<td>German or French ........................................ 5 p.</td>
<td>English Literature, 2 p. { Composition, 2 p. } ................ 4 p.</td>
</tr>
<tr>
<td>Algebra ........................................... 4 p.</td>
<td>German, continued ........................................ 3 p.</td>
</tr>
<tr>
<td>History of Italy, Spain, and France 3 p.</td>
<td>French, begun ........................................ 5 p.</td>
</tr>
<tr>
<td>Applied Geography (European political—continental and oceanic</td>
<td>Algebra.* 2 p. {</td>
</tr>
<tr>
<td></td>
<td>Botany or Zoology ........................................ 4 p.</td>
</tr>
<tr>
<td></td>
<td>English History to 1688 ........................................ 3 p.</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong> ................................................................ 33 p.</td>
</tr>
<tr>
<td></td>
<td><strong>25 p.</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Secondary School Year</th>
<th>4th Secondary School Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greek ........................................... 4 p.</td>
<td>Greek ........................................... 4 p.</td>
</tr>
<tr>
<td>English Literature, 2 p. { Composition, 1 p. } ................ 4 p.</td>
<td>English Literature, 2 p. { Composition, 1 p. } ................ 4 p.</td>
</tr>
<tr>
<td>German ........................................... 4 p.</td>
<td>German ........................................... 4 p.</td>
</tr>
<tr>
<td>Algebra,* 2 p. {</td>
<td>Trigonometry ........................................ 2 p.</td>
</tr>
<tr>
<td>Geometry, 2 p. {</td>
<td>Higher Algebra ........................................ 4 p.</td>
</tr>
<tr>
<td>History, English and American .................................... 3 p.</td>
<td>History (intensive) and</td>
</tr>
<tr>
<td>Meteorology, 3 p. 2nd ½ yr. {</td>
<td>Geology or Physiography,</td>
</tr>
<tr>
<td></td>
<td>4 p. 1st ½ yr.</td>
</tr>
<tr>
<td></td>
<td>Anatomy, Physiology, and</td>
</tr>
<tr>
<td></td>
<td>Hygiene, 4 p. 2nd ½ yr.</td>
</tr>
</tbody>
</table>

* * Option of bookkeeping and commercial arithmetic.

### TABLE 6

**RECOMMENDATIONS OF THE COMMITTEE OF TEN ON SECONDARY SCHOOL STUDIES—A SUGGESTED PLAN FOR DEVELOPING FOUR SEPARATE "TRACKS" EACH TO BE USED BY STUDENTS HAVING A PARTICULAR INTENTION UPON COMPLETION OF HIGH SCHOOL**

<table>
<thead>
<tr>
<th>Year</th>
<th>Classical</th>
<th>Latin-Scientific</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Three foreign languages (one modern)</td>
<td>Two foreign languages (one modern)</td>
<td>One foreign language (ancient or modern)</td>
</tr>
<tr>
<td>1.</td>
<td>Latin  5 p.</td>
<td>Latin  5 p.</td>
<td>Latin, or German, or French  5 p.</td>
</tr>
<tr>
<td>2.</td>
<td>Latin  5 p.</td>
<td>Latin  5 p.</td>
<td>Latin, or German, or French  5 p.</td>
</tr>
<tr>
<td></td>
<td>German or French begun  4 p.</td>
<td>German or French begun  3 p.</td>
<td>German or French begun  3 p.</td>
</tr>
<tr>
<td></td>
<td>20 p.</td>
<td>20 p.</td>
<td>20 p.</td>
</tr>
<tr>
<td></td>
<td>German or French  4 p.</td>
<td>German or French  3 p.</td>
<td>German or French  3 p.</td>
</tr>
<tr>
<td></td>
<td>20 p.</td>
<td>20 p.</td>
<td>20 p.</td>
</tr>
<tr>
<td></td>
<td>as in Classical 2</td>
<td>as in Classical 2</td>
<td>English  5 p.</td>
</tr>
<tr>
<td></td>
<td>20 p.</td>
<td>20 p.</td>
<td>20 p.</td>
</tr>
</tbody>
</table>

*In some schools in which Greek can be begun taught as a modern language, or in which local public opinion or the history of the school makes it desirable or teach Greek in an integral way, Greek may be substituted for German or French in the second year of the Classical program.

programs proposed by the committee were criticized for their heavy emphasis on college preparation. The report of another committee, the Committee of Fifteen, in 1895 further favored students planning to enter college by shortening the elementary school offering enough to allow algebra to replace much of the seventh- and eighth-grade arithmetic and Latin to take the place of English grammar in the eighth grade. Four years later in 1899, the Committee of Thirteen proposed that a number of constants (four units in foreign languages, two units in mathematics, two in English, one in history, and one in science) be required of all college entrants, and that these programs be supplemented by a number of acceptable electives (Report of the Committee on College-Entrance Requirements 1899, pp. 632-817).

The Committee of Fifteen report did include more than what has already been mentioned. The report tended to view the curriculum of the elementary school entirely in terms of content areas. The first eight years of study emphasized grammar, literature, arithmetic, geography, and history. Of course other areas were included. Students were also expected to spend time on industrial and esthetic drawing, natural science, physiology, hygiene, vocal music, physical culture, algebra, and morals. It was not a program that took individual differences into account and was criticized by some as being a defense of the status quo (Butts and Cremin 1953, p. 384). The discussions of these N E A Committees led the way for numerous proposals during early years of the twentieth century. Basically, they suggested that there be a shift from eight years of elementary school to one six years in length and a six-year secondary school. These proposals allowed for more
vocational differentiation and preparation during the last two years of secondary school. A standing committee of N E A appointed in 1905 and reporting in 1907, 1908, and 1909, supported this concept (Butts and Cremin 1953, p. 392). In 1912 the Committee on Economy of Time in Education, appointed by N E A, supported the six-year high school and suggested that the six-year period be separated into three years of "junior high" and three years of "senior high" (Brubacher 1966, p. 418). This period of time also witnessed the establishment of regional accrediting agencies like the North Central Association of Colleges and Secondary Schools founded in 1895. The need for and results of such associations are noted by Callahan (1961).

These associations grew out of the need for some means of standardizing the programs and evaluating the many schools that were opening. As a result, if a high school met certain standards set up by the Association it received a rating, which meant that it would be recognized and that the work its students took would be accepted at other schools and colleges (p. 135).

While the time period covered by this chapter can be characterized by the emphasis on standards and the desirability and undesirability of uniformity, the "tone" of the time can be appreciated by the criticisms and evaluations of the schools voiced by persons of that time in history. Huling (1891b) in an article in Educational Review discussed the aim of the high school and in his opinion one of its weaknesses.

The High School, to the great mass of its pupils, will of necessity be the completion of their education. There are seldom to be found more than ten per cent, in any one year, who enter with the purpose of continuing their studies beyond the High School; and the proportion of such is usually much smaller. The chief work of the High School, therefore, must
be to give the mass of its students the best preparation it can for the duties of life, and this without regard to requirements for admission to higher institutions. If, as some contend, the course best for those who intend to continue their studies through college is also best for those who drop out at any given point, then the main work of the High School will be the best preparation for higher institutions. This opinion, however, is not generally acted upon in the arrangement of High School courses (p. 123).

The N E A committees previously mentioned addressed this issue in the next few years. Three years after the Committee of Ten Report, Hervey (1896) suggested a revision of the Committee's recommendations for a program of studies (Table 7) that allowed for local conditions. He briefly summarized those revisions.

The introduction of the manual-training course, preparatory to institutes of technology, mines, etc.; the offering to two courses, each containing three foreign languages; the provision of some form of manual training and drawing in each course; and the including of physical training in the total of each year's work (p. 84).

The need for manual training was further emphasized four months later by Hyde (1896) in the same publication by saying "manual training is an essential feature of the social mission of the common schools" (p. 227). Two months later Hanus (1896) of Harvard listed what he interpreted the special aims of elementary education to be.

1. To nourish the mind of the child through a course of study which should comprise an orderly presentation of the whole field of knowledge in its elements, and thus acquaint the pupil with the world in which he lives and the civilization into which he is born, and of his own relations to them, including his duties and his privileges; and thus to provide the opportunity for the exercise of all the child's powers—
## TABLE 7

**PROPOSED COURSES OF STUDY FOR HORACE MANN HIGH SCHOOL AND MARY MANUAL-TRAINING HIGH SCHOOL (1896)**

<table>
<thead>
<tr>
<th>MANUAI TRAINING</th>
<th>GENERAL</th>
<th>CLASSICAL, WITHOUT GREEK</th>
<th>CLASSICAL, WITH GREEK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>History, Science, and Modern Language in Each Year</td>
<td>Three Foreign Languages (Two Modern)</td>
<td>Three Foreign Languages (One Modern)</td>
</tr>
<tr>
<td></td>
<td>FIRST YEAR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 English.........</td>
<td>4</td>
<td>English...........</td>
<td>4</td>
</tr>
<tr>
<td>1 Mathematics......</td>
<td>4</td>
<td>Mathematics.....</td>
<td>4</td>
</tr>
<tr>
<td>1 History..........</td>
<td>4</td>
<td>History.........</td>
<td>4</td>
</tr>
<tr>
<td>1 Science.........</td>
<td>4</td>
<td>Science........</td>
<td>4</td>
</tr>
<tr>
<td>1 Drawing.........</td>
<td>2</td>
<td>Drawing.........</td>
<td>2</td>
</tr>
<tr>
<td>1 French..........</td>
<td>3</td>
<td>French.........</td>
<td>3</td>
</tr>
<tr>
<td>1 German...........</td>
<td>1</td>
<td>German.........</td>
<td>1</td>
</tr>
<tr>
<td>1 Manual Training..</td>
<td>6</td>
<td>Physical Training.:</td>
<td>2</td>
</tr>
<tr>
<td>1 Physical Training.</td>
<td>2</td>
<td>Physical Training.:</td>
<td>2</td>
</tr>
<tr>
<td>Net................</td>
<td>30</td>
<td>Net.............</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>SECOND YEAR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 English.........</td>
<td>3</td>
<td>English...........</td>
<td>3</td>
</tr>
<tr>
<td>2 Mathematics......</td>
<td>4</td>
<td>Mathematics.....</td>
<td>4</td>
</tr>
<tr>
<td>2 History (or German)</td>
<td>1</td>
<td>History (or German)</td>
<td>1</td>
</tr>
<tr>
<td>2 Science.........</td>
<td>3</td>
<td>Science........</td>
<td>3</td>
</tr>
<tr>
<td>2 Drawing.........</td>
<td>4</td>
<td>Drawing.........</td>
<td>4</td>
</tr>
<tr>
<td>2 French...........</td>
<td>3</td>
<td>French.........</td>
<td>3</td>
</tr>
<tr>
<td>2 Manual Training..</td>
<td>2</td>
<td>Physical Training.:</td>
<td>2</td>
</tr>
<tr>
<td>2 Physical Training.</td>
<td>2</td>
<td>Physical Training.:</td>
<td>2</td>
</tr>
<tr>
<td>Net................</td>
<td>27</td>
<td>Net.............</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>THIRD YEAR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 English.........</td>
<td>3</td>
<td>English...........</td>
<td>3</td>
</tr>
<tr>
<td>3 Mathematics......</td>
<td>3</td>
<td>Mathematics.....</td>
<td>3</td>
</tr>
<tr>
<td>3 History..........</td>
<td>3</td>
<td>Latin.........</td>
<td>3</td>
</tr>
<tr>
<td>3 Science.........</td>
<td>3</td>
<td>Science........</td>
<td>3</td>
</tr>
<tr>
<td>3 Drawing.........</td>
<td>4</td>
<td>Drawing.........</td>
<td>4</td>
</tr>
<tr>
<td>3 French...........</td>
<td>2</td>
<td>French.........</td>
<td>2</td>
</tr>
<tr>
<td>3 Manual Training..</td>
<td>2</td>
<td>Physical Training.:</td>
<td>2</td>
</tr>
<tr>
<td>3 Physical Training.</td>
<td>2</td>
<td>Physical Training.:</td>
<td>2</td>
</tr>
<tr>
<td>Net................</td>
<td>22</td>
<td>Net.............</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>FOURTH YEAR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 English.........</td>
<td>3</td>
<td>English...........</td>
<td>3</td>
</tr>
<tr>
<td>4 History..........</td>
<td>3</td>
<td>History.........</td>
<td>3</td>
</tr>
<tr>
<td>4 Science.........</td>
<td>3</td>
<td>Latin.........</td>
<td>3</td>
</tr>
<tr>
<td>4 French (or German)</td>
<td>3</td>
<td>French (or German)</td>
<td>3</td>
</tr>
<tr>
<td>4 Physical Training.</td>
<td>2</td>
<td>Physical Training.:</td>
<td>2</td>
</tr>
<tr>
<td>Net................</td>
<td>22</td>
<td>Net.............</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>SUMMARY</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Years</td>
<td>Periods</td>
<td>Years</td>
</tr>
<tr>
<td>English...........</td>
<td>4</td>
<td>13</td>
<td>English...........</td>
</tr>
<tr>
<td>Mathematics......</td>
<td>2</td>
<td>8</td>
<td>Mathematics......</td>
</tr>
<tr>
<td>History..........</td>
<td>3</td>
<td>13</td>
<td>History..........</td>
</tr>
<tr>
<td>Science.........</td>
<td>4</td>
<td>16</td>
<td>Science.........</td>
</tr>
<tr>
<td>French..........</td>
<td>2</td>
<td>14</td>
<td>French..........</td>
</tr>
<tr>
<td>German...........</td>
<td>2</td>
<td>16</td>
<td>German...........</td>
</tr>
<tr>
<td>Drawing.........</td>
<td>1</td>
<td>16</td>
<td>Drawing.........</td>
</tr>
<tr>
<td>Physical Training.</td>
<td>4</td>
<td>56</td>
<td>Physical Training.</td>
</tr>
</tbody>
</table>

mental or moral, aesthetic, manual or constructive—through good instruction and wise discipline.

2. To guard and promote his normal physical development (p. 448).

He continued by listing the aims of secondary education as well.

1. To discover and systematically to develop a human being's interests and capacities—intellectual, moral, aesthetic, manual or constructive.

2. With constant regard to the progress of this discovery to so direct his development as gradually to emancipate him from external restraint and guidance, in order to render him, as far as possible, self-directing, i.e., physically, mentally, morally stable, alert, vigorous, and active.

3. To enable the youth to realize that he owes a duty to society as well as to himself; and hence that the prizes of life—namely, wealth, leisure, honor—in order to possess lasting worth in his own estimation and in the estimation of his fellow-men, must be earned; or when inherited, as they sometimes are, that they must be deserved; that, in short, man's highest and most permanent ideal is service (pp. 448-449).

At the turn of the century Seaver (1900) wrote of the high school of the twentieth century and suggested it would be a "school for the development of individuality" (p. 153). He further predicted that "complaints of overwork will be heard no more; for . . . emulation, striving for high rank, and struggling with too many or too hard lessons to escape loss of promotion or loss of diploma will have no place" (p. 159).

In 1901, Katharine Shute, from the Boston Normal School, identified what she felt were two fundamental criticisms of schools that have their origin in the unsatisfied ideal of America's society. The two were "... schools, as compared with the schools of the past, are producing weak-willed men and women, persons who shirk responsibility, who avoid difficulties, who do not know the joy of overcoming obstacles" and
Jacobs (1901) attempted to describe what he thought people expected of their schools and listed the following: a multiplicity of studies adapted to the needs of the individual; a more thorough approach to studies, particularly in English; a scholarly graduate; all studying to be done in school; and, that schools become institutions of education rather than institutions of instruction (pp. 448-458). Dewey (1901) suggested in an article in Educational Review that it is difficult to determine what people expect of the schools because they want very diverse things--some that are contradictory (p. 459). He then made an important observation concerning the obligation of the school in this dilemma.

The schools are not doing, and cannot do, what the people want until there is more unity, more definiteness, in the community's consciousness of its own needs; but it is the business of the school to forward this conception, to help the people to a clearer and more systematic idea of what the underlying needs of modern life are, and of how they are really to be supplied (p. 460).

Andrews (1901) reports that in 1901 some people were crying, "Back to the schools of the fathers," and warned against such requests that completely ignore the many shortcomings of the "old school" in manner similar to present-day debates over the "Back to Basics" (p. 258). In June, 1905, in the "News and Notes" section of the Educational Review, the New York Principals' Club's view on the return to the three R's is printed.

1. That they are a survival of a period when the industrial development of modern life was unknown, and they do not recognize these modern changes.
2. That when taught exclusively they degenerate into a vicious set of drills, in which provision is made for the smallest and least significant part of the child's activities.

3. That as they lack content they make no provision for any other than a purely intellectual training; aside from the influence of school and teacher, there is nothing in a knowledge of the three R's which has any real emotional or ethical influence. This would be impossible under a modern course of study.

4. That all the abuses of elementary methods have arisen from an exclusive three-R course.

5. That the leading exponents of educational science and method, including the trend of philosophic thought of the great master minds, are agreed on the evils of a system of instruction which concerns itself with words rather than things, with form rather than content.

6. That "fads and frills" give content to the course of study, give opportunity for the natural development of children's minds, supply in outline what is really the best and most truly useful knowledge, allow for ethical and emotional training, and in certain branches care for the health and physical well-being of the child (p. 107).

William H. Maxwell, superintendent of schools in New York in 1904, listed what he felt were the generally accepted expectations for the schools.

1. The public schools should provide such an education that the opportunities of all citizens to make a living and to lead happy and prosperous lives shall be equal, as far as education can make them equal.

2. The public schools should provide the highest quality of education, not only for the purpose of equalizing the opportunities of all, but in order that there may be a "perpetual succession of superior minds, by whom knowledge is advanced, and the community urged forward in civilization. . . ."

3. The school, as distinguished from the college, provides training for childhood and youth. . . .

4. The state should require that the primary elements and means of knowledge should be taught to all children.

5. The school should provide training for the body as well as for the mind. . . .

6. The intellectual training given in the schools involves, in the first place, the adjustment of the mind to its spiritual environment thru gaining some knowledge of the intellectual inheritances of the race, and, in the second
place, the development of the qualities of industry, energy, helpfulness, and devotion to duty—qualities necessary both to individual and to social progress (pp. 378-379).

Smith, superintendent of schools in Auburn, Maine, while addressing the N E A National Convention in 1907, spoke about the "defects" of the schools and mentioned the following: failure to meet individual needs; uniformity that does not allow for local differences; too much school work required of students; and the "... failure to inculcate in children the liking and the power for work" (pp. 173-181). In July of 1910, James Joyner, the president of N E A, speaking before its convention identified what he felt were "some dominant tendencies in American education." He suggested the most marked tendencies were: the growth in demand for vocational education (he warned against having separate vocational schools which caused students to be separated into "peasant" and "special" classes); the encouragement of otiosity; and increased emphasis on moral education; and the growth of the altruistic spirit. One last example will suggest that not all were satisfied with schools in 1914. Collins (1914) writing in the Educational Review spoke critically of American education and its students. In his article he quotes Superintendent J. M. Greenwood, of Kansas City.

Our present system of education has produced a luxuriant crop of spineless and animated nobodies, because the children of this country are not taught to work. Clearness, distinctness, and persistence in knowing and thinking are lost attributes in our methods of study and discipline... the contention is that instead of the children being put to work in the elementary schools, they fritter their time away in useless diversions, virtually playing at school and dealing with inane platitudes which lead to educational bankruptcy (pp. 393-394).
Collins (1914) continues by quoting the editor of the *Sunday School Teachers' Periodical*.

The demand today is that all things shall be made easy. Even the whims of the children must be gratified. The teacher must always make the lessons so interesting that it will not task the pupils to listen to them, and so simple that it will not require any effort to understand them. It is thought unreasonable to expect pupils to do any hard thinking for themselves (p. 394).

Criticizing the new emphasis on pupil hygiene, Collins (1914) quotes from a letter written by a Mrs. Comer and published in *Atlantic Monthly*.

... people nowadays are growing very particular about Tom's and Mary's tonsils and teeth but are paying very little attention to the mental rickets and curvature of the soul that they are contacting (p. 395).

Collins (1914) continues by paraphrasing another part of Mrs. Comer's letter.

She says what is apparent to everyone that the rising generation is thirstily avid for pleasure, and that it is so keen in its desire for it. Moving picture shows and vaudeville performances satisfy it no matter how stupid, inane, and drivel they may be (p. 395).

It is apparent that the societal expectations for schools from 1890 to 1915 sometimes were in conflict. The calls for schools to treat students as individuals were answered with demands that students be made to work like students did in "the old school." While schools were asked to prepare pupils for life, a debate continued over how vocational and manual training should be offered to students. John Dewey appears to have been correct when he suggested Americans were not unified in their expectations of schools. In spite of the ambiguity that existed over
"what schools should be doing," continued emphasis was being placed on vocational education, social hygiene, and concern for the student as an individual. The latter had support from some of America's most respected spokesmen which included Stanley Hall, William James, and John Dewey. Dewey became the most articulate and the most influential of a host of educational reformers who lived during the early part of the twentieth century.

Colonel Francis Parker, perhaps more than any one man, laid the groundwork for Dewey and others who were to become identified with the "progressive" movement in American education. As superintendent of schools in Quincy, Massachusetts during the 1870's, he employed some of Froebel's principles and concentrated the work of the elementary school on self-expression, particularly in the forms of reading and writing. His efforts became known as the "Quincy Experiments" and supported the concept that the center of the educational process was not objects of nature but the child. An interesting account of the work of Parker at Quincy can be read in The "Quincy Methods" Illustrated, written by Lelia E. Patridge, who went to Quincy and saw the methods being used. Parker later moved to Chicago and became principal of the Cook County Normal School in that city; it is interesting to note that this is one of the schools Rice visited and evaluated highly (Rice 1893, p. 168). Parker later became involved with the School of Education of the University of Chicago. It was at the University of Chicago in 1896 that Dewey established an experimental school and borrowed heavily from Parker's philosophy of education. A discussion of Dewey's contributions to education are beyond the scope of this study, but it is important to say
that his influence on elementary education was monumental. He suggested that the work of the traditional school was often far removed from the experience of the student and therefore meaningless, and often resulted in mere verbalization, which appeared to be real learning but was really not. He felt the child's interests and purposes should be respected and the curriculum of the school adapted to them instead of the other way around (Callahan 1961, pp. 137-138). Dewey was a forthright critic of the education of his time and especially of formalism and rote learning.

How many students were rendered callous to ideas, and how many lost the impetus to learn because of the way in which learning was experienced by them? How many acquired special skills by means of automatic drill so that their power of judgment and capacity to act intelligently in new situations was limited? How many came to associate the learning process with ennui and boredom? How many found what they did so foreign to the situations of life outside the school as to give them no power of control over the latter? How many came to associate books with dull drudgery, so that they were "conditioned" to all but flashy reading matter (Dewey 1938, p. 15)?

These ideas, and others like them, were the basis of progressive education that gained wide acceptance and will be discussed in the next chapter.

Even though more and more attacks were being made on the traditional conceptions of human nature and learning, strict mental discipline and religious-moral development remained the most important aims of American education throughout the time period covered by this chapter. It is understandable, then, that the intellectual activities which people thought would achieve these objectives continued to be the primary emphasis in the courses of study. Butts and Cremin (1953) describe the view of most educators of this time.
... in the minds of most educators, the good citizen was the man who could read and write, whose mind had been disciplined, and who had received appropriate character education (p. 433).

Make-up of the School Population

The last decade of the nineteenth century and the early years of the twentieth were years which witnessed a great increase in the number of students attending school. While some of the increase certainly can be attributed to the increase in population—from nearly 63 million in 1890 to over 100 million by 1920—other factors such as compulsory education laws, continued interest in the education of non-white students, and a new emphasis on the education of "exceptional" children contributed as well.

The most obvious results of this increase were the growth of the school systems and, consequently, the decline of the illiteracy rate. Graham (1974) in her book, Community and Class in American Education, 1865-1918, reports that the illiteracy rate in 1870 for persons over ten years of age was nearly 20 percent. However, this rate fell nearly three percent each decade so that by 1910 the illiteracy rate for the whole nation was 7.7 percent (p. 13). It should be pointed out, however, that the rates varied greatly from one section of the country to another. Blacks in 1910 had a rate of 30.4 percent and the white foreign-born illiteracy rate was 12.7 percent (p. 13). The most positive of all the literacy figures Graham (1974) reports were those of the children of immigrants. In 1910, the illiteracy rate for white persons, one or both of whose parents were foreign born, was only 1.1 percent. This group constituted the most literate segment of the population (pp. 13-14).
The great variance in these rates makes it apparent that there was a wide discrepancy in educational opportunity available during the early years of the new century. This fact is given further support by the data reported by Graham (1974) in the form of the following chart indicating the percentage of children ages six to fourteen attending school in 1910.

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>New England Region</td>
<td>91.9</td>
</tr>
<tr>
<td>Middle Atlantic Region</td>
<td>88.4</td>
</tr>
<tr>
<td>East North Central Region</td>
<td>89.1</td>
</tr>
<tr>
<td>West North Central Region</td>
<td>87.5</td>
</tr>
<tr>
<td>South Atlantic Region</td>
<td>70.3</td>
</tr>
<tr>
<td>East South Central Region</td>
<td>70.2</td>
</tr>
<tr>
<td>West South Central Region</td>
<td>69.3</td>
</tr>
<tr>
<td>Mountain Region</td>
<td>81.7</td>
</tr>
<tr>
<td>Pacific Region</td>
<td>86.3</td>
</tr>
</tbody>
</table>

(p. 15)

More than one-half of the children lived in the first four regions and nearly 90 percent of these children attended school. However, in the South, where more than one-third of the children lived and where almost all of the black children lived, only about 70 percent were enrolled (p. 15).

In 1890 the total enrollment in elementary and secondary day schools was 12,722,581, representing 68.6 percent of the population five to seventeen years old. Of this number, 12,529,618 were enrolled in grades K-8. By 1915, 74.6 percent of the population five to seventeen years old were enrolled, and the high school enrollment had increased to nearly six times what it was in 1890 (Table 2, page 53). The writer has already pointed out that the region of the country was a factor in enrollment, but so were race and sex. In 1890, 58.5 percent of all white boys were attending school, while only 31.8 percent of non-white
boys were. During the same time, 57.2 percent of all white girls were
being schooled, but only 33.9 percent of the non-white girls. Three
decades later these percentages were to change to: white boys, 65.5
percent; non-white boys, 52.5 percent; white girls, 65.8 percent; and
non-white girls, 54.5 percent (Table 1, page 42).

Another matter must be examined in order to better understand the
school population during the period covered by this chapter. Concern
and some criticism was voiced over the large number of children who
left elementary school without finishing the course. Statistical
information is difficult to obtain and not very reliable, but Krug
(1969) maintains that "The high school had its dropouts by the thousands,
the elementary school by the tens of thousands" (p. 96). Table 2, page
53, shows that the percent of average daily attendance for all students
in 1890 was only 67 percent and by 1915 had risen to only 74 percent.
Compulsory-attendance laws were not uniform from state to state and
often were not well enforced. Furthermore, it was 1918 before all
states had adopted some form of compulsory school attendance law. Table
8, page 82, reports on the school attendance laws that had been adopted
by 1890. In an article in the June Educational Review Parsons (1903)
indicates that several states had changed their attendance laws by
raising the age limit and the total number of attendance days required
(p. 23). It is important to note that compulsory attendance laws pertained
to white students almost exclusively. Some concern however, was
being expressed about this fact. Nellis (1901), the superintendent of
the Sac and Fox Indian School in Iowa, was one example. He maintained
that compulsory attendance laws should also apply to Indian children
### TABLE 8

**LAWS RELATING TO SCHOOL ATTENDANCE IN THE UNITED STATES (1889)**

<table>
<thead>
<tr>
<th>States and Territories</th>
<th>Sum of Required Year</th>
<th>Amount of Schooling</th>
<th>Officers Charged with Enforcement of Law</th>
<th>Penalty on Failure upon Conviction</th>
<th>Centuries of Trustee</th>
<th>Provision for Poor Children</th>
<th>Hours, Term, and Studies to Be Same as in Public Schools and Teaching in English Language</th>
<th>Amount of Such Schooling</th>
<th>Requirements of School</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>8-14</td>
<td>2-3rd of term</td>
<td>Clerk of board of education or district trustees</td>
<td>Fine of not more than $50 and costs for first offense, and $5 to $50 and costs for each subsequent offense.</td>
<td>Institutions of instruction or correction, or State reform school.</td>
<td>Clothing</td>
<td>Under 14; 12 weeks each year.</td>
<td>8-14</td>
<td>&quot;Competent instructors.&quot;</td>
</tr>
<tr>
<td>Colorado</td>
<td>8-14</td>
<td>12 weeks</td>
<td>Any school director.</td>
<td>Fine of $5 for each week's failure to comply with law.</td>
<td>Institutions of instruction or correction, or State reform school.</td>
<td>Free textbooks</td>
<td>13 13-14; 12 weeks, preceding year.</td>
<td>8-14</td>
<td>&quot;Competent instructors.&quot;</td>
</tr>
<tr>
<td>Connecticut</td>
<td>8-16</td>
<td>While schools are in session</td>
<td>Truant officers.</td>
<td>Fine of $1 to $5 for each week's failure to comply with law.</td>
<td>Institutions of instruction or correction, or State reform school.</td>
<td>Free textbooks</td>
<td>13 13-14; 12 weeks, preceding year.</td>
<td>8-14</td>
<td>&quot;Competent instructors.&quot;</td>
</tr>
<tr>
<td>Dist. of Columbia</td>
<td>8-14</td>
<td>12 weeks</td>
<td>School trustees.</td>
<td>Fine of $5 to $30 for first and $5 to $50 for each subsequent offense.</td>
<td>Institutions of instruction or correction, or State reform school.</td>
<td>Free textbooks</td>
<td>13 13-14; 12 weeks, preceding year.</td>
<td>8-14</td>
<td>&quot;Competent instructors.&quot;</td>
</tr>
<tr>
<td>Idaho</td>
<td>8-14</td>
<td>12 weeks</td>
<td>Truant officers.</td>
<td>Fine of $1 to $5 for each week's failure to comply with law.</td>
<td>Institutions of instruction or correction, or State reform school.</td>
<td>Free textbooks</td>
<td>13 13-14; 12 weeks, preceding year.</td>
<td>8-14</td>
<td>&quot;Competent instructors.&quot;</td>
</tr>
<tr>
<td>Illinois</td>
<td>7-14</td>
<td>12 weeks</td>
<td>Truant officers appointed by boards of education and school directors.</td>
<td>Fine of $5 to $30 for first and $5 to $50 for each subsequent offense.</td>
<td>Institutions of instruction or correction, or State reform school.</td>
<td>Free textbooks</td>
<td>13 13-14; 12 weeks, preceding year.</td>
<td>8-14</td>
<td>&quot;Competent instructors.&quot;</td>
</tr>
<tr>
<td>Kansas</td>
<td>8-14</td>
<td>12 weeks</td>
<td>School directors and presidents of boards of education.</td>
<td>Fine of $1 to $50 for each week's failure to comply with law.</td>
<td>Institutions of instruction or correction, or State reform school.</td>
<td>Free textbooks</td>
<td>13 13-14; 12 weeks, preceding year.</td>
<td>8-14</td>
<td>&quot;Competent instructors.&quot;</td>
</tr>
<tr>
<td>Maine</td>
<td>8-14</td>
<td>12 weeks</td>
<td>Truant officers.</td>
<td>Fine of not more than $30.</td>
<td>Institutions of instruction and county truant schools.</td>
<td>Free textbooks</td>
<td>13 13-14; 12 weeks, preceding year.</td>
<td>8-14</td>
<td>&quot;Competent instructors.&quot;</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>8-14</td>
<td>30 weeks if schools are kept, otherwise so.</td>
<td>Truant officers and school committees.</td>
<td>Fine of not more than $30.</td>
<td>Institutions of instruction and county truant schools.</td>
<td>Free textbooks</td>
<td>13 13-14; 12 weeks, preceding year.</td>
<td>8-14</td>
<td>&quot;Competent instructors.&quot;</td>
</tr>
<tr>
<td>Michigan</td>
<td>8-14</td>
<td>4 months</td>
<td>Truant officers and school boards.</td>
<td>Fine of $5 to $30 for each week's failure to comply with law.</td>
<td>Institutions of instruction and county truant schools.</td>
<td>Free textbooks</td>
<td>13 13-14; 12 weeks, preceding year.</td>
<td>8-14</td>
<td>&quot;Competent instructors.&quot;</td>
</tr>
<tr>
<td>Minnesota</td>
<td>8-14</td>
<td>10 weeks</td>
<td>School directors and presidents of boards of education.</td>
<td>Fine of $10 to $15 for first and $10 to $50 for each subsequent offense.</td>
<td>Institutions of instruction and county truant schools.</td>
<td>Free textbooks</td>
<td>13 13-14; 12 weeks, preceding year.</td>
<td>8-14</td>
<td>&quot;Competent instructors.&quot;</td>
</tr>
<tr>
<td>State</td>
<td>Weeks</td>
<td>School Directors, presidents of boards of education, School trustees, School committees and boards of education.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Montana</td>
<td>8-14 12</td>
<td>Fine as in Kansas, with alternative of 90 days in country jail.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nebraska</td>
<td>8-14 12</td>
<td>Fine of $10 to $100, or imprisonment up to 30 days in jail.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nevada</td>
<td>8-14 16</td>
<td>Free text-books.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Hampshire</td>
<td>8-14 12</td>
<td>Fine of not more than $10 for first, and $20 for each subsequent offense.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Jersey</td>
<td>7-12 20</td>
<td>Police and constables.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Mexico</td>
<td>7-12 3</td>
<td>School directors.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York</td>
<td>8-14 14</td>
<td>Trustees of school districts, presidents of unions, or officers designated by boards of education.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Dakota</td>
<td>8-14 12</td>
<td>President of school boards and boards of education.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>8-14 12</td>
<td>Truant officers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>8-14 12</td>
<td>School directors and clerk of school districts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhode Island</td>
<td>7-15 12</td>
<td>Truant officers appointed by town or city government.</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Dakota</td>
<td>8-14 12</td>
<td>Presidents of school boards.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utah</td>
<td>9-14 16</td>
<td>School trustees and presidents of boards of education to inquire into cases of neglect of duty.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vermont</td>
<td>8-14 30</td>
<td>Consider the case of neglect of duty.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washington</td>
<td>8-15 3</td>
<td>School directors, presidents of boards of education, or truant officers appointed by such boards.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wisconsin</td>
<td>7-13 12</td>
<td>County superintendents of schools.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wyoming</td>
<td>7-16 3</td>
<td>Free text-books and clothing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For children under 16, 12 weeks; under 14, 6 months, or whole time school was kept; under 12, whole time kept.

because for various reasons the parents of these children were not encouraging their children to attend school (pp. 923-924). The Negro situation was somewhat different. Generally speaking, where schools were supplied for the black children they were well attended. Booker T. Washington, the famous black principal of the Tuskegee Institute in Alabama, when asked in 1908 if he advocated compulsory education for his race responded negatively.

That is not necessary; the Negro hasn't advanced that far in American Civilization. Open a schoolroom any day and he will fill it. Open another and he will fill that. He honors teachers and schoolhouses and long terms and a chance to educate himself in the American fashion (p. 91).

Bartholomew (1890) of Kentucky, responding to an address on Negro education, expressed a view held by many white people, particularly those in the South.

Mr. President, I do not think that equality of rights necessarily means identity of rights. When the Negroes are supplied with comfortable schoolhouses, a proper course of instruction, the necessary apparatus for illustration of the same, and qualified teachers, then the requirements of the Constitution of the United States are fully met. This is accepted by both whites and blacks, as far as I know. The schools for the races are separate. As has been said many times during this meeting, we must consider our environments. The colored schools are progressing, and the colored people are satisfied (p. 515).

The fact still remained that even when schools were supplied for students as a whole many were failing to complete high school. Huling (1900) in an article in the Educational Review identified what he had found were the reasons for failures in the first year of the high school.
1. Deficient preparation in the earlier schools,
2. Lack of proper habits of study in view of the demands of high-school life,
3. Lack of interest in the specific work which the pupil has to do,
4. The state of mind in a pupil which teachers, when speaking freely, generally call laziness,
5. Infibled condition of health,
6. Dullness in the pupil (pp. 463-474).

Another study, on a topic similar to Huling's, was done by Stratton Brooks in 1903. Based on data collected from 111 superintendents, he listed twelve causes of withdrawal from school. These results reported in percentages in Table 9 seemed to be important.

He identified that most girls withdrew from school because of "ill health," while most boys, as well as a large number of girls, withdrew "to work." Brooks (1903) concluded that while most of the boys left school to go to work, he felt he had reason to believe that most did so not because of a need for money, but because they had "... an inner stirring towards a more active and vigorous life" (p. 378). This was not true for girls. Evidence from the study indicated to Brooks that if "leaving to work" was the cause for a girl to leave school, it generally was because it was financially necessary. Brooks does point out that the reason more girls did not leave school was that few jobs were available to them (p. 379).

Child labor legislation during the early part of the twentieth century had greatly improved the labor conditions for children. However, much remained to be done. Butts and Cremin (1953) report that in spite of such legislation a growing number of children were working, often slaving, in shops and factories for long hours and very low wages.
### TABLE 9

**CAUSES OF WITHDRAWAL FROM HIGH SCHOOL (1903)**

<table>
<thead>
<tr>
<th></th>
<th>BOYS</th>
<th></th>
<th>GIRLS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grades</td>
<td>High School</td>
<td>Total</td>
<td>Grades</td>
</tr>
<tr>
<td>1. Ill health</td>
<td>9</td>
<td>5</td>
<td>8</td>
<td>36</td>
</tr>
<tr>
<td>2. To work</td>
<td>51</td>
<td>37</td>
<td>46</td>
<td>32</td>
</tr>
<tr>
<td>3. Desire for activity</td>
<td>4</td>
<td>9</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>4. Indifference</td>
<td>9</td>
<td>12</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>5. Home influence</td>
<td>8</td>
<td>1</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>6. Failure in work</td>
<td>6</td>
<td>11</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>7. Truancy</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>8. Bad conduct</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>9. To attend other schools</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. Dislike for authority</td>
<td>2</td>
<td>11</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>11. Bad habits</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>12. Society</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note: Numerals are percentages.*


They point out that the census of 1920 reported that a million children from the ages of ten to fifteen were gainfully employed (p. 415).

While many children were being disadvantaged by the nature of their labor, it would be very unfair to insinuate that there were not positive and sincere efforts being made by society to meet the educational needs of children. Kindergartens had continued to flourish since their beginning and by 1918 had become clearly accepted as the first step in education. Perhaps more significant was the concern shown for the child
needing special education or concern for the "defectives" as they were often then called. As was noted in the previous chapter, the first school for the deaf was founded in 1816 and had constituted the first real step in recognizing that children with "special problems" could be educated. It was not until 1900, however, that the American populace began to recognize their obligation to special students. The first tax-supported school for crippled children was begun in Chicago in 1900 and the first state school in Massachusetts in 1904. In 1908, New York City founded the first public school class in speech correction (Atkinson and Meleska 1964, p. 149). Progress of this type prompted Frederick Bolton to proclaim in 1912 that special education had begun in the public school but it was only the beginning.

But only in the last decade has the problem ... (public education of exceptional children) ... come to be regarded in any way as an integral part of public school education, to be provided for out of public school funds and managed by regular city and state boards of education. So rare is it yet, that most persons could not name any cities and states where the more enlightened view has been taken (p. 63).

Steps toward concern for children as persons and mass education were slowly but surely being made.

Assessment of Student Learning

Education during the years from 1890 to 1915, in many ways, is characterized by the criticism voiced toward it and the attempts to respond to this criticism by: setting standards; examining the worth of uniformity; placing new emphasis on vocational education and social hygiene; a continued emphasis on moral education; and, just as important-
ly, attempting to assess the achievement of students using large samples and a statistical basis.

By 1890, written examinations were widely used in the classrooms. For the reasons discussed in the last chapter, oral examinations were virtually a thing of the past. Some written examinations were still being used as the determining factor in promotion of students from one grade to another, but even this practice, particularly in the leading cities, was looked upon with less and less favor. Prince (1898) writing in the *Educational Review* noted that "the written examination as the sole means of ascertaining the pupils' fitness for promotion seems to be passing away" (p. 232). While this use of examinations was becoming less frequent, the debate over the use and abuse of examinations, started in the middle of the nineteenth century, was continuing. In 1890 Maxwell, speaking before the N E A, argued eloquently that examinations, even for promotional purposes, if properly used were legitimate (pp. 127-141). Concerns, however, were being expressed about variance in grading of examinations among teachers, the lack of individuality that examinations allowed, and such evils as cramming. Eliot (1893b), three years earlier in 1892, had spoken before the N E A and complained about the way individual differences were suppressed by the system of grading and promotion (pp. 82-95). Perhaps this was inevitable when one considers that grading was originally suggested so that the teacher would be faced by pupils of similar age and scholastic attainment. It is logical to expect, therefore, that the teacher's efforts would be directed at the students as a whole and promotions made in grade lots using some uniform standard (Brubacher 1966, p. 377). Bright (1895) commented on
cramming by insisting that "cramming for examination is the most vicious of all school practices" (p. 275). But it was the "Age of Standard" and even though examinations were sometimes badly used, it was generally accepted that some method must be used to evaluate the progress of the student and even teacher effectiveness. The careful construction of standards and a method of evaluating to see if the standards had been reached were seen as important. Bagley (1912), addressing the elementary department of NEA, pointed out some important needs for such standards. The standards: provide the teacher with a definite goal; provide incentive for the student; help identify weaknesses in teaching; provide a way to test new methods; allow the efficiency of a system to be determined more accurately (p. 634).

The assessment of student learning in America entered a new era in 1897. The step was precipitated almost naively by a person this writer has already introduced, Joseph Rice. His articles in The Forum in the early 1890's had created a great deal of controversy, but by 1894 it had begun to die down (Cremin 1961, p. 7). He, however, began again to write in The Forum. Rice believed the elementary curriculum could be enriched by students being exposed to more than just the "basics," but he realized that instruction in the three R's alone demanded about 70 percent of the school time. He suggested that if the time were properly used, as little as 35 percent would be needed (Rice 1897a, p. 538). He based his feelings on observations made during his 1892 school visits, but he sensed more than "feelings" would have to be supplied to support his position. In 1894 he developed the concept of the comparative achievement test, and beginning in February of 1895 and
over a period of sixteen months, he gathered data from spelling achievement tests given to nearly 33,000 children (Rice 1897b, p. 164). The results published in The Forum again embroiled him in controversy. He maintained the data he had collected showed: students attending "progressive" schools did as well on the test as students attending "mechanical schools"; culture of parents was not significant in determining test scores; influence of environment appeared insignificant; the amount of time spent each day in the classroom on spelling or the methods used did not appear to be significant; nor were home influences a significant determinant of test scores (Rice 1897b, pp. 170-171). While the research methods and results can be, and were, greatly criticized, Cremin (1961) maintains that Rice's articles in The Forum were unique in at least two ways.

... the first to perceive the educational problem as truly national in scope; and ... the first to apply the technique of muckraking in attacking the political corruption and professional intransigence infecting the schools. The progressive movement in education begins with Rice precisely because he saw it as a movement (p. 22).

As important as these observations by Cremin are, the fact is that Rice had insisted on quantitative data on which to base judgment. Rice (1897a), writing in The Forum, explained why he felt such data were necessary.

... So long, however, as we have no standards, judgments based on the results of an examination, in a single room, school, or city, is [sic] not only absolutely worthless, but may mean a gross injustice, in estimating both the qualifications of the teachers and the value of the methods employed by them. Under existing conditions, there is only one way in which definite information in this matter can be obtained. It is by extending a reasonable test to a large number of classes, in different localities, so that all methods and
conditions may be represented, and by judging of the results on a comparative basis (p. 545).

Rice more than likely did not foresee the far-reaching effects of his testing experiment. While it is true that his fifty word spelling test was of little worth as a scientific device, the underlying idea was a significant and perhaps permanent contribution. For one thing, it prepared the way for more scientific work that came early in the new century. Meyer (1967), while agreeing that Rice was first on the quantitative scene, maintains that the measurement movement received its biggest push from Judd and Thorndike (p. 298). Judd, at the University of Chicago, and Thorndike, at Columbia's Teacher College, were eventually to develop test after test and scale after scale. Meyer (1967) notes that as a result of their tests "... every kind of educational enterprise was put under quantitative inspection, from marks and methods to curriculum and administration" (p. 299).

Thorndike became generally recognized as the father of the educational measurement movement. As a student in the late 1890's he had attended Wesleyan, Harvard, and Columbia universities. Sears, writing in a book edited by Kandel (1924), maintains that in 1902, Thorndike was the first to offer a university course in measurement (p. 135). In 1908 a student of Thorndike's, Cliff Stone, announced the development of the first objective test for arithmetic reasoning and in 1909 Thorndike published the Thorndike Handwriting Scale.

Starting in 1910, a series of studies was made on the lack of reliability of teachers' grading of students. The results stimulated the development of a more objective procedure for testing student
achievement and of assigning marks or grades (Starch and Elliott 1913, pp. 254-259). Achievement testing was not the sole measurement attempt. Intelligence testing made its appearance in America in 1908 when Henry H. Goddard introduced the Binet-Simon Intelligence Scale. Binet and Simon had developed the tests in France and Goddard had translated them into English, originally in 1908 and a revision in 1910. The full impact of this type of measurement was not felt until 1916.

Summary

By 1915 American education had taken on many of the characteristics of the present time. The concept of mass education or universal education was moving ever closer to reality. The common school had now been extended to include the high school. In 1915 over 200,000 students graduated from high school and nearly three-fourths of all children between the ages of five and seventeen were attending school. Even large numbers of adults were attending schools of one kind or another.

There had also been an enormous lateral expansion of educational activities and activities related to education. The movement for the prevention of child labor, the growth in the number of libraries and playgrounds, the campaign for health, activities such as scouts and campfires, and other educationally related activities such as athletics and dramatics all contributed to this expansion.

Increased attention was being paid to exceptional children—-a modest attention to those who were exceptionally intelligent and only a bit more to those with physical and mental handicaps.

Vocational education and the feelings toward it were nearly revolutionary in nature. With the Smith-Lever Act of 1914, the federal
government encouraged the inclusion of certain vocational courses in the school. Vocational guidance was beginning to appear and state systems of vocational schools were developed.

A new statement of educational theory was being formed under the leadership of Dewey, James, Hall, and others.

Because of the leadership of Thorndike and others of the same persuasion, an important attempt was made to apply to education the methods of exact measurement and of statistical analysis and comparison. A step had been taken toward the specific measurement of a student's knowledge and away from evaluating in a general way what a student knew.

Perhaps the most identifiable characteristic of this time is the concentration on "standards." Influenced often by Rice and others of his persuasion who criticized schools or identified weaknesses but wanted to make them better, people began to see the need for, and in some cases insist on, changes that would result in more uniformity in the schools. Society still had many of the basic expectations of schools with regard to curriculum but wanted students to be better schooled, teachers better prepared, a continued emphasis on moral education and good citizenship, more concern shown for the child as an individual, and some evidence that these goals had been accomplished.

In the next time period from 1916 to 1953, the progressive movement reached its peak and fell, two world wars were fought, and the nation suffered through a depression. The people were tested in more than one way. Interrelated to the societal tests was the tremendous expansion of the testing movement started by Thorndike and Binet. It would eventually affect American education greatly. For this reason Chapter IV is entitled "The Age of Testing."
CHAPTER IV

THE AGE OF TESTING: 1916-1953

The last decade of the nineteenth century and the early years of the twentieth in the United States were years characterized by the obsession for standards, particularly in education. The "standardizing" of the expectations for schools had been complicated by the lack of a national school system as well as a strong desire on the part of individual states to control their own schools. While people as a whole recognized the necessity to cooperate in setting general standards for education, they were not about to capitulate their responsibilities for schools to some national authority. The roots of the "grass-roots" approach to education ran deep. In spite of the fact that following World War I, America had grown to "adulthood" and was functioning well as a nation of united states, the writer found it very difficult to identify a single set of societal expectations for schools for the years covered by this chapter. (See Figure 3 for a summary of events during this period.) Because of this, a desire for specificity on the part of the writer gave way to generalization based on a broad view of the American educational scene. This is not to imply that an inaccurate impression is given—only that a more detailed discussion of expectations would be nearly unending and in the final analysis not very helpful for the purposes of this study.

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Figure 3. Timeline of Important Dates and Events Emphasized in Chapter IV (1916–1953).
Societal Expectations for the Schools

In each of the previous chapters it was noted that there were certain societal forces evident during each particular time period which greatly affected society's expectations for schools. This period is no exception. While the forces differ from those discussed in the previous two chapters, they have some commonality and merit exploration prior to the actual listing of expectations. One trusted source for such an exploration is *A History of Education in American Culture* by Butts and Cremin published in 1953. During the years from 1916 to 1953 there were an increasing number and variety of educational views being expressed. How these views affected educators is reported by Butts and Cremin (1953).

During the period between World War I and the mid-century the chorus of voices that made their claims upon education increased in range and volume until the conscientious professional educator could no longer afford to ignore them or fail to develop a defensible point of view of his own (p. 487).

What were these views that were being expressed so vociferously? Butts and Cremin (1953) suggest that they can be categorized into at least four kinds of orientation (p. 487). First, there were those concerning man and values, and particularly those expressed by the Protestant and Roman Catholic churches. The Protestants were divided into three points of view—fundamentalism, liberalism, and neo-orthodoxy. The fundamentalists believed that the public schools should give more attention to religious instruction, which in turn, they felt would develop better moral standards among the youth. Therefore, they advo-
cated Bible reading in the schools. As a result many states passed laws requiring Bible reading as part of the curriculum (p. 489). Some of these states also passed legislation prohibiting the teaching of evolution, which resulted in one state, Tennessee, becoming the stage for the famous "monkey trial" of John Thomas Scopes in 1925. Following World War II, the concept of religious instruction in the schools grew in popularity with the program of released time, which eventually led to a whole series of court cases (pp. 547-548). The liberal Protestants also supported an increased attention to Bible reading and released time, not as the revelation of divine authority, but as ethical guides to better conduct that could be followed by all sectarian groups (p. 490). In between these two points of view was found the neo-orthodox Protestant. Following the two world wars and the world-wide depression many Americans began to feel that they needed more help than they could count on from man's own intelligence and effort alone. The neo-orthodox Protestant of this time found little help in the literal approach to the fundamentalist nor in the opposite extreme espoused by the liberals and settled on a view which asserted that moral conduct and social betterment could be achieved only by a commitment to the fundamental beliefs of a traditional Protestant Christianity which recognized the power of such things as modern science but did not put faith solely in it. This view resulted in a revival of religious instruction in the public schools (Butts and Cremin 1953, p. 490).

The Catholic Church agreed with the Protestants regarding the importance of moral education. Butts and Cremin (1953) saw this agreement having a formula-like composition.
Many Protestants agreed with many Catholics on the general formula that went something like this: morality must rest upon religion. This is a Christian nation. Christianity promotes good citizenship, nay good citizenship is not possible unless it rests upon Christianity. Therefore, the state in its proper goal of promoting good citizenship should also promote Christianity by a free "cooperation" between the state and the churches (p. 492).

Eventually this formula of cooperation between the two faiths came under stress because of several issues, the most significant of which was state and local support of parochial schools (pp. 528-534). During the 1940's a movement arose, involving lay and clerical leaders of many faiths, which expressed concern about the lack of religious knowledge among Americans, particularly among the youth. The movement had received its impetus from the Third White House Conference held in 1939 (Atkinson and Maleska 1964, pp. 160-161). The concept of "released time" grew in popularity even though the Supreme Court in 1948 handed down a decision which, while ambiguous, ruled that state's tax-supported public school buildings were being illegally used for the dissemination of religious doctrine (p. 161).

The second major force involved several dominant philosophic views of man and knowledge. While various names have been used in describing these philosophies, the writer has chosen to use the terms used by Butts and Cremin (1953). First, there were the Idealists who felt that a well trained and disciplined mind was requisite to achieving the proper conceptions of the universe, man's civilization, and one's own self—a philosophy that by 1930 was no longer a leading one in American education (pp. 492-493). Secondly, there were Realists who insisted that schools must pass on the accepted truths and values of society as well
as the realities of scientific fact. They argued that the teacher's role was to see that children do acquire the essential knowledge by whatever discipline and authority was necessary. They also felt that there was a relatively stable content of knowledge that should be required of students and it could be measured objectively by the development of scientific tests. This philosophy, in one form or another, is still active in education today (p. 494). The third group, the Humanists, were divided into two camps. The one stressed the importance of selecting a few able students for advanced education. Those students would become the leaders of the masses while the rest could profit from a trade, technical, or vocational training, but not from a genuinely liberal education. One advocate of this position was Nicholas Murray Butler. While several examples of Butler's writings exist, one which illustrates his thought appeared in 1919 in the *Educational Review*. Following World War I, Butler (1919) described what he felt a liberal education ought to be like.

For nearly a generation past American education has laid the greatest emphasis upon the study of the English language and literature, and this is as it should be. In one important respect, however, damage has been and is being done, and again the cause is to be found in a wrong method of teaching. The idea is prevalent that the best way to improve the written English of students is to compel them to write constantly and on all sorts of topics. This is a fallacy. The inventor of the daily theme did an almost incalculable amount of damage when he started a movement that rapidly spread all over the United States. The one best way in which to teach students to write good English is to teach them to read good English. He who constantly reads the best English and also the best French, the best Latin and the best Greek, and who writes occasionally and when he has something to say, will have a far better written style than he who pours out a few hundred words five times a week on diverse topics as to most of which he has no knowledge and little interest. The waste of
time thru excessive devotion to English composition is very
great and is not likely to be patiently borne much longer.
The daily writing is obnoxious to the students and the
inspection and correction of their work is drudgery for the
teacher uncompensated by any adequate result (p. 74).

The second group of Humanists argued that the distinctive job of educa-
tion was to develop the faculty of intellect, and they therefore paid
less attention to the moral, the esthetic, and the religious aspects of
human experience (Butts and Cremin 1953, pp. 495-496). Still another
group of philosophers were the Experimentalists. The most outstanding
spokesman for this point of view was John Dewey. Basic to their
philosophy was the conception of experience as interactive and continu-
ous with nature. Dewey (1938) wrote of this point of view in his book
Experience in Education.

The principle of interaction makes it clear that failure of
adaptation of material to needs and capacities of individuals
may cause an experience to be non-educative quite as much
as failure of an individual to adapt himself to the material
(p. 47).

This increased emphasis on the freedom and interest of the child found
fertile ground during the "progressive era" in American history, covering
roughly the years from 1916 to the second world war. It was during this
time that states experimented with social legislation like the eight-
hour day, the popular recall of judges, and the initiative and referen-
dum. According to Brubacher (1966), there was "... a renewed confidence
that old abuses did not have to be endured and that by taking thought
they could remold their institutions nearer to their hearts desire"
(p. 389). Out of this social atmosphere emerged a "progressive-educa-
tion movement." While others including Parker and Adler had contributed earlier to the progressive approach, it was Dewey who became most recognized as its spokesman. A detailed discussion of Dewey and the progressive-education movement is beyond the scope of this study but some mention is necessary. In 1916 Dewey published what was perhaps his most significant statement about education, *Democracy in Education*. He suggested that education was a process of experimenting that was not confined to school years but began at birth, and perhaps before, and continued throughout life. He felt one did not educate for life because education was life. Aims of education were not to be placed in some distant future but were within the process; the aim of education was the solution of the immediate problem. He concluded that as one solves a problem, he learns and is better able to solve the next problem that arises. It can therefore be concluded that there is no final goal of education and no time when one's education is complete (pp. 41-68).

Dewey's influence spread throughout the world. The progressive-education movement itself took on a degree of formality with the founding of the Progressive Education Association in Washington, D.C., in April of 1919. A discussion of the Association and the progressive-education movement can be found in Cremin's book *Transformation of the School* published in 1961; for the purposes of this study only a brief mention will be made. It is important to understand that the Association and the movement were not entirely synonymous. While Dewey was closely identified with the progressive movement in education, he was never closely tied to the Association (Cremin 1961, p. 249). In fact, by 1938 he had written *Experience in Education* which was one attempt to
disassociate himself from those who were advocating extremes or mis-
interpretations of his concepts. The Association kept alive the ideas of
the importance of: the individual student; student interest and experi-
ence; vocational education; and contributions like the "Project Method"
advocated by William Kilpatrick, a former student of Dewey. The move-
ment's greatest impact occurred between 1920 and 1940. Perhaps its
greatest contribution to the development of American education was its
Eight-Year Study covering the years from 1932 to 1940 (Cremin 1961, p.
251). In 1930 the Association had appointed the Commission on the
Relation of School and College to be chaired by Wilford M. Aikin.
Aikin (1942) reports that the Commission had two major purposes.

1. To establish a relationship between school and
college that would permit and encourage reconstruction in
the secondary school.
2. To find, through exploration and experimentation,
how the high school in the United States can serve youth more
effectively (p. 116).

After a year of study the group submitted a report sharply indicting
American high schools on a number of counts (Cremin 1961, p. 252).
Based on this study, Cremin (1961) reports, an experiment was proposed.

The Commission proposed an experiment in which some twenty
leading secondary schools, public and private, would be
invited to redesign their offerings with a view to achiev-
ing (1) greater mastery in learning, (2) more continuity of
learning, (3) the release of the creative energies of stu-
dents, (4) a clearer understanding of the problems of con-
temporary civilization, (5) better individual guidance of
students, and (6) better teaching materials and more effec-
tive teaching (p. 252).

In 1932 the experiment was developed. Thirty secondary schools were
asked to participate (one later withdrew) and over 300 colleges agreed
to take part. The final report issued in 1942 was in five volumes and, perhaps because of the war, never received the attention it merited (Cremin 1961, pp. 253-254). Aikin (1942) in Volume I of the report summarized the findings resulting from the experiment.

First, the graduates of the thirty schools were not handicapped in their college work. Second, departures from the prescribed pattern of subjects and units did not lessen the student's readiness for the responsibilities of college. Third, students from the participating schools which made most fundamental curriculum revision achieved in college distinctly higher standing than that of students of equal ability with whom they were compared (p. 117).

The findings obviously had profound implications for both schools and colleges. It is unfortunate that this great contribution by the Association came so near to its demise. For various reasons, the Association in 1955 announced its disbandment.

The third force Butts and Cremin (1953) suggest American educators had to deal with involved several psychological points of view (pp. 487-488). Again the terms used by the writer to describe the various groups are those used by Butts and Cremin. First there were the Connectionists. They placed an emphasis upon the stimulus-response concept and saw a connection between the external situation and the response that the individual makes as an important thing. Considerable emphasis was placed upon the inherited elements in human nature and these were seen as important explanations for differences in ability, motivation, and achievement (Butts and Cremin 1953, p. 500). The Connectionists insisted that intelligence was largely an inherited quality and could not be changed much by changes in environment. Butts
and Cremin (1953) report that Thorndike came to this same conclusion in 1939 (p. 500). The next group, the Behaviorists, believed that behavior and learning resulted from the process of conditioning. The extreme view of this concept suggested that all children are virtually identical at birth and differences arise because of the different stimuli that are presented to them by their environment (pp. 501-502). In opposition to this view were the Field Psychologists who said that learning does not arise from a specific response to a specific stimulus but rather the learner is a whole organism and responds as a whole; therefore, drill and repetition were useless unless the learner understood the problem that faced him. The purposes and goals of an activity must not be merely important to the teacher but understood by the learner as well (p. 503). Freud was to represent the next group, the Psychoanalysts. They believed in the unconscious determination of behavior and probably contributed most to education by emphasizing the importance of the early childhood (pp. 505-506). Finally, the Social Psychologists emphasized the importance of group dynamics and believed that personality itself was a result of the predispositions and attitudes that are organized and structured by the individual as he behaves in his various social groups (p. 507).

The last and final force suggested by Butts and Cremin (1953) was, simply stated, the tremendous explosion in knowledge. Nearly every field of inquiry had accumulated mass amounts of knowledge; somehow a determination of how it was to be handled had to be made. One group argued that such a mass of knowledge necessitated that students eventually specialize. A second group saw the acquisition of information as
the chief goal for their students, while others felt that the primary purpose for acquiring knowledge was to be able to use it in solving everyday problems. The problem of objectivity also arose. Do students and scholars remain neutral to the social concerns around them while attempting to acquire knowledge, or do they become keenly aware of their social surroundings and apply their knowledge to correct social ills? These were the questions being asked. Lastly the concept of egalitarianism was still being debated. One side argued for an intellectual elite while the other saw the widest possible dissemination of knowledge as the only proper goal for a democratic society (pp. 508-510).

The four forces discussed in the preceding paragraphs—conflicting religious views, philosophical views, psychological views, and the explosion of knowledge—were joined by others that had a less direct effect on education but nevertheless did influence it. During the years from 1916 to 1952 two world wars were fought, a world-wide depression took place, the American middle-class rose sharply in numbers, labor movements began to show power, and the American national government moved from a weak and fairly neutral-type authority to one that was large and strong. Although it is difficult to measure with any accuracy the effect each force had on education, it is apparent that American society changed and consequently so did its schools.

In the beginning of this chapter the writer stated that a general examination of expectations for schools, during the period covered by this chapter, would best fulfill the purposes of this study. After studying numerous documents and writings, the writer chose three general statements of purpose that, in his opinion, accurately represent the
societal expectations for schools from 1916 to 1953. Following the dis-
cussion of these three statements, several examples from the writings of
various individuals addressing the topic of expectations will be given.

Prior to 1900 high schools were most generally viewed as institutions
preparing students for college. Since that time, however, a radical change
had occurred. Gradually both theory and practice viewed the high school
as a place for educating virtually all of American youth, no matter what
their plans and destination after high school were to be. One of the
first signs that signaled this change was a report of the Commission on
Reorganization of Secondary Education in 1918 (Butts and Cremin 1953,
p. 592). The Commission had been established in 1913 by the National
Education Association. The Commission had four purposes.

1. Formulate statements of valid aims, efficient methods,
and kinds of materials whereby each subject may best serve
the needs of high-school pupils.
2. Enable the inexperienced teacher to secure at the
outset a correct point of view.
3. Place the needs of the high school before all agencies
that are training teachers for positions in high schools.
4. Secure college entrance recognition for courses
that meet the needs of high school pupils (Knight 1952, p. 105).

Sixteen committees were selected to review and study various topics and
subject fields dealing with secondary education. The various committees
submitted reports from 1913 to 1918 (Raubinger and others 1969, pp. 100-
101). The report that became most well known was the one issued in 1918
which included "The Cardinal Principles of Secondary Education." Seven
main objectives of education were listed.

1. Health
2. Command of fundamental processes
3. Worthy home-membership
4. Vocation
5. Citizenship
6. Worthy use of leisure
7. Ethical character (Bureau of Education 1918, pp. 10-11).

While the Commission was addressing the topic of secondary education, it is important to note that the seven objectives that were listed were meant to apply to education as a whole—elementary, secondary, and higher (p. 11). In addition, it is noteworthy that these aims were a deviation from those generally accepted. Brubacher (1966) commented about this change.

. . . Eschewing the traditional aims of education, such as knowledge for its own sake, mental discipline, and harmonious self-development, this commission sought to state the aims of education in terms of the sociological realities of the America of its day (p. 17).

Twenty years later, in 1938, the National Education Association, through its Educational Policies Commission, submitted another set of objectives, "The Purposes of Education in American Democracy." This time the list contained only four general aims.

1. Self-Realization
2. Human Relationship
3. Economic Efficiency

In the report each aim was discussed in some detail and objectives listed for each aim. For instance, under the aim, Self-Realization, thirteen objectives were listed.

The Inquiring Mind. The educated person has an appetite for learning.
Speech. The educated person can speak the mother tongue clearly.

Reading. The educated person reads the mother tongue efficiently.

Writing. The educated person writes the mother tongue effectively.

Number. The educated person solves his problems of counting and calculating.

Sight and Hearing. The educated person is skilled in listening and observing.

Health Knowledge. The educated person understands the basic facts concerning health and disease.

Health Habits. The educated person protects his own health and that of his dependents.

Public Health. The educated person works to improve the health of the community.

Recreation. The educated person is participant and spectator in many sports and other pastimes.

Intellectual Interests. The educated person has mental resources for the use of leisure.

Esthetic Interests. The educated person appreciates beauty.

Character. The educated person gives responsible direction to his own life (p. 50).

This same commission published additional statements, one in 1944, Education for All American Youth and another in 1948, Education for All American Children. A third statement, Education for All American Youth: A Further Look was published in 1952 and identified ten educational needs of youth that the Commission felt were imperative.

1. All youth need to develop salable skills and those understandings and attitudes that make the worker an intelligent and productive participant in economic life. To this end, most youth need supervised work experience as well as education in the skills and knowledge of their occupations.

2. All youth need to develop and maintain good health and physical fitness.

3. All youth need to understand the rights and duties of the citizen of a democratic society, and to be diligent and competent in the performance of their obligations as members of the community and citizens of the state and nation.

4. All youth need to understand the significance of the family for the individual and society and the conditions conducive to successful family life.
5. All youth need to know how to purchase and use goods and services intelligently, understanding both the values received by the consumer and the economic consequences of their acts.  
6. All youth need to understand the methods of science, the influence of science on human life, and the main scientific facts concerning the nature of the world and of man.  
7. All youth need opportunities to develop their capacities to appreciate beauty in literature, art, music, and nature.  
8. All youth need to be able to use their leisure time well and to budget it wisely, balancing activities that yield satisfactions to the individual with those that are socially useful.  
9. All youth need to develop respect for other persons, to grow in their insight into ethical values and principles, and to be able to live and work cooperatively with others.  
10. All youth need to grow in their ability to think rationally, to express their thoughts clearly, and to read and listen with understanding (Educational Policies Commission 1952, p. 216).

Knezevich (1975) suggests that these ten statements can be represented by the following list.

1. Occupational skill  
2. Health  
3. Civic understanding  
4. Family life  
5. Ability to consume wisely  
6. Science  
7. Arts (esthetics)  
8. Use of leisure  
9. Human relations  
10. Ability to think and communicate clearly (pp. 6-7).

A great deal of similarity can be found in the three lists submitted in 1918, 1938, and 1952. All three lists include some mention of the need for a command of fundamental processes, a need for some sort of vocational training, and a need for moral education. Two of the three lists, those from 1918 and 1952, also include a need for an emphasis on home and family life, health education, and worthy use of leisure time. From this comparison and analysis, it becomes apparent that some form of
the Cardinal Principles remained as the generally accepted societal expectations for schools throughout this entire period. It is further evident that the expectations for schools had begun to emphasize the development of personality and social skills.

The expectations for schools listed in the 1918, 1938, and 1952 reports, while accurately representing those most common from 1916 to 1953, are by no means the only statements made on the subject. In 1916 Preston, on the staff of an English high school in Boston, commented on the aim of the large city school.

And what is the product which we wish to have come out of this melting-pot? A company of scholars? I venture to say not, but rather an army of young citizens, trained to be industrious, upright and reliable in whatever situation they may be placed, and inspired with the spirit of service to their neighbors, to the community and to all that is best and highest in humanity (p. 405).

In 1917, Mrs. Alexander Thompson, a member of the Oregon legislature, stated that "The object of public education is to equip each child with the knowledge and training that will enable him to make the most adequate use of his innate abilities" (p. 71). One year later, in 1918, Martin Brumbaugh, the Governor of Pennsylvania, listed what he thought the aims of education should be: moral education; egalitarian in nature; vocation oriented; teach thriftiness; patriotic in nature; free from German influence (pp. 85-86). In 1922, the United States Commissioner of Education, John Tigert, in an address before the National Education Association, stated, "Education means today a preparation for living according to the highest standards of this age" (p. 202). In 1925, John T. Greenan, a well known teacher of social studies from the state
of New Jersey, stated what he thought the real job of education was in an article in the *Educational Review*.

The real job of the public school is to give to the citizens of this country a background of the ideals of democracy and economic, social, and political truths... (p. 98).

Leonard Koss, a professor from the University of Minnesota, in 1925 compiled a list of aims of education from an examination of 112 books and articles written on the subject, most of which had been written prior to 1910. His findings showed that out of the twenty-four general aims most often mentioned by the authors, only two concerning elementary education were listed by 61 percent or more of the writers—social-civic responsibility and training in the fundamental processes. At the same time, 61 percent or more of the writers agreed on nine aims for high school: general or liberal training, social-civic responsibility, morality, health, recreation and esthetic participation, practical and occupational efficiency, democratic education, recognition of individual differences, and preparatory education (p. 179).

It should be obvious to the reader that total agreement on the aims of schools among parents, lay persons, and educators did not exist. This lack of agreement often led to criticism.

In 1923, Thomas Agnew, an elementary principal from New Jersey, reported that people were becoming concerned about the "fads and frills" in the schools.

... With the declared intention of reducing financial wastage, certain State legislatures have appointed committees, for the elimination of the so-called "fads and frills" in the schools... (p. 661).
Just three years before in 1920, R. W. Himelick, a superintendent of schools from Indiana, expressed concern about too much emphasis being placed on the minimum essentials.

Too much stress has been placed upon the mere minimum essentials in subject-matter to be transformed into knowledge and not enough upon the ability to use this material to think constructively and the formation of right habits which constitute real manhood. Reading is important, but only in so far as it enables the child to converse daily with a multitude of great minds in order that he may catch glimpses here and there that will help him to be a congenial member of society and properly perform the tasks which fall to him (p. 425).

Another superintendent, O. L. Reid, in 1924 challenged those who suggested cutting the curriculum offerings.

Several years ago an editor longing for certain popularity served notice that the schools must get back to the fundamentals, cut out the frills, and lower their tax demands. I approached him for advice, told him that I longed to improve the product at the same time that I lowered the cost of production. I offered to recommend the elimination of any subject or subjects that fifty-one percent of our patrons would be willing to give up. I got no help; the offer still stands (p. 849).

Reid (1924) continued this same theme in the last paragraph of his article.

Those men who honestly believe that "apples were redder when we were boys" and those of us who think that we have not seen a piece of real pumpkin pie in thirty years are prone to believe that the children of today are not spelling so well as they did in the good old days. This attitude embraces all the three R's. What more natural when looking about for an explanation of the supposed deplorable condition than to seize upon the fundamental subjects more recently introduced into the curriculum and dub them fads (p. 854)?
Lastly, in 1940, Edgar Doudna from Wisconsin, while addressing the American Association of School Administrators, spoke with optimism about the schools.

The elementary school has been accused of having too many fads. Generally the complainants are not quite sure as to what they mean by a fad, but commonly they refer to music, art, homemaking, manual arts, plays and games, and those things on the secondary level we call extracurriculum activities. The enrichment of the school program is generally approved. Parents are nearly always enthusiastic about the opportunities which their children have as compared with the limited curriculum of their own school days. Without neglecting the "good old fundamentals," the elementary school thus finds ways and means to make learning more significant and the approach to the arts natural and easy (p. 249).

Later in the same article he compared the "old" with the "new."

The transition from the old to the new has, of course, resulted in some losses, and every change has not been a synonym for progress. But the net result amounts to little less than revolution. The best elementary school of the old days was a good school; the worst was unspeakably bad; and the average was indifferently adapted to its day and generation. The best of today is much better than the best of the other days, and the average is far ahead. The worst are still terrible, but relatively fewer (p. 250).

By the mid 1940's the expectations that the progressive education movement had fostered took on a new urgency—one that came to dominate the thinking of those involved in education. In 1945 the Harvard Committee on the Objectives of a General Education in a Free Society suggested that the aim of education should be to prepare the student to become well trained in a vocation or art as well as in the general art of the free man and the citizen (The Committee on the Objectives of a General Education in a Free Society 1945, pp. 42-78).
Students needed to be prepared for life. "Economic competence no longer meant how to do a job, but how to get and hold one, how to get along with employers and fellow workers, and how to spend one's earnings as wisely as possible" (Church and Sedlak 1976, p. 403). This new trend became formalized in the "life adjustment" movement that dominated the forties and early fifties. It was culminated in the work of the Commission of Life Adjustment Education for Youth, established through the Office of Education in 1946 (p. 403). A year earlier, Charles Prosser, a leading advocate of vocational education, had pointed out that approximately 20 percent of youth would attend vocational schools, 20 percent of youth would prepare for college entrance while attending high school, but the remaining 60 percent attending schools may very well not receive the life adjustment training they needed and were entitled to--unless the public schools provided it (p. 404). The Commission recommended programs that addressed the needs of the 60 percent Prosser had identified. The programs emphasized: physical, mental, and emotional health; ways to help youth resolve both present adolescent problems and anticipated adult ones; providing work experience that would teach industrious habits rather than specific job skills; and the development of activity skills that could lead to personal achievement and satisfaction during one's leisure time (p. 404). According to Church and Sedlak (1976), the Commission submitted major reports in 1951 and 1954 and influenced the adoption of life adjustment training programs in thousands of schools throughout the nation (p. 404). By 1954 the Commission had come under sharp attack by the critics of progressive education and was not reappointed by the U.S. Commissioner of Education.
A steady flow of criticism of the public schools—including anything identified as "modern" or progressive—began around 1950. In 1949, Mortimer Smith published *And Madly Teach* and Bernard Bell published *Crisis in Education*—both of which were highly critical of the progressive movement of their day. Others suggested that the schools lacked definite aims. Bestor, a well known critic of schools, commented on this in *The Scientific Monthly* in 1952.

... No belief is more firmly held in the United States than belief in education. But belief is not enough. We must understand education as well as believe in it. The thing that counts, after all, is not the number of schoolrooms we have, but what goes on in them. And if we really believe that education is vital to our safety, then we need to know exactly what kind of schooling constitutes genuine education, and what kind is merely a gaudy show (p. 109).

Bestor also authored, one year later in 1953, *Educational Wastelands*, a book highly critical of the educational scene of his day.

... Discontent with the training which the public schools provide is almost unanimous. ... Business men are dismayed at the deficiencies in reading, writing, arithmetic and general knowledge displayed by the high school ... graduates they employ. Parents are alarmed at the educational handicaps under which their children are obliged to labor as they enter the serious business of life (p. 4).

Earlier in the book he observed that Americans regard schooling as an experience that is pleasing to the recipient but not very valuable to society. He then explained why he felt this point of view had been adopted.

... Public opinion is not so perverse as to adopt such a view without cause. It is fully aware of the traditional claims of education. It is prepared to believe that knowledge is a good thing both in its own right and for the
practical purposes to which it can be put. It sees a connection between good citizenship and the ability to think. What it is skeptical about is the ability of our schools . . . to impart these qualities of mind to their graduates (p. 2).

A view sympathetic to Bestor's was expressed by Albert Lynd in *Quackery in the Public Schools* published in 1953. He was almost poetic as he identified the problem and specifically delineated the neglected subject areas.

The bare intellectual backsides of many public school children have been remarked by parents, employers and college instructors. Their complaint is that, while neo-pedagogues palaver more and more about real needs of youngsters, the pupils are learning less and less about the arts of word and number, the history and the literature, and sciences and the aesthetics, and the rest of the painfully accumulated culture of this harassed civilization (p. 14).

**Make-up of the School Population**

In 1917, T. P. Twiggs, Supervisor of Compulsory Education of Detroit, Michigan, addressed the Department of Superintendence of the National Education Association in Kansas City. During his presentation he stated, "Our country is suffering from a sixth-grade civilization. The average American citizen leaves school with a sixth-grade education . . ." (p. 830). Twiggs' statement was an indictment of America's professed commitment to mass education and specifically against child-labor practices of his day. While it is true that elementary and secondary total enrollments had grown by nearly six million students since the start of the century (Table 2), it was also true that nearly half of the students never reached ninth grade. The ninth graders, or those starting high school, in 1925 represented only 54 percent of those
with whom they had been in the second grade back in 1918. Also, reaching grade nine was no guarantee that the student would graduate. From those students who were freshmen in public high schools in 1920, only 46 percent remained to be seniors in 1923 and this percentage dropped to 44 percent for the freshmen of 1925 and the seniors of 1928 (Office of Education 1930, p. 454). In 1920 only 16.8 percent of the population seventeen years of age were high school graduates.

In spite of these rather dismal statistics progress was being made. Compulsory education laws, in one form or another, existed in all of the states with Mississippi's enactment in 1918. By 1950, every state had a child labor law which in most cases applied to employment of minors up to sixteen or eighteen years of age and in some cases applied up to the age of twenty-one (Knight 1952, p. 70). In 1924 an attempt was made to pass a constitutional amendment which would have prohibited the labor of a person under eighteen years of age, but in 1950 not enough states had ratified the proposal to make it part of the Constitution (p. 71). Elementary enrollment figures had grown from over eighteen million in 1916 to over twenty million in 1952. High school enrollments during this same time period had gone from over one million to nearly six million students. By 1952, well over half of the population seventeen years of age were high school graduates. The enrollment figures when examined by race and sex are also informative. In 1920, 65.6 percent of all white boys of school age were enrolled in school and by 1950 it was 79.7 percent. For white girls, the corresponding figures were 65.8 percent and 78.9 percent. The enrollment figures for non-caucasian students (boys and girls together) were 53.5 percent in 1920 and 74.8
percent in 1950 (Table 1). Butts and Cremin (1953) report that the census of 1920 showed that over 70 percent of all Negro children between seven and fifteen years of age were attending school as well as over 67 percent of the Indian children and 85 percent of the Chinese and Japanese children of the same age bracket (p. 416).

The huge influx of Negro students into the educational system brought with it a very special problem. As attempts were made to make up for the years of neglect and raise the Negro children up to the same educational standards as those for white children, huge expenditures of money were necessary. Many of the states faced with this task were also some of the poorest in the nation. Selections from an address delivered in 1918 by Kelly Miller, Dean of Howard University, will serve as a representative for the many expressions of concern being made about the problem.

Without national aid to Negro education the Southern States must continue for generations under the heavy handicap of a comparatively ignorant and ill-equiped citizenship (p. 557).

Later in his speech he further defended his position on federal aid.

It was unfair to the Southern States to require them, unaided, to prepare the Negro for duties of citizenship at the time of his enfranchisement. The nation as a whole was responsible for the condition of the Negro. The fact that slavery became a localized institution was not due to the inherent deviltry of the South nor to the innate goodness of the North. Slavery was a national institution and became localized under the operation of climatic and economic law. It is equally unfair today to require the South to bear the heavy burden alone. The Negro problem is the nation's problem; the remedy should be as comprehensive as the need (p. 557).

The equality, financing, and separateness of Negro education remained serious problems throughout the time period from 1916 to 1953 and re-
quired some rather dramatic measures to begin to solve them. Chapter V will discuss these measures and their results.

In conclusion, it should also be noted that the earlier efforts at providing education for the blind, the deaf, and the mentally handicapped during the last century had begun to be rewarded as literally hundreds of special public schools to care for such children were established during this period. These later efforts were further rewarded in the 1960's with federal financial assistance.

Concerns were also being expressed for the "gifted" child by such noted persons as Nicholas Butler and George S. Counts. They maintained that by concentrating on equality for all children, there was a failure to recognize that inequality did exist in the realm of nature. Counts (1922) in an article in the Educational Review addressed this problem.

Because of this mistaken notion of equality, we have been reluctant to admit the existence of the individual of superior natural gifts. It is a point about which we have been sensitive, actually fearing perhaps to acknowledge that through no act of his own a particular individual may be born into the world with either a robust or feeble physical inheritance, a stable or unstable mental constitution. We have consequently maintained a tradition that any ordinary individual can perform the duties of a political office, whether it be that of city mayor, police commissioner, or postmaster. Place must be made in our traditions for the gifted citizen (p. 240).

The concept of egalitarianism was further challenged by the heavy emphasis on testing which will be discussed in the next section of this chapter.

Assessment of Student Learning

The proliferation of testing in America for the purposes of educational measurement during the period covered by this Chapter is astound-
ing. The concentration on standards during the first part of the century had given encouragement to the development of tests in order to measure whether the standards had been achieved. In 1921, Arthur Mead reported that there were at least eight types of tests and scales being used for educational measurement, some of which were standardized and others that were not: the Binet-Simon and other various modifications were being used to test general intelligence; various scales and tests were being used to test mental functions of the informational and habitual types, such as handwriting, spelling, algebra, and historical and scientific information; tests and scales were being used for the measurement of the mental functions of reasoning and judgment; although under attack, tests were being used to measure the aesthetic functions, using such tests as the Thorndike Scale for drawing; tests to measure the ethical qualities, although found difficult to do, were also being developed; tests were being used to evaluate school buildings, school grounds, and textbooks; and lastly, tests were developed and used for the classification of Army recruits (pp. 117-120). Later in the same article Mead (1921) pointed out some factors in measurement which demanded caution. He warned that in the development of the steps in a standardized scale the term value had often been applied to the numerical index of the "step" and confused with social value. He also suggested that some criticism was heard from those suggesting that some of the tests were produced to test for abilities in subjects whose content had not yet been shown to be of any great value. He further warned that teachers and administrators must at all times be concerned with more than just measurement because, "... measurements must contribute to the solutions of the
problems involved, but they can not do the thing alone" (p. 127). Lastly, he warned against being inconsistent by using the measurement data to conclude things for which the tests were never intended (p. 127).

Proponents of testing were always ready to list the reasons why testing was important and how it improved instruction. One such example is F. B. Knight, who shared his reasons before the Elementary Education Department of the National Education Association in 1921. They were: they make possible the comparisons of grades and school systems; through their use one is better able to classify students; they help diagnose weaknesses in the schools and the capacities of individual students; by measuring the "product" one could determine which method of teaching was best; and lastly, they allowed for the creation of specific objectives in the elementary school and the ability to determine if they had been achieved (p. 450).

Another phenomenon that appeared during this period was the attempt to compare past and present achievements of students by using various methods of research. Robert and Helen Lynd reported on their study in a book entitled Middletown in 1929 and then reported a follow-up study in Middletown in Transition published in 1937. The Eight Year Study conducted by the Progressive Education Association, mentioned earlier in this chapter, is another example. In 1919, Caldwell and Courtis (1924) made a study of the Boston schools in an effort to discover what changes had taken place in the ability of pupils or in the effectiveness of teaching between 1845 and 1919. Their general conclusion was the the pupils of 1845 were no more thorough or efficient than the pupils of 1919 (pp. 84-97). A similar study was reported in 1924 by the National Educa-
tion Association. The study was conducted by administering to students certain examinations which had been used in schools in 1856. The conclusions drawn from the results indicated that the later students were as capable and proficient as had been the earlier children (National Education Association 1924, pp. 314-315). A final example is a study conducted in 1936 by Douglas Lawson. Reporting on the study in *Educational Administration and Supervision* in 1940, he explained that he administered tests, used in St. Louis in 1870, to students enrolled in 1936. His conclusions from the results are similar to the other studies already mentioned.

By way of final summary, then, it may be observed for the period studied that (a) the earlier schools set higher standards for promotion and used more difficult materials for given grade levels; but that (b) the evidence indicates that the effectiveness with which the schools have operated in later years is apparently as great as, or greater than, that of the earlier schools (p. 678).

While the methods used in, and the conclusion drawn from each of these tests can be criticized, the efforts were in most cases motivated by a sincere desire to measure how "schools were doing."

By 1918, there were eighty-four achievement tests for elementary schools and twenty-five for secondary schools. Annual sales of these tests became significant. Monroe (1918) reported sales of 900,000 copies of one test and sales of 200,000 of at least two others (p. 71). Using these tests, educators assessed the degree of attainment of the standard. One of the results, and perhaps the most serious, of this wide use of testing appeared when the measurement itself became more important than the standard. This view is supported by Britell (1978)
when she says, "... the measure provided evidence; it therefore, took precedence over the definition of the standard" (p. 12). The usage of the tests nevertheless increased despite warnings on the lack of standardization and uncontrolled sample populations (p. 12).

One of the objectives of testing was the classification of students. This could not be accomplished using achievement tests. In 1916, Lewis Terman of Stanford University began to revise Alfred Binet's testing process. Using the mental quotient, the ratio of mental age to chronological age, he multiplied it by 100 to produce the Intelligence Quotient (I.Q.) (Perrone 1977, p. 12). One year later, in 1917, individual tests, like the Binet, were being used in schools (Britell 1978, p. 14). People became fascinated by the I.Q. score and as a result the word competence took on a new meaning.

The concept of the competence produced by education now was redefined in terms of the amount of mental ability an individual possessed. More ability was better, with little consideration of whether there was a corresponding increase in competence (Britell 1978, p. 14).

Following World War I, educational testing was used to identify the different levels of mental ability and educational achievement. This was a new direction. No longer was the focus of the accountability of educators directed toward educational effectiveness and competence to function. Educational efficiency was a new goal of educational measurement. Fred Scott spoke about this new found desire for efficiency in the School Review in 1915. "The passion for testing efficiency will not slack until every element and factor of the teaching process has been submitted to rigorous quantitative measurements" (p. 36). The
intelligence tests being used in schools were modeled after the Army Alpha and Beta tests used during World War I. Britell (1978) reported that mental ability and competence became synonymous, "... "A" men were more competent than "C" men. "A" students with I. Q.s of 150 were more competent than "C" students with I. Q.s of 100" (p. 15). Although various proficiency tests to measure competence had also been developed during World War I, little effort was made to make use of their concepts in schools. Only the use of such tests in testing clerical skills was evident in education. By 1954 most of the achievement tests being used were either survey or diagnostic in nature (Torgerson and Adams 1954, p. 38).

During the 1920's most measurement experts defended the belief that there was a high correlation between intelligence and performance on achievement tests. Consequently, there were educators who insisted that schools having large numbers of students with low I. Q.'s could not be compared on achievement test performance with those schools having students with higher intelligence test scores (Britell 1978, p. 16), but by the end of the 1920's and during the 1930's the concept of educational measurement was being re-examined. Britell (1978) suggested it was "... a period of unparalleled examination and attention to educational problems and reform" (p. 17). While this view may be somewhat of an exaggeration, it is certainly true that in spite of the economic problems measurement experts developed a better understanding of the limits of tests and re-examined earlier conclusions on group and individual performance. Britell (1978) described this time period by saying, "Finally, educators seemed ready again to assume responsibility
for the education of all their pupils and to consider the ultimate objective of the educational process" (p. 18).

World War II ended the opportunity for these new commitments to be put into practice. Following the war a new national commitment to expanded opportunity asked educators to serve an even larger population. However, the 1950's would not find critics of the schools being silent. The expectations for schools were once again being reassessed and a court case in 1954 re-emphasized the need for commitment to the concept of egalitarianism.

Summary

The years from 1916 to 1953 in many respects had been tumultuous years. But, as the American society was confronted with wars and depression, people found time to be concerned about schools and the education they provided. The progressive-movement in education, nurtured by the brilliance of people such as Dewey, re-emphasized the concept of egalitarianism and concern for the individual student. Vocational education in high schools was encouraged by the Smith-Hughes Act of 1917 and new aims of education were identified by various educational committees, commissions, and organizations. As the curriculum of the schools exhibited a life-adjustment orientation, critics called for a return to a more disciplined approach to education and began to ask educators to be accountable for their products. At the same time, moral education and good citizenship (particularly during and immediately following the war years) continued to be emphasized in the schools. The increase in the amount of knowledge in nearly every subject area dictated some degree of specialization by students and the high school
continued to change from a preparatory school for college to a school for all youth. Lastly, the aims of education became sociological in tone as opposed to the more traditional aims of the past—knowledge for its own sake, mental discipline, and self-development.

Educational measurement was one reply to the demand for accountability. Achievement testing, and particularly intelligence testing, became widely used in the schools. Correlating achievement scores and I. Q. scores, educators at times became more concerned about the measurements than they were about standards. In fact, scores were sometimes used as an excuse for student incompetence. However, this testing movement (an infant in 1916) greatly matured and became much more responsible by the end of this period.

The concept of egalitarianism with regard to education had benefited from the reports of the National Education Association Committees and Commission as well as from such efforts as the Eight-Year Study but suffered somewhat from the testing movement and the disruptions of the depression and World War II years. The total enrollment figure in 1936 was 29,005,873 and gradually decreased to a low of 25,757,907 for the year 1944. For each year thereafter, however, enrollment totals again increased (Table 2). By 1952, 84.7 percent of all children between the ages of five and seventeen years of age were attending schools. While that high percentage is impressive, it also indicates that thousands of children of school age were not attending. Non-white students were attending in large numbers by 1953, although most Negro children were still attending separate schools from the whites, particularly in the South. Racial segregation was still demanded by law in some states.
This fact was the challenge of the next period. In 1954 the legal basis for segregation was destroyed by the Supreme Court. Equality regarding education took on new meaning and is the reason for the next chapter to be entitled "The Age of Egalitarianism."
CHAPTER V


The education innovations initiated during this time period covered by this chapter (see Figure 4) represents some of the very best that has been attempted in American education and perhaps some of the most ill-conceived. It is an era full of actions motivated by the best of intentions and contradicted by fewer actions motivated by shortsightedness and inaccurate interpretations of what the expectations for schools should be. It is a period dominated by the demand for egalitarianism and the attempts and struggles to achieve it.

Societal Expectations for the Schools

A compilation of expectations for this period, represented by a specific list, would inevitably be a distortion of reality. This writer is convinced that no one list can be supplied that would accurately address the aims advocated by Americans in general. In this sense, this period shares many of the same complexities found in the previous period. One of the most noteworthy was made as a result of the White House Conference on Education held in Washington, D.C. in 1955. The Conference, called by President Eisenhower, was attended by professional educators and lay persons from all parts of the country. The Conference report, published in 1956, indicated that the consensus of
Figure 4. Timeline of Important Dates and Events Emphasized in Chapter V (1954-1971).
the participants was that there were fourteen things that schools should continue to develop in the student.

1. The fundamental skills of communication—reading, writing, spelling as well as other elements of effective oral and written expression; the arithmetical and mathematical skills, including problem solving. While schools are doing the best job in their history in teaching these skills, continuous improvement is desirable and necessary.

2. Appreciation for our democratic heritage.

3. Civic rights and responsibilities and knowledge of American institutions.

4. Respect and appreciation for human values and for the beliefs of others.

5. Ability to think and evaluate constructively and creatively.


7. Social competency as a contributing member of his family and community.

8. Ethical behavior based on a sense of moral and spiritual values.


10. Esthetic appreciation and self-expression in the arts.

11. Physical and mental health.

12. Wise use of time, including constructive leisure pursuits.

13. Understanding of the physical world and man's relation to it as represented through basic knowledge of the sciences.


This list did raise some criticism. One example is a statement by Harris (1956).

As I interpret this list of accomplishments, the teacher is supposed to be a scholar, a humanist, a social director, a psychiatrist, a coach, a prophet, a moral leader, an artist, an entertainer, a high priest, and a magician (p. 83).

It is important to note that the White House Conference (1956) report not only reported the expectations for the public school, but also gave priority assignments to some phases.
The development of the intellectual powers of young people, each to the limit of his capacity, is the first responsibility of the schools. Beyond this basic task, all kinds of instruction are not equally important for all children, and their importance varies from community to community. A primary responsibility of any local school authority is to establish priorities of significance among basic general education, specialized education of all kinds, and extra curricular activities (p. 11).

Priorities were also a subject addressed in the "Rockefeller Report" published in 1958.

At the pre-college level the greatest problem today is to reach some agreement on priorities in subject matter. There is little or no dispute about the content of the curriculum in the first seven or eight grades, and relatively little about the "general education" provided for all pupils in grades 9 to 12... In the great "democracy of subject matters" which we have allowed to develop, it is only a moderate exaggeration to say that beyond the prescribed subjects (which take about half the student's time), any subject has been considered to be as important as any other subject (The Pursuit of Excellence 1958, p. 26).

In 1960, Lawrence W. Downey reported the study he had made which attempted to identify the elements of the task of public education and determine the extent to which the public perceived those elements to be important aspects of the task of the public school. The identification was achieved through a review and synthesis of many notable statements of the task from the time of Mann to the end of the 1950's. The study resulted in the identification of the tasks of the secondary school.

A. Intellectual Dimensions

2. COMMUNICATION OF KNOWLEDGE: Skill to acquire and transmit.
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3. CREATION OF KNOWLEDGE: Discrimination and imagination, a habit.
4. DESIRE FOR KNOWLEDGE: A love for learning.

B. Social Dimensions
5. MAN TO MAN: Cooperation in day-to-day relations.
6. MAN TO STATE: Civic rights and duties.
7. MAN TO COUNTRY: Loyalty to one's own country.
8. MAN TO WORLD: Inter-relationships of people.

C. Personal Dimensions
9. PHYSICAL: Bodily health and development.
10. EMOTIONAL: Mental health and stability.
11. ETHICAL: Moral integrity.
12. AESTHETIC: Cultural and leisure pursuits.

D. Productive Dimensions
13. VOCATION-SELECTIVE: Information and guidance.
15. HOME AND FAMILY: Housekeeping, do-it-yourself, family.
16. CONSUMER: Personal buying, selling and investment (p. 24).

In order to determine the extent to which the public perceived these elements to be important aspects of the task of the public school, Downey and two of his colleagues, R. C. Seager and A. T. Slagle, developed The Task of Public Education Opinionnaire. The sample consisted of people living in fifteen communities representing four geographic regions arbitrarily selected: the New England States, the Deep South, the Midwest, the West Coast, and the prairie provinces of Canada. Based on the data collected, the researchers reported several findings.

1. There was a high degree of agreement regarding the task of the public school. All respondents, both educators and non-educators, perceived intellectual development to be the most important outcome in public schooling. There were,
however, subtle disagreements, variations in the amount of emphasis people were willing to place upon the intellectual or other aspects.

2. Interestingly, geographic region appeared to be a determiner of educational viewpoint. Just as there are regional political preferences, apparently there are also regional educational philosophies. The western region, for example, tended to favor the socializing aspects of education; the southern regions emphasized physical education and personal development; the eastern regions placed emphasis upon moral training; and Canada favored the intellectual and the aesthetic.

3. Occupation and amount of schooling were the best predictors of educational belief. Perhaps these are related, but the relationship does not explain the whole phenomenon. These two variables emerged more or less independently as consistent indicators of perception of the task. The higher one's position on the occupational continuum, the greater the importance he assigned to the intellectual, the aesthetic, and the world citizenship aspects of the task; conversely, the less importance he assigned to the physical, the moral, the consumer, and the vocational aspects. Similarly, the more schooling respondents had themselves, the more they tended to emphasize the intellectual aspects and minimize the social, physical, and vocational aspects of education.

4. Age was a somewhat less reliable predictor, as were race and religion. It was rather surprising to note, however, that the older the respondent, the more he tended to favor the physical, the patriotic, the moral, and the family aspects of education; the younger the respondent, the more he tended to favor the intellectual and related aspects. Catholics, as a group, placed greater emphasis upon the patriotic, the civic, and the moral elements than did Protestants. Negroes, as a group, placed greater emphasis upon the physical, the social, and the moral than did whites.

5. Community-type, income, sex, and proximity-to-school did not prove to be variables closely associated with educational viewpoint.

6. The factor analysis identified three basically different educational philosophies or perceptions of the school's task, and three corresponding groups of respondents. The points of view were: first, a high value upon the intellectual and related components, with a corresponding low value for the productive and related elements; second, a high value upon the productive and related intellectual skills, with a corresponding low value upon the social and certain aspects of the personal; and third, a high value upon the social, particularly the civic and patriotic, and a correspondingly low value upon the personal, particularly the physical and the aesthetic (Downey 1960, pp. 64-66).
While the White House Conference and the study conducted by Downey had concentrated on identifying goals and tasks with which the school should be concerned, another study, begun in 1964, dealt with a related topic. In the spring of 1964, J. Win Payne, President of the American Association of School Administrators, appointed a special commission and charged it with responsibility for identifying and stating in clear and concise fashion major educational imperatives that must be at the forefront as curriculums are modified, instructional methods revised, and organizational patterns reshaped to meet the educational needs of the United States.

After two years of study, this commission identified nine such imperatives in education.

To make urban life rewarding and satisfying
To prepare people for the world of work
To discover and nurture creative talent
To strengthen the moral fabric of society
To deal constructively with psychological tensions
To keep democracy working
To make intelligent use of natural resources
To make the best use of leisure time
To work with other peoples of the world for human betterment (American Association of School Administrators 1966, p. i).

An examination of the findings from the White House Conference (1955), Downey's study (1960), the AASA study (1966), and those conducted in 1918, 1938, and 1952, discussed in the preceding chapter, reveals more similarities than differences (Knezevich 1975, pp. 6-7). The actual expectations for schools had not changed greatly during the first six decades of the twentieth century; however, a difference is found in the emphasis placed on individual expectations.
The progressive education movement, very evident during the first three decades of the twentieth century, and later the life adjustment movement, popular during the late forties and early fifties, both came under attack by 1950. Both reform movements were nearly buried by an avalanche of articles and books criticizing the recommendations of the Commission of Life Adjustment Education for Youth and progressive education in general. Kenneth Winetrout, writing in the *Phi Delta Kappan* in January of 1954 in response to Albert Lynd's book *Quackery in the Public Schools* published in 1953, described how prevalent the criticism of American schools had become.

Professional education has been the subject of so much misunderstanding, of so much bitter and petulant attacks, that educators in self-defense are forced to dismiss most of them perfunctorily. Every week some national magazine may carry a blast. Critics of education can easily get front page space. . . . One never knows when a colleague or a neighbor will deliver a barrage against education, and it is no fun to be on the receiving end so much of the time (p. 169).

The critics were prolific authors. Books and articles in popular magazines and professional journals produced a steady flow of criticism. Perhaps one of the most prolific authors from this group, and one who continued to write throughout most of this period, was Arthur Bestor. In addition to his *Educational Wastelands*, discussed in Chapter IV of this study, he wrote *The Restoration of Learning* which was published in 1955. In it, he deplored the anti-intellectual philosophy that he felt was being preached by educational theorists. He wrote numerous articles in professional journals such as *Harvard Educational Review* and also in popular magazines such as *U.S. News and World Report*. His theme was
consistent—schools were paying too little attention to the teaching of science, mathematics, history, and foreign languages. In his view, the progressive reforms of the preceding decades had caused the deterioration of the schools. It is interesting to note that he was not nearly as critical of Dewey as he was of those who had professed to be Dewey's followers.

In an article written in June of 1954, Bestor stated what he thought the purpose of education ought to be. "The purpose of public education today is what it has always been: to raise the intellectual level of the American people as a whole" (p. 374). He continued by making the following observation.

To do so we needed an educational system commensurate in size with the size of the nation. . . . Today we have reached the point where the law of diminishing returns largely cancels out the gains that once could be realized by simple physical or numerical expansion. We must plan the future of American education not by mechanically extrapolating past trends, but by thoughtfully considering what we wish to accomplish and how we ought to go about it (pp. 374-375).

As far as Bestor (1954) was concerned, quantity in education was not enough—quality also had to be an aim.

It is one thing to accept the lowering of standards as an unavoidable consequent of rapid expansion. It is quite another to accept lowered standards as a permanent and even desirable feature of a democratic educational system. To do the latter is to betray not only education but democracy itself. We perpetrate a fraud when we promise—for the first time in human history—to offer an education of adequate duration to every child in the nation, and then proceed to dilute it and vitiate its strength (p. 376).

It is difficult to communicate effectively what a tremendous impact Bestor's writings had on the American reader. It is important to note
that during the fifties America was locked in conflict in a "Cold War" with Russia and its communist allies. Russia and communism were seen as a constant threat and writers like Bestor often pointed out that Russian schools were better at educating their students in the critical areas of mathematics and science—areas critical to defense and the "space race."

The first lap of the race into space was lost to the Soviets in October of 1957. During that month, Russia put into orbit around the earth the first man-made satellite, "Sputnik." The impact on American citizens was immediate and substantial. To many, it simply proved that Russia's educational system was superior to America's; it also "confirmed" the charges made by the critics of American schools. One dramatic example of how this concern and fear was fueled is evident in a series of articles published in Life during March and April of 1958 in which Russian and American schools were compared.

Almost immediately there was popular support for "strengthening" the curriculum of American schools. A new physics curriculum had been introduced in 1956, and by the end of 1958 the same was true in mathematics. Additional changes were made in other sciences, in social studies, and foreign languages. In 1958, Congress passed the National Defense Education Act which supplied funds to education to be used in the "critical areas" of the curriculum and to college students who were preparing themselves in areas needed for national defense—particularly science and mathematics.

Out of this "national defense" oriented atmosphere emerged a military man bent on reforming education, Vice Admiral Hyman G. Rickover. Rickover had been a participant in the atomic submariner project and had
found it difficult to find men with qualified scientific backgrounds to
work on the project. He maintained that this lack of qualified people
was a direct result of the American schools being preoccupied with a
curriculum that was not oriented toward the stress of mathematics and
science. He became an articulate spokesman for school reform and wrote
for, and was quoted in, the popular magazines of the day. In an article
in U.S. News and World Report dated December 6, 1957, Rickover recom­
mended that a council of scholars should set a national standard for the
high-school diploma and for the competence of teachers. Schools meeting
this standard would get official accreditation. He further recommended
that if a local school continued to teach such subjects as "life adjust­
ment" instead of trigonometry, French, and physics, its diplomas would
not be accredited by the council (p. 91). In 1960, Rickover's Education
and Freedom was published. It became his most popular writing and called
for higher standards in American education based on the assumption that
education was the foundation of the nation's security.

Perhaps the most influential of all of the critics of progressive
education was James Bryant Conant. Writing in 1959 (The American High
School Today) and in 1963 (The Education of American Teachers), he pro­
posed reforms that were not nearly as drastic as those proposed by other
critics.

Before discussing the writings of Conant, it is important to state
that although the critics were very different from each other, they also
agreed on a number of points. All called for a return to the basics—
identified as grammar, math, science, more reading of classical literature,
more work in languages, and more history. Nearly all criticized what they
called the aimlessness of public education. Humanists, such as Bestor and Smith, rejected Dewey's pragmatism and called for an emphasis on utilitarian, functional, and immediately useful activities. In response to those demands, the Council on Basic Education was founded. The Council advocated that schools existed to provide the essential skills. On opposite ends of the long list of reformers were Rickover and Conant. Both men valued the liberal arts, but Rickover was caustic in his review of public education and advocated rather drastic reforms. Conant, on the other hand, was less caustic in his approach and attempted to reform in a positive manner (Church and Sedlak 1976, p. 405).

Conant (1959), in his book The American High School Today, listed twenty-one recommendations for improving public secondary education (pp. 44-76). However, two major suggestions stand out. Not unlike Jefferson, he advocated that the public schools should identify each generation's intellectual elite and insure that the elite was well prepared educationally to assume positions of political and technological leadership. This stance was an obvious shift from the life adjustment concept which concentrated on those students who were not college bound nor being trained in vocational schools. While he did address himself to the needs of those students not in the elite group and showed concern for them, most of his suggestions tended to ignore all students but the "best." In fairness, however, it is important to note that he saw honor in all occupations, but he did feel that not all students were capable of achieving on the same level and that schools should not lower their standards. In order to identify students and counsel them into the proper roles in life, he advocated an intensified guidance system (Church and Sedlak 1976, pp. 408-416).
Conant's second suggestion was that the comprehensive high school was the best way to create a necessary sense of community across classes—unlike Rickover who suggested that America model its schools after Britain or France. Conant believed schools should become responsible for maintaining the equality of opportunity which was basic to democracy and for channeling young people into future roles in a way that would make the nation strong (Church and Sedlak 1976, pp. 414-417). Conant's suggestions gained wide support and throughout the fifties and early sixties major changes—particularly in curriculum—occurred.

Without question, education in America during the fifties and early sixties had been affected by the shift of emphasis to science and the liberal arts. The change had been relatively swift and the reasons complex, but Cremin (1961), in his book *The Transformation of the School*, does suggest several reasons for the decline in acceptance of progressive education: 1) those most closely identified with the movement often were in disagreement, which caused strife, which made headlines and caused the movement to appear disorganized and lacking in definite objectives; 2) any reform movement is negative by nature and many of the suggestions advocated for reform were adopted as "answers" and when they failed, the movement lost support; 3) much of what was advocated required well-trained and competent teachers and administrators—when tried by those who were not, the results were less than successful; 4) the cries for reform that created enthusiasm in the beginning seemed a bit hollow after progress had been made; 5) following World War II, the political and social thought became more conservative and found the liberal ideas of progressive education unacceptable; 6) as
the movement became more professionalized, it lost much of the support from nonprofessional groups of people; 7) the movement failed to keep pace with the continuing transformation of American society (pp. 348-351).

As schools refocused on subject matter and on intellectual discipline, an inevitable counter force emerged. By the mid-sixties such critics as Edgar Friedenberg, Paul Goodman, Jonathan Kozol, and John Holt raised their voices in concern about American education. Paul Woodring, the education editor-at-large for the Saturday Review, wrote in 1970 about this new force.

During the Sixties a new group of critics—Goodman, Friedenberg, Holt, Kozol, et al.—reversed the direction of attack, insisting that the need is not for greater rigor or higher academic standards but rather for more individual freedom and more attention to the child's social and emotional needs (p. 66).


We cannot have real learning in school if we think it is our duty and our right to tell children what they must learn. We cannot know, at any moment, what particular bit of knowledge or understanding a child needs most, will most strengthen and best fit his model of reality. Only he can do this. He may not do it very well, but he can do it a hundred times better than we can. The most we can do is try to help, by letting him know roughly what is available and where he can look for it. Choosing what he wants to learn and what he does not is something he must do for himself (pp. 220-221).

Gross (1971), in an article in the Phi Delta Kappan, commented on Holt and others with similar views.

For John Holt, "to a very great degree, school is a place where children learn to be stupid." Paul Goodman
"would not give a penny to the present administrators, and would largely dismantle the present school machinery."
Jonathan Kozol demonstrates that the schools of one of our major cities destroy the minds and hearts of black children. George Leonard, Peter Marin, and Edgar Friedenberg see schools stifling the finest and most passionate impulses of young people (p. 23).

In the same article, Gross (1971) listed the principles on which these reformers would reconstitute education.

1. Students, not teachers, must be at the center of education.
2. Teaching and learning should start and stay with the students' real concerns, rather than with artificial disciplines, bureaucratic requirements, or adults' rigid ideas about what children need to learn.
3. The paraphernalia of standard classroom practice should be abolished: mechanical order, silence, tests, grades, lesson plans, hierarchical supervision and administration, homework, and compulsory attendance.
4. Most existing textbooks should be thrown out.
5. Schools should be much smaller and much more responsive to diverse educational needs of parents and children.
6. Certification requirements for teachers should be abolished.
7. All compulsory testing and grading, including intelligence testing and entrance examinations, should be abolished.
8. In all educational institutions supported by tax money or enjoying tax-exempt status, entrance examinations should be abolished.
9. Legal requirements which impede the formation of new schools by independent groups of parents--such as health and safety requirements--should be abolished.
10. The schools' monopoly on education should be broken. The best way to finance education must be to give every consumer a voucher for him to spend on his education as he chooses, instead of increasing allocations to the school authorities (p. 23).

Another view of American education surfaced in 1970. Charles E. Silberman, writing in his book Crisis in the Classroom, spoke critically of American education but--similar to the way Rice had done many years before--also praised schools and practices he felt were exceptionally
good. One such institution was the New School for Behavioral Studies in Education at the University of North Dakota (pp. 287-290). He also defended teachers in general and disagreed with Holt and his friends, who according to Silberman (1970) thought "that the schools are staffed by sadists and clods who are drawn into teaching by the lure of upward mobility and the opportunity to take out their anger" (p. 141). According to Silberman (1970), teachers were human and had faults, but he saw most teachers as "decent, honest, well-intentioned people who do their best under the most trying circumstances" (p. 142).

Briefly during the last years of the sixties and the early seventies, two forces appeared that influenced public education and its curriculum. The first, Career Education, was partially the result of an emphasis on the "dignity of work" of all kinds and the emphasis on egalitarianism. The term, Career Education, was coined in 1968 and 1969 by Sidney Marland, U.S. Commissioner of Education. The concept encouraged schools to provide proper guidance and experiences that would allow students to make appropriate and wise decisions about their involvement in the "world of work." Through the influx of federal and state funds--most often distributed by departments of vocational education--and such writers as Kenneth Hoyt, thousands of schools implemented career education programs. Most of the programs were not designed to be a separate part of the curriculum but were to be integrated into each grade level and course offering. For reasons beyond the scope of this study, the movement never met the expectations of those who had been its founders. It did, however, suggest to educators that the expectations for public education went beyond preparing students for "professional" occupations.
The second force was an emphasis on ecology. Fueled by popular books which discussed the dangers of pollution, over population, and the misuse of natural resources and warnings by scientists that the country was slowly—but at an increasing rate—moving toward self-destruction, Americans became concerned about what they were doing to themselves and future generations. Again the reasons for the partial demise of this force are complicated and numerous, but it can be noted that the birth control pill, successful efforts to combat pollution, and the realization that some of the dangers had been exaggerated all led this force to have less and less of an influence on public education. However, curriculum changes and additions concerning ecology had guided students to a new level of awareness about themselves and their environment. The movement had also opened many new occupations and schools gradually addressed these new student-preparatory needs.

Make-up of the School Population

Earlier in this chapter the writer referred to the educational egalitarianism that dominated so much of this period. This revolutionary epoch in American education has precipitated volumes of scholarly work and numerous intelligent debates over the assessment of its accomplishments. However, even the most noteworthy of these scholarly pursuits inevitably led to further discussions concerning the proverbial cup being half empty or half full. The scope of this study permits only a general overview of this egalitarian movement, which means that numerous historical events and facts will receive only limited attention, and perhaps some are not mentioned at all. This is not to indicate
that the picture given will be inaccurate, but only that a more detailed discussion is impossible within the limitations placed on the study.

Perhaps from the beginning it is important to note that the revolution referred to in the above paragraph was not a revolution that took place in the schools "but in our view of them, in our changing conception of the nature of childhood, and what society, through its schools, should do for children, rather than to them" (Cass 1970, p. 61). As is so true in much of America's history, what started out as a social issue soon became an educational issue.

In 1954 the famous Brown vs The Board of Education Topeka (Kansas) decision was handed down. Setting aside the concept of "separate but equal" articulated in Plessy vs Ferguson in 1896, the decision served notice that racial segregation in public schools anywhere in the United States was null and void because it violated the Constitution. It is important to note that the case involved only such inequality as might result from a governmentally imposed requirement of racial segregation. The court was not primarily concerned with equality of educational opportunity per se. The court was chiefly concerned with the question of whether specific state laws relating to educational opportunity provided equal protection of the laws.

The complexities of defining "equality of educational opportunity" were and are staggering. Myron Lieberman, writing in 1959, spoke of this in an article for the Harvard Educational Review.

... it becomes important to recognize that complete equality of educational opportunity is impossible. Not everyone can have the same teacher or live in the same home environment or travel the same distance to school, to mention just a few things that could be the basis of
inequality of educational opportunity. The impossibility of complete equality tells us something about what people do not ordinarily mean when they say that there is equality of educational opportunity. They do not mean that there are no inequalities whatsoever pertaining to educational opportunity. Rather, they mean that some inequalities can be disregarded in judging whether there is or is not equality of educational opportunity (p. 173).

One month after the Brown decision, Bestor (1954) stated his view on the subject of equal educational opportunity.

To extend educational opportunity to everyone involves bringing into school for a certain length of time every child, regardless of his ability, or interest or effort. Hence our compulsory attendance laws. But the idea of democratic opportunity does not imply the indefinite prolongation of such schooling, that is, mere classroom attendance by young people without intellectual curiosity, mental ability, or willingness to work (p. 376).

The ensuing discussions following the Brown decision were numerous and aimed at interpreting what equal educational opportunity meant. It was relatively easy for some to interpret educational egalitarianism to mean identical education. Children were not only to be treated alike but were to be perceived as being alike. The view was criticized by many. One of the most notable of these critics was Isaac L. Kandel. In an article published in 1956, he attempted to explain why equality of educational opportunity had been so interpreted as to become identity of education.

Among the explanations that may be adduced for the interpretation of equality of educational opportunity in practice is the notion that it is undemocratic to attempt to distinguish between pupils of different abilities, as though intellectual ability can be defined in the same terms as political equality. Another possible explanation
is a certain fear that a sound definition of the ideal of equality in terms of an education adapted to differences in ability would lead to social stratification (pp. 270-271).

While Kandel did identify the above explanations, he deplored the idea of equating educational egalitarianism and identity of education. He felt individual differences had to be taken into account and those gifted with superior talent should be encouraged to reach their full potential. He could not accept that the provision for equality meant the sacrifice of talent even though, in his view, such a sacrifice was happening. Kandel believed that superior talent in students was no longer honored when all subjects in the curriculum were seen as being equal and people held the view that it did not make any difference what a student studied, so long as he like it. It was a fatal error, Kandel (1956) thought, when "equality of educational opportunity could now be assured by the acceptance of the notion of the equality of all subjects that any group of students might think that they wanted" (p. 272). In Kandel's view, it was not undemocratic to identify superior talent or intellect in students nor to consider some subjects as worth more educational value than others. Kandel's view on identifying differences in students was shared by Thomas D. Horn who expressed his views in 1954 in an article in the Phi Delta Kappan.

Perhaps one of the major weaknesses in education has been the failure to see that there is nothing undemocratic in the possession of magnificent talent or intellect ... nor in excelling all others in a particular area. Likewise, it is not undemocratic to possess restricted talents in any or all fields of endeavor (p. 97).
It is obvious that the task to which egalitarianism had called educators was a difficult one. Even when a sound definition was agreed upon, the tendency was to pay more attention to the superior student, the retarded student, or to both, and ignore the rest of the students. Fischer (1960) spoke of this danger.

No one need argue here that bright young people are a priceless asset to the nation, or that each should be encouraged to go as far and as fast as he can. The danger here is that we may overlook as individuals those whose gifts have come in smaller sizes. They are important too, and, as Abraham Lincoln once noted, they occur in very large numbers. There is an unfortunate tendency today to personalize our references to the talented and retarded, but to treat the other pupils as a faceless mass (p. 19).

Not everyone, however, was a sympathetic to the "faceless mass" to whom Fischer had referred. Within this mass of students were those who found it difficult to adapt to the formal educative process and were unwilling to conform to every expectation. They were normally referred to as juvenile delinquents. The term was not new to this period but as enrollment numbers grew rapidly during this time and compulsory laws were enforced, their numbers grew as well. Perhaps one of the most unsympathetic views of these students was voiced by the then superintendent of schools in Needles, California—Max Rafferty. He called them slobs, and in a 1958 article in the Phi Delta Kappan, Rafferty suggested they should be treated like a disease in the schools.

We have gone overboard on universal education. It has become a fetish, instead of a logically considered objective. By our stubborn refusal to exclude clearly pathological cases
from school, we are presently permitting this fetichism to work irremediable wrong upon the great majority of normal children whom we are exposing to this moral plague. It is my conviction that Slobbism is a highly contagious disease. It must be treated as such (p. 59).

Earlier in the same article, Rafferty (1958) suggested that these students should be eliminated from the schools.

One way or another, the Slob must go. Those of his ilk who have passed the point of no return must be excluded from our schools as socially uneducable, even as we exclude the unfortunate imbecile as mentally uneducable. And let no one challenge our right to take this step. The Slob is more dangerous to his classmates than a walking case of typhoid or tuberculosis. We have not only the right, but the clear and positive duty to quarantine him. It is our shame that we have not done so sooner. What will become of him? When he has reached this stage, he has passed beyond our power to correct. He is no longer susceptible to Education. He has become a subject for criminology (p. 59).

Without question, Rafferty's views were extreme and precipitated by the "blackboard jungle" atmosphere that existed in some of the schools within his state and other states as well. These views, however, were not unique to Rafferty. During the later fifties more and more concern was expressed about the delinquent and his negative influence on the schools.

As the decade of the sixties began, new political and social winds began to blow. The Civil Rights movement founded during the fifties found a friend in the White House. The "New Frontier" of the Kennedy administration generally supported the civil rights movement and called all Americans to participate in making the United States—and the world—a better place in which to live. Society was asked to view each person
as a unique individual with unique potentialities. It was further sug-
gested that in order for some people—those previously deprived of civil
rights and opportunity—to have a chance at reaching their full poten-
tial, assistance would have to be given. In education, this was trans-
lated into "compensatory education." In 1963 and 1964, Presidents
Kennedy and Johnson declared a "War on Poverty" and in 1965 the Ele-
mentary and Secondary Education Act was passed by Congress. The Act
authorized federal funds for educational programs aimed at assisting
"deprived" children. The funds provided to schools nearly doubled the
amount that had previously been given by the federal government to
local schools for the support of education. While the Act included
several parts and addressed several problems relating to education, it
was in reality a "civil rights" piece of legislation rather than an
effort to support public education through the use of federal funds.
Another attempt made on the federal level involving the concept of
egalitarianism was the "Head Start" program. Begun as a massive effort
by the Office of Economic Opportunity—not the Office of Education—in
1965 and 1966, it was intended to be a summer preschool program designed
to involve professional educators, community workers, guidance coun-
selors, and parents in an effort to stimulate the cognitive powers of
poor children. Its emphasis on learning was somewhat similar to that
which was expressed during the "progressive era." Through the research
of Martin Deutsch, J. McVicker Hunt, and Benjamin Bloom, it was found
that the first few years of life were significant in determining the
child's later capacity to learn. Psychologists Cronbach, Hunt, Bruner
and others spoke about learning and early childhood. They argued that
children could learn more than had been previously thought, they could learn it better, and, perhaps most important, they could learn it earlier. One result of such thinking was the proliferation and popularity of so-called "educational" toys (Church and Sedlak 1976, pp. 416-417).

Additional attempts were made to equalize educational opportunity by recruiting teachers from minority groups and to include women, blacks, Latins, and Indian studies in both the public schools and higher education. Indian education had made major gains during the "New Deal" but a major setback nearly occurred during the Eisenhower Years when Congress in 1953 declared its intention to terminate federal relations with Indians in order to speed assimilation. The policy, however, was not carried out and the sixties witnessed a rapid increase in attention given to Indian affairs. Butts (1978) reports that Indian children in 1970 were predominantly in public schools (63 percent), with 31 percent in government schools and six percent in mission schools (p. 339). He further reports that the most striking expansions in the decade of the sixties were the growth of the Indian population in urban centers (30 percent in 1960; 38 percent in 1970) and the proportion of young people going through secondary school and on to college; 55 percent of the age group finished high school and 20 percent entered college (p. 339).

The Spanish-speaking minority made slow but steady gains in the area of education during the fifties and sixties. The legal battles over unequal and separate education were not as spectacular as those involving the black codes, but there were similarities. Even as late as 1970 a federal judge ruled that Corpus Christi, Texas, was actually operating a dual school system for Mexican-Americans, and he ordered
the board of education to submit a plan for desegregation (Butts 1978, p. 341).

As American Indian and Spanish-speaking students realized more and more success along the road to universal education, the black population of students often found themselves in the middle of two vocal groups—segregationists, who maintained that "separate but equal" was fair, and those supporting the causes of the civil rights movement. From the mid-fifties throughout the period, the confrontations over civil rights spilled from the courts to the schools, the college campuses, the streets, the restaurants, the buses, and the Southern states. However, by the early sixties the tempo of desegregation picked up. These small steps toward egalitarianism often led to violent resistance, but the legal confrontation on matters of education continued with slow but noticeable success. In fact, Butts (1978) maintains that "... by the end of the decade, the educative effect of the law in persuading white public opinion to accept desegregation in the South turned out to be remarkably significant" (p. 330).

The year 1964 was a turning point in the progress of legal desegregation. In that year, the Civil Rights Act was passed by Congress. It put all three branches of the federal government behind the drive for equality in education. Title IV of the Act authorized the Justice Department to initiate law suits on behalf of individuals to compel compliance with desegregation in the schools and to give assistance to school districts, in desegregation. Title VI put teeth into the operation by authorizing the withholding of federal funds from state or local agencies, including school districts that continued to discriminate.
The Act also directed the Commissioner of Education to survey inequality of educational opportunity among all groups in the United States. The survey was promptly begun, and in 1966 a 743 page report of the findings, prepared by James S. Coleman and six associates, was published. In the study, it was revealed that achievement among poor children was most highly and positively correlated to the socioeconomic status of the children with whom they attended school (Church and Sedlak 1976, p. 451). This conclusion led to arguments for large scale busing of children from one neighborhood to another—disrupting, in many cases, the concept of the neighborhood school. Serious opposition to this practice arose almost immediately and continued throughout the time period.

The reviews of compensatory education were mixed. Two are noted here as examples. The first is from 1969.

Today the schools are criticized for their failure to provide equality of opportunity to poor black children. The charge is true, but it is by no means the whole truth, nor is it new. The public schools have always failed the lower classes—both white and black. Current educational problems stem not from the fact that the schools have changed, but from the fact that they continue to do precisely the job they have always done (Greer 1969, p. 84).

Later in the same article, Greer (1969) discussed the emphasis on egalitarianism and how in his opinion it had changed the purpose of the school.

What this means, in effect, is that in a variety of different ways we have increased our demands on the schools. Thirty years ago the purpose of public education was culturally defined as little more than baby-sitting for all children. Now, neither corporations, government, suburban
parents, nor the black community are willing to accept the school as a mere custodian. Its purpose has been redefined by society: Not only must it serve all children, but it must graduate them all with salable skills (p. 102).

The second example is from an article written in 1970 by Peter Schrag.

About a decade ago, something began to change. Until then "equality of educational opportunity" was understood in simple (and misleading) terms. It was the equality inherited from social Darwinism: Everyone in the jungle (or in society, or in school) was to be treated equally: one standard, one set of books, one fiscal formula for children everywhere, regardless of race, creed, or color. Success went to the resourceful, the ambitious, the bright, the strong. Those who failed were stupid or shiftless, but whatever the reason, failure was the responsibility of the individual (or perhaps of his parents, poor fellow), but certainly not that of the school or the society.

In the process of compensating and adjusting, of head starting and upward bounding, the burden of responsibility shifted subtly from the individual to the school and the society. Failure used to be the kid’s fault; not increasingly, it seems, at least in part, to be the fault of the system (p. 70).

In spite of the problems related to egalitarianism, 97.8 percent of all children from the ages of 5 to 17 were attending school in 1970 (Table 10) and 89.4 percent of minority students were enrolled. The latter figure had changed from 80.8 percent in 1954. However, many struggles were still ahead. In 1970, attempts were still being made to desegregate schools in Mississippi, Louisiana, and elsewhere in the Deep South, and these attempts were still meeting determined resistance—although no longer much violence or rioting. By this same date, only 23 percent of the nationwide total of more than six million black pupils attended integrated public schools. About half of the total of more than six million black pupils were in the South and there the
### KINDERGARTEN, ELEMENTARY, AND SECONDARY SCHOOLS AND ENROLLMENT: 1870-1970

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See footnotes at end of table.
### TABLE 10 (Continued)

**KINDERGARTEN, ELEMENTARY, AND SECONDARY SCHOOLS AND ENROLLMENT: 1870-1970**

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* Denotes first year for which figures include Alaska and Hawaii.
* NA: Not available.
* **Denotes operating and nonoperating districts.
* Statistics are for 1970-71.
* Partially estimated.
* Data for 1890 and 1932-1938 exclude kindergarten enrollment; all other years include it.

percentage of blacks in the school with whites was only eighteen
(Bickel 1970, p. 518).

Assessment of Student Learning

During the fifties the critics of American education maintained
that educators seemed to provide neither competence for everyone nor
excellence for the few. As was mentioned earlier in this chapter, the
critics, like the public, differed on which goals should be preeminent.
Because of the threat of Soviet supremacy, the public demanded, however,
that educators concentrate on those who excelled. Egalitarianism must
not mean the sacrifice of talent. Bestor, writing in 1954, expressed
his view on the matters of egalitarianism and testing achievement.

Because of compulsory attendance laws the high school is
obliged to admit every child of appropriate age, But, it
is not obliged to graduate every child. . . .
. . . Final examinations at the completion of high
school are absolutely necessary if the secondary school
diploma is to have any real significance. . . . The
public will have no difficulty in grasping the fact
that a high school administrator or teacher who refuses
to have his students graded on their achievement by inde­
pendent examinations is like the public official who re­
fuses to have his accounts audited by independent examiners.
If we who are professionally engaged in education will
redirect the American public schools toward the goal of high
intellectual achievement, I am certain that public opinion
will respond with enthusiasm (pp. 376-378).

The views of Bestor, and others like him, were fairly well accepted
during the fifties, but during the sixties the new emphasis on egalitar­
ianism seemed to be in conflict with the suggestion that schools should
concentrate on a talented few. Therefore, the articulation of such a
philosophy and the operational practices that followed never gained
acceptance during the sixties for philosophical and practical reasons.
Problems with positions like Bestor's increased as people became aware of the vast differences in basic opportunity. In the sixties, national policy turned to the issue of remedy in response to the growing political power of racial and ethnic minorities and a new national social conscience. Courts and civil rights groups questioned the use of certain selection devices; in essence, they asked whether the chosen measure and level were evidence of competence. Again, the failure of definition plagued both educators and the public. Some debated the need for standards; others debated the impact of the sixties on the standards; still others debated the appropriate level; few examined the nature of the standards. Despite the pressure for and actual elimination of some grading practices and the institution of open admissions, public accountability still demanded evidence of educational achievement (Britell 1978, pp. 19-20). During the early seventies one began to hear demands for specific accountability, for the delineation of the schools' responsibility for results.

By the end of the sixties the American society found itself deeply involved in and divided by racial strife; an unpopular war in Vietnam; the "reexamination" of family, school, and religious standards; and the extreme preoccupation (as many viewed it) with the rights of the individual. As Americans observed their society--disliking much of what they saw--they searched for the cause of so much disruption. In the minds of many, the schools were identified as the culprit. Educators, it appeared to them, had made many promises and offered much hope but simply had not delivered. Schools, however, were not alone; liberal courts and liberal politics also received their share of the blame. In
the view of many, the courts had gone too far in their protection of the individual's rights and the Democratic administration had proven once again that good intentions and huge sums of money do not necessarily solve problems.

The optimism about the value of education, however, was still there and continued to be strong, but serious doubts arose about the public school system's ability to actually deliver on its promises. Perhaps the epitome of such distrust was the introduction of "performance contracts." The first performance contract was the highly publicized venture in the adjacent cities of Texarkana along the Arkansas-Texas border during the 1969-70 school year. The private firm, Dorsett Educational Systems, guaranteed to raise the reading and math skills of potential junior high school dropouts one grade level within eight weeks or pay a cash penalty. If the company succeeded, Dorsett would be paid eighty dollars for each subject grade level gain.

An independent evaluator conducted periodic testing, and school officials marveled at the improvements the students were making. But in the final May evaluation, officials learned that at least a portion of the success was due to Dorsett's having "taught to the test," programming into the learning machines answers to questions the students would have on their national achievement tests.

Performance contracts soon came under attack. One critic was Robert E. Stake. In an article in *Phi Delta Kappan*, published in 1971, he warned about the dangers of performance contracts when general-achievement tests were used to measure performance gain.

Are such tests suitable for measuring specific learning? To the person little acquainted with educational testing, it
appears that performance testing is what educational tests are for. The testing specialist knows better. General achievement tests have been developed to measure correlates of learning, not learning itself (p. 583).

In spite of the public's continued demand that school systems be held accountable for their products, few accountability programs were "successful" and the performance contracts rapidly faded from the scene. The reasons for their demise perhaps should have been predicted. Lopez (1970) has suggested four basic reasons: 1) most accountability programs were installed in organizational settings that lacked the necessary background and organizational traditions to assimilate them; 2) the administrative procedures governing the program were not attuned to its purposes; 3) accountability systems were not designed to gain acceptance by those who have to implement them; 4) the measures of accountability that were developed did not meet even minimum standards of reliability and relevancy (p. 231).

The demand for accountability, however, did not go away as the reader will discover in the next chapter.

Summary

It is difficult, if not impossible, to characterize this entire period in one, or even several, simple terms. The two decades representing this period of American educational history were quite different from each other.

As the fifties emerged, the demand for "academic discipline" was a sharp contrast to the progressive and life adjustment movements of the preceding decades. The move from the child-centered emphasis of
progressive education to the selectivism of Rickover was no small leap. During the progressive era the children's experiences and interests were the determining factors in deciding what educational experiences they would have. During the fifties the "cold war" and the concentration on national survival dictated what areas would be emphasized in schools. Jefferson's interpretation of universal education was revived as the need for national defense demanded an identification of leaders and the special education of a select few. Vocational education received new support as a way of training people in the technical areas needed in the new scientific age. Curriculum changes in public education reflected the tremendous importance placed on science and mathematics, and to a lesser extent, the liberal arts. All of this was partially supported nationally with huge sums of federal money through the National Defense Education Act. It was a decade dominated by America's preoccupation with national security, and the schools simply reflected that societal concern.

The "list" of societal expectations for schools did not vary significantly from the fifties to the sixties but the emphasis placed on specific expectations did. As the threats generated by the cold war became diminished during the middle sixties the "war on poverty" demanded attention. School curriculum offerings now had to be "relevant" and the demand for the development of each individual's talents employing the learner-oriented methods found support from the romantic reformers of the decade. "Make love, not war" was the new popular cry. Scientists were not honored as much for their contributions to national defense as they were for their scientific contributions to the more
"romantic" race to the moon. "Social" studies in school course offerings became popular as history, sociology, and government courses were divided into mini-courses reflecting the relevancy and specificity demands of the students. The academic discipline of the fifties and very early sixties gradually gave way to a less strict interpretation of what an educated person should be.

As the civil rights movement gained momentum and reached its peak by the end of the sixties, a new definition of what constituted equality of opportunity emerged. It was one that focused on groups rather than individuals. Few writers seriously suggested that every child should, or could, be made to have equal capabilities, but the new definition did say that the distribution of skills, potential, and merit within any particular socioeconomic, racial, or ethnic group ought closely to approximate the distribution of those characteristics in any other socioeconomic, racial, or ethnic group. Church and Sedlak (1976) offered the following clarification.

The equality in question was not equality of skills of material success between any two randomly chosen individuals but equality in skills and material success between the children (considered as groups) of any two social classes or racial or ethnic groups (p. 453).

As American society developed a new group consciousness, the schools and their programs reflected this new understanding of egalitarianism. "Compensatory education" was one major effort. Another was the making of the school curriculum "relevant" to ghetto children. A third, was an increased effort on the part of the school to recruit more and more teachers from a background roughly similar to that of the children.
having difficulty. Two final ways were through desegregation and integration. None of these attempts were totally successful but their implementation is an example of the kind of commitment made to egalitarianism during the latter years of the period.

This writer views the fifties as basically "reactionary" years and the sixties as "action" years. Action does not necessarily guarantee success but it almost always projects hope. When total success is not realized, quite often cynicism and another round of reaction is precipitated. By 1969, such cynicism was present in American society with regard to its schools. Cries for accountability and the use of performance contracting are two examples. The "return to the basics" demand that was mostly unheard during the sixties once again emerged during the seventies. Accountability was replaced in the seventies by a new demand—the guarantee of minimum competence. As this new demand and the continued demand for egalitarianism merged the societal expectations for schools took on a new dimension. Therefore, the title of the next chapter is "The Age of Universal Guarantee of Minimum Competence."
CHAPTER VI

The American public's attitudes toward public education during the years represented by this period were, like other periods at least in part, reflections of the American society (see Figure 5). The demand for accountability with regard to education had surfaced during the late sixties and early seventies—years when Americans were faced with high inflation, unemployment, and the disasters of Vietnam and Watergate. Educators during the sixties had promised much and the general public had been optimistic about the ability of the educative process to meet the peoples' expectations. However, as the dreams for egalitarianism and the promises for better educational results, through well-funded creative ideas and approaches, were never fully realized, the American public became more cynical.

Parents from every social class were incensed because the school environment had not protected their children from drugs. The classrooms "without walls," that had been one representative of the educational "freedom" of the sixties, now appeared to many to be areas inviting chaos and encouraging students to be undisciplined. The parents of the upper classes were increasingly upset that the inquiry method of education that was so popular in their schools seemed to regularly lead their children to question sacred values and to rebel against
Figure 5. Timeline of Important Dates and Events Emphasized in Chapter VI (1972-1978).
established traditions. The perceived lack of student discipline in the schools was viewed as a serious problem and many lamented the fact that strict dress codes were no longer enforced or even policy. Evidence of this dissatisfaction is seen in the findings of the 1969-1978 Gallup Polls reported in the Phi Delta Kappan. When respondents were asked to identify the major problems facing the schools, they identified "lack of discipline" in the schools as the most serious except in 1971 when it was listed the third most serious.* Reported declines in standardized test scores further fueled the negative public feelings about schools.

In short, the public did not feel satisfied with what they perceived was happening in the schools. They demanded quieter schools, more obedient students, and a return to the basics—generally identified as reading, writing, and arithmetic. As a consequence of this dissatisfaction, voters turned down school bond issues and school tax increases with surprising regularity.

Societal Expectations for the Schools

In many ways, the "back-to-basics" movement was a continuation of similar demands made during the fifties. The events of the sixties were in some ways a digression (some would say a nightmare) from the objectives of people like Bestor, Conant, and Rickover. In reality, many of the innovations of the sixties had only a small lasting effect on educational practice. By the early seventies, the federal funds

*(Gallup 1971, p. 35); (Gallup 1972, p. 34); (Gallup 1973, p. 39); (Gallup 1974, p. 21); (Gallup 1975, p. 228); (Gallup 1976, p. 188); (Gallup 1977, p. 34); (Gallup 1978, p. 34).
which had supported many of the innovations were no longer available or available only in much smaller amounts. Instead, millions of dollars in federal funds were being spent on accountability programs in education. Performance contracts, vouchers for parents, program budgeting, systems analysis, and management by objectives were just some of the areas receiving attention. What motivated people to advocate such practices is open to debate. Some, undoubtedly, viewed the implementation of such practices as a way to cut costs and as a result little attention at times was given to the needs of students. This issue was raised by Hechinger (1978) in the National Education Association Journal, *Today's Education*. In the article, he pointed out that those who simply want to cut school budgets have joined forces—under the banner of basics—with both political and educational conservatives.

The call for a return to the basics, in his opinion, was really a demand for "cutting out the frills" motivated by a desire for lower property taxes as well as a desire to support the puritanical view of education (pp. 31-32).

Regardless of the reasons, the shift to a conservative approach to public education was obvious. Cries were heard once again for the schools to return to the emphasis of the "good old days." Brodinsky (1977b), writing about the back-to-basics movement, noted how prevalent the demands had become.

Newspaper editorials demand that "the 3 R's must come home again." Parents attending PTA and school board meetings charge that the schools are soft on reading, writing, and math instruction—and usually make the headlines. Taxpayers, citizens, voters, including those who know how to reach their state legislators, call for laws to bring
a return to the basics. Employers are always sharp in
their accusations that those entering the labor market are
weak in reading, writing, spelling, work habits, and atti-
tudes. . . . College entrance examination officials and
college professors complain that the secondary schools are
sending them students who read and write at low levels and
are not prepared for higher education (pp. 12-13).

From the preceding chapters of this study, it is apparent that the con-
cern noted by Brodinsky is not entirely unique to this period. Concern
about the quality of public education had historically been expressed
by groups of Americans. Again, it was not that the societal expecta-
tions for schools had changed greatly from those stated in earlier
years--the Cardinal Principles of Secondary Education were still viewed
as relevant--but rather that the emphasis placed on individual expecta-
tions had changed. The accountability demands stressed the need for
evidence of self discipline, competence, and academic achievement in
the products of the schools. These demands tended to be in conflict
with the creative and innovative practices of the sixties.

The back-to-basics movement of the seventies is a peculiar phenomenon.
While its origin dates back to the founding of the United States, its
appearance on the educational scene was perceived by many as a new idea,
or at least a "fresh" idea. The basics advocates viewed the implementa-
tion of their views as a step in a positive direction and at the same
time referred to the past when citing examples of "good" education--
often ignoring the fact that the examples from the past were practices
that had been criticized during the time they were implemented. The
movement enjoyed widespread publicity but had no formal organization to
speak for it. In fact, this informal organization may have been the
reason that the movement seemed to have such a large following. One did not have to accept any specific set of objectives or creed because none existed. All one had to do was express some interest in the basic elements of education and you were counted among the movement's ranks. A Gallup poll conducted in 1976 and reported in the Phi Delta Kappan of that same year indicated that 51 percent of the respondents thought the best way to improve the quality of public education overall was to devote more attention to teaching the basic skills (Gallup 1976, p. 189). One year later 57 percent of the respondents in a similar poll said they had not heard or read about the back-to-basics movement (Gallup 1977, p. 35). What appears to be a contradiction is simply evidence that people advocating a return to the basics did not generally identify with a formal movement but somehow had been convinced that the basics needed more emphasis. Unlike the basics movement of the fifties, the movement of the seventies did not appear to have any chief spokesperson—no "Rickover" or "Bestor" was evident. The concerns being expressed by a variety of sources, however, did receive publicity from all types of media.

Because of the informal nature of the basics movement, it is difficult to determine what specific requests were being made by the advocates, or for that matter, what was meant by the term "basics." Clarification of the term "basics" was not found in a recent Gallup poll which asked people to respond to the question, "Do you favor or oppose this back-to-basics movement?" Of those who responded, 83 percent were in favor, 11 percent were opposed, and six percent gave no answer (Gallup 1977, p. 36). When respondents were asked to identify the
"basics," some respondents listed reading, writing, and arithmetic. A substantial number, however, suggested that the "basics" were such traditional values as good manners, proper dress, obedience, and a return to "structured classrooms" and to "the old way of teaching" (Gallup 1977, p. 36). This lack of agreement led Snider (1978) from the National Education Association to note that, "It would seem, then, that some parents want 'basic skills' while other parents want 'basic behavior'" (p. 17).

Evidence would seem to indicate that people were generally in favor of an increased emphasis on the "basics" as long as they are allowed to define them. One example of this type of thinking is found in an article authored by Jarrett (1977). In the article he states, "I'm for basics--assuming, of course, that you agree with me on what they are" (p. 235). In the same article, Jarrett says, "The trouble is that the word (basics) seems to mean too little, sometimes too much. It means too little if the implication is that schools . . . should teach nothing but the three R's . . ." (p. 235).

It is apparent that any attempt to identify and deal with the issues of the back-to-basics movement would be difficult and in need of scholarly objectivity. One such pursuit was undertaken on April 25, 1977, when a group of educational leaders met for three days at Wing-spread in Racine, Wisconsin. The stated purpose of the meeting was "to examine the state of the basic skills in American education" (Brodinsky 1977b, p. 7).

The participants in the conference included specialists in reading, mathematics, communications, and other curriculum areas; legislators,
public school administrators, and higher education representatives; and leaders of national and state agencies concerned with education. The group was assigned the task of "analyzing requirements for the development of competence in reading, writing, computing, and other basic skills" as well as "sorting out the issues in a movement that calls upon educators to give greater emphasis to what has been labeled 'basic skills'" (Brodinsky 1977b, p. 7).

One participant of the conference, Brodinsky (1977a), submitted a composite view of some of the conference findings in an article in the Education Digest. In the article, he listed twelve demands that the back-to-basics advocates had made at various times and places.

1. Emphasis on reading, writing, and arithmetic in the elementary grades. Phonics is the method advocated for reading instruction.
2. In secondary grades, most of the day to be devoted to English, science, math, and history taught from "clean" textbooks.
3. At all levels, the teacher is to take a dominant role.
4. Methodology is to include drill, recitation, daily homework, and frequent testing.
5. Report cards are to carry traditional marks (A, B, C, etc.) or numerical values (100, 80, 75, etc.), issued at frequent intervals.
6. Discipline to be strict, with corporal punishment accepted. Dress codes should regulate student apparel and hair styles.
7. Promotion from grades and graduation from high school to be permitted only after mastery of skills and knowledge has been demonstrated through tests.
8. Eliminate frills—clay modeling, weaving, doll construction, flute practice, volleyball, sex education, etc.
9. Eliminate electives and increase number of required courses.
11. Eliminate "social services"—sex education, driver education, guidance, drug education, physical education.
12. Put patriotism back in schools. And love for one's country. And for God (pp. 2-3).
Brodinsky (1977a) was quick to add that, "Such a list, read as a totality, would cheer only the most rabid protagonists of back-to-basics" (p. 3).

Later in the same article Brodinsky (1977a) listed the developments that precipitated the back-to-basics movement.

Parents have taken a larger part in school affairs. They try to reshape policies and programs in accordance with their views.

Blacks and Hispanics claim their children are ignored or shortchanged with respect to instruction in basic skills.

Over the years, teachers have been urged to focus on creativity, humanistic objectives, and development of independent thinking. It has not always been clear whether these were to be in addition to, or instead of, mastery of the skills.

Employers have long complained that high-school graduates do not make productive workers because they cannot read instructions on the job and lack ability in arithmetic.

Colleges have long complained the typical high-school graduate is unprepared for college.

As proof of their complaints, employers and colleges cite the 12-year drop in national test scores. Parents say, of the reason for the drop, "There is not enough emphasis on basics."

Partisans of the basics often revolt against the growth of super-professionalism in education, and the proliferation of the school's services and activities.

Finally, there is the financial crunch. It is cheaper to finance a stripped-down school program (p. 3).

It would be relatively easy to accuse the media of being interested in "a story"—sensationalism, bad news, and sweeping generalities—when reporting the criticisms of the basic advocates. However, it is obvious from the list above that there were fundamental causes for the dissatisfaction with public education.

One indication of the degree of dissatisfaction the American public held was found in the 1978 Annual Survey of the Public's Attitudes Toward the Public School by the Gallup Poll and the Charles Kettering Foundation. When respondents were asked to rate the public
schools in their communities using an A, B, C, D, or Fail rating, it was found that only nine percent rated their schools an A. In 1974, 18 percent of the respondents in a similar poll had given their schools an A rating. In 1978, 28 percent of the respondents gave their schools a B rating compared to 30 percent in 1974, and 30 percent gave a C rating in 1978 while 21 percent had given a C rating in 1974 (Gallup 1978, p. 35). When respondents in the 1978 poll were asked the question, "What, if anything, do you think the public schools in this community should be doing that they are not doing now?" a significant number indicated they wanted more emphasis placed on the basics (Gallup 1978, p. 36).

It is impossible to isolate the back-to-basics movement from the other accountability issues that were dominant during this period. In the next two sections, two more issues will be discussed—egalitarianism and minimum competency testing.

Make-up of the School Population

School enrollments had increased greatly during the fifties and sixties, particularly secondary school enrollments. According to one government report, 5,725,000 students were enrolled in public high schools in 1950 and by 1970 that figure had risen to 13,022,000 (U.S. Bureau of the Census 1975, p. 368). However, during the seventies school enrollments tended to level off in the high school and drop rather sharply in the elementary schools due to the declining birth rate. In 1970, 30,001,000 students were enrolled in public elementary schools, but by 1977 this figure had dropped to 25,983,000 (U.S. Bureau of the Census 1978, p. 3).
By the seventies, enrollment figures supply evidence that universal education, in the sense of students having an opportunity to attend school and taking advantage of that opportunity, appeared to be a near reality. According to the most recent enrollment figures available to this writer, in 1977 over 99 percent of all students ages 7 through 13 were in attendance, 98.5 percent of all students 14 or 15 years of age were enrolled, and approximately 89 percent of all students 16 or 17 years of age were enrolled in schools (U.S. Bureau of the Census 1979, p. 59). The relatively low dropout rates during the period also are impressive. Throughout most of the period the dropout rate for white males and females remained fairly constant—10 percent for males and 11 percent for females. The number of blacks who dropped out of school declined from about 24 percent for males and 22 percent for females in 1967 to 18 percent for males and 19 percent for females in 1975. Dropout rates for the Spanish minority were higher. About 25 percent of all persons 14 to 24 years old of Spanish origin were dropouts and for Spanish origin groups who usually speak Spanish at home, the dropout rate went up to 45 percent (Neill 1978, p. 32).

Enrollment figures, however, do not tell the whole story. The issue of egalitarianism (equal opportunity) was yet to be resolved. The reforms of the sixties had not been successful in providing equal opportunity to all students. Such experiments as "performance contracts" had not proven successful and attempts to desegregate the schools had met with mixed success. In fact, government statistics indicated that while integration had progressed in the South and the border states during the first half of the seventies, racial isolation

Busing for the purposes of desegregation had been seen as an answer to the equal-education problem by its advocates during the late sixties and early seventies. By the mid-seventies the advocates were no longer so numerous or vocal. Busing, often court-ordered, nevertheless did continue. Opposition to busing, however, also continued. In 1976, court cases concerning busing were still pending in such cities as Milwaukee, St. Louis, Dayton, Omaha, Detroit, Kansas City, Indianapolis, Los Angeles, Chicago, and New York (Butts 1978, p. 336).

The Supreme Court historically had influenced greatly the issue of desegregation. The busing issue was no exception. Court cases were numerous and a detailed discussion is beyond the scope of this study; however, one interpretation of the Court's stance on segregation may be helpful. Butts (1978), writing about the 1977 Supreme Court, offered an interpretation of the Court's position.

For segregation in schools to be declared unconstitutional it must be shown that it was the result of deliberate and intentional action by government agencies, including, of course, boards of education and administrators. This probably meant that court-ordered desegregation need not go beyond what was necessary to redress the segregation resulting from intentional government policies. It also meant that a district once desegregated need take no further action to prevent resegregation caused by housing patterns or white flight to the suburbs. But in the Dayton case in June, 1977 the Court reaffirmed the authority of federal courts to order city-wide desegregation, including city-wide bussing, if the factual findings of segregation warranted it (p. 336-337).

The problems arising out of integrating schools and busing students for the purpose of desegregation had been major. Although the issues are
generally identified as social ones, they often became educational. In fact, integration and busing combined were identified as the fourth major problem confronting schools in a recent poll taken concerning the public's attitudes toward education (Gallup 1978, p. 34).

In the same poll, the question was asked, "In your opinion, do black children and other minorities in this community have the same educational opportunities as white children?" The results are interesting. Those answering "yes" to the question represented 80 percent of the respondents. For all respondents who were parents of children in public schools, 86 percent answered affirmatively to the question. When respondents were classified as white, black, from the South, or from the North, the following were found to answer "yes" to the question: Southern whites, 85 percent; Southern blacks, 54 percent; Northern whites, 86 percent; Northern blacks, 21 percent (Gallup 1978, p. 37). Perhaps some of the dissatisfaction expressed by the Northern blacks is related to the absence of movement in desegregation that was mentioned previously in this section.

Further confusion was added to the issue of egalitarianism by such persons as Jensen and Jencks. Jensen (1969), in an article in the Harvard Education Review, argued that the failure of various compensatory strategies "proved" that blacks in the United States really did have an inherently inferior capacity for abstract reasoning (pp. 1-123). Jensen's stance was heatedly debated, but clearly it struck a responsive chord in American society. His findings were often cited as reasons for spending less money on compensatory education and provided a vent for many latent feelings that blacks were inferior. Church and Sedlak
(1976), writing about Jensen, shared their opinion on the possible outcomes of Jensen's findings.

In a longer perspective, it may appear that Jensen's work was the beginning of a resurrection of the educator's traditional explanation of why certain groups did poorly in school—that the students and their racial inheritance, rather than the schools, were at fault (p. 470).

Jencks and his associates argued that the assumed correlation between future success and educational advantages was far more tenuous than had been realized. In their view, "luck" and aspects of personality having little or nothing to do with cognitive ability seemed far more important than academic success in determining a person's future in the economic structure. Eliminating the differences in wealth between the richest fifth of the population and the poorest fifth was more important in the view of Jencks than eliminating the differences between blacks and whites. Jencks therefore concluded that since education had a relatively small role in determining the pattern of grossly unequal distribution of wealth, it had little power to change it. As far as he was concerned, educators had promised something that they could not deliver (Church and Sedlak 1976, pp. 470-471).

The views of neither Jensen nor Jencks were universally accepted. The debate over their findings is by no means finished and more than likely will continue into the next decade and perhaps beyond. It is important to note, however, that each of these views maintained that equalizing educational opportunity was not purely an educational issue. Jensen saw it as a cultural one and Jencks saw it as one socially and economically oriented. The importance of these stances will become more
evident in the next section of this study when minimum competency testing is discussed.

In concluding this section, one more important note is necessary. Cultural and financial differences among students were not the only considerations receiving attention relative to the issue of egalitarianism. Early in the sixties children with physical handicaps were receiving special attention. Some physical handicaps were easily identifiable, such as blindness or hearing loss, and schools had been established for students so handicapped since the turn of the century. However, other handicaps were not so well understood nor so easily identified. Students who found learning difficult were often all placed in one category and labeled "retarded." By 1960, it became widely recognized that many of the students who had been labeled as retarded were not retarded at all, but were simply handicapped by some "learning disability" unrelated to any intelligence or cultural factors. Consequently, in 1970, Congress passed the Education of the Handicapped Act which provided funds for professional training, research, and demonstration activities for children with learning disabilities.

Later, in 1975, Congress passed the Education for All Handicapped Children Act (PL 94-142) which was far broader in scope and purpose. Although the Act did not provide adequate funds for implementation, its purpose was very clear. In Section 601 (c) of the law the purpose was stated.

It is the purpose of this act to assure that all handicapped children have available to them ... a free appropriate public education ... to assure that the rights of handicapped children and their parents or guardians are protected, to assist States and localities to provide for the education of all handicapped children, and to assess and assure the
effectiveness of efforts to educate handicapped children (National Education Association 1978, p. 1).

Section 121a.5 of the law's regulations defined "handicapped children."

... those children evaluated ... as being mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impaired, deaf-blind, multi-handicapped, or as having specific learning disabilities, who because of those impairments need special education and related services (National Education Association 1978, p. 2).

The regulations also specified that the education of the handicapped children must take place in a "least restrictive environment."

What is meant by this term was explained in Section 121a.550 of the regulations.

(1) That to the maximum extent appropriate, handicapped children, including children in public or private institutions or other care facilities, are educated with children who are not handicapped, and

(2) That special classes, separate schooling or other removal of handicapped children from the regular educational environment occurs only when the nature of severity of the handicap is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily (National Education Association 1978, p. 15).

The above definition led to widespread "mainstreaming" (assigning handicapped children to classes with "normal" students whenever possible). The results of such a practice are at this point inconclusive. (The law did not go into effect until September 1, 1978.) However, some criticism has already surfaced. Smith (1979), a Colorado State University professor, speaking at a workshop of the American Association for the
Advancement of Science, pointed out his dislike for imposed egalitarian efforts such as mainstreaming.

A recent judicial tour de force has related to the educational disaster called mainstreaming. It is particularly disastrous when children with behavioral problems are injected into the classroom over the school's objections. It is an insult to the professional judgments of teachers and administrators, an undermining of their authority, and an affront to those children who would like to get an education. But it is very egalitarian! But it also makes it very difficult to carry on a sound instructional program (p. 7).

In the same speech Smith (1979) spoke of what he called the "Cult of Egalitarianism."

There does not seem to be much doubt that the pervasiveness of this philosophy has contributed to many of the problems in education today including the declining standards of achievement (p. 6).

He further likened egalitarianism to a disease.

Egalitarianism has affected admission standards, tracking and grouping, hiring practices, district organization and school boundaries, school transportation, school finance, and school discipline. It is the Dutch elm disease of the educational establishment (p. 7).

While Smith's views may be extreme, they do characterize the concern that was being expressed about practices that attempted to encourage egalitarianism in education.

An additional observation is important at this point. As American public education met with more and more success with regard to egalitarianism, it was recognized that in a society where everybody attains a certain level of the educational system it is difficult, if not impos-
sible, to distribute social benefits on the basis of attainment of that level. If every student were to complete the twelfth grade, the relative benefits from such attainment would be fewer. In other words, while no special benefit could be gained from completing the twelfth grade successfully, a great deal could still be lost by failing to do so.

This perspective had the potential of being most painful for minority groups. Typically these groups had rested their hopes for a better life on educational attainment and the benefits that had traditionally been the result of such an effort. However, as those benefits became fewer in number it became apparent that the higher levels of attainment that they had sought were now more of a necessity than ones that guaranteed benefits.

Minority groups, however, were not the only ones affected. During the seventies, the general public was less willing to accept a high school diploma as the measure of achievement. Many persons believed that the standards that had to be met in order to graduate from high school were no longer as high as they had once been. This view is at least partially responsible for a shift in the public's view on educational attainment. The shift was one from level of education to one of quality of education. This resulted in less interest in expanding educational attainment and more interest in improving educational achievement.

**Assessment of Student Learning**

In the preceding section, the shift of focus from educational attainment to educational achievement was discussed. This shift, how-
ever, did not mean that the concept of egalitarianism was no longer an important educational issue. While it is apparent from the preceding section that the effort to equalize educational opportunities through certain practices had its critics, strong political support for egalitarianism continued (evidenced by the legislation dealing with handicapped children). The demand for egalitarianism was voiced by articulate, and often politically-oriented, groups that represented people from nearly every part of American society.

The real and most obvious focus, in spite of the continuing demands for egalitarianism, was on educational achievement, however. The interest in educational achievement appeared not to be based so much on the public's desire to assure that students had the proper opportunities to achieve—recall that the public generally showed little interest in increasing the financial support to schools—but rather on the desire for some evidence that students were achieving. Some of the reasons for this new focus have been discussed earlier in this chapter—the emphasis on accountability and basics—but one important reason has not been discussed.

By 1973, the decline in test scores on certain standardized examinations was receiving widespread publicity. Receiving the most attention was a decline in the averages received by high school students on the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board. Between the years of 1963 and 1975, the mean verbal score had dropped forty-one score units and the mean mathematics score had dropped twenty-nine score units. By 1977, the mean verbal score had dropped eight more score units and the mean mathematics score had dropped three
more score units (Hanford 1978, pp. 7-8). A rather similar decline was apparent in scores of college-bound students on the tests of the American College Testing (ACT) Program. Unlike the SAT results, however, ACT scores dropped more in mathematics than in English. The mean ACT composite score dropped from 19.9 to 18.6 on a scale of 1 to 36 (Neill 1978, p. 27).

While test developers and administrators insisted that declines in the SAT— whose prime purpose is to measure youth’s aptitude for college— should not be used as an indicator of the quality of elementary and secondary education, generally that is what did happen. Media representatives, national spokesmen, legislators, parents, and even educators inferred from the reported declines that schools everywhere were slipping badly (Neill 1978, p. 25). Consequently, the accountability and back-to-basics advocates used the reported declines to justify their causes— often ignoring that some of the reasons for the reported declines were not directly related to the solutions they proposed.

Emerging from this accountability-oriented atmosphere arose a new movement. In one effort to tie together attainment (a desire of the advocates of egalitarianism) and achievement (a desire of the advocates of accountability) it was suggested that certain minimum standards should be established and satisfied by everyone who attained a particular level of the educational system. Furthermore, in order to determine if these minimum standards had been met tests would be administered. The results of these "minimum competency tests," it was suggested, would return credibility to the diploma as well as to promotion from one grade to
another. In a recent article entitled "Making Sense of the Competency Testing Movement" written by Haney and Madaus (1978), the impetus for competency tests was discussed as well as the two basic forms of tests.

The enthusiasm for competency tests stems from a belief that the testing of essential skills and competencies will help raise academic standards and increase educational achievement. . . . Among the variety of competency-testing schemes now being discussed or implemented there are two main forms: controlling grade-to-grade promotion, and providing a minimum basis for awarding high school diplomas (p. 463).

Although most discussions concerning the minimum competency testing movement centered around the use of tests as a basis for awarding high school diplomas, Pipho (1979) of the Education Commission of the States reports that by the end of 1978, five states—California, Arizona, Florida, Kentucky, and Maryland—based grade promotion on attainment of specific competencies (pp. 1-13). According to Cawelti (1977) states and school districts adopting the competency based education concept were clearly moving away from the "social promotion" practices of the past (p. 313). However, the practice of grade retention was not very popular during the seventies, in spite of those states adopting some form of competency testing to be used for determining grade promotion. Serious studies concerning nonpromotion had brought the practice into question. Cawelti (1977), after studying some efforts to determine the effectiveness of grade retention, reported on his findings.

. . . the studies on nonpromotion show that it does not have a positive effect on achievement and it often has harmful consequences from the social standpoint (p. 314).
By 1973, the term "accountability" had begun to be replaced by the words "minimum competency testing." During the next five years a majority of the states mandated some form of competency testing—either through legislation or through action by state boards of education. Pipho (1979) reported that by the end of 1978 thirty-six states had taken such action; nearly half of the states used the test scores to determine the awarding of a high school diploma (pp. 1-13). The first state to use minimum competency tests as a requirement for high school graduation was New York. The plan was approved by the New York State Board of Regents in March, 1976 (Haney and Madaus 1978, p. 468).

Requiring students to pass a minimum competency test as a prerequisite to a high school diploma generated the most public debate of all of the minimum competency testing issues. Numerous articles were written and professional papers presented on the topic. Writings covering the fairness and legality of the practice (McClung 1978, pp. 397-400), the costs of legislated programs (Anderson 1977, pp. 1-27), and the politics of such programs (Kelley 1977, pp. 1-36) were read and debated. Advocates of minimum competency testing often suggested that by using such tests for determining high school graduation, the diploma would take on real meaning. However, the tests used were scored using a pass-fail method (which gave limited information about the student's competence) and little interest was shown in alternative ways of scoring. One alternative was suggested by Ellis Page, president-elect of the American Educational Research Association, in 1978. He suggested that instead of just a pass-fail score the results of a test battery in the
most important subjects should be written on the diploma itself (p. 8). Page's proposal never gained popular support.

The minimum competency movement and the issues raised by it are so complex that this study cannot possibly cover it in detail. Furthermore the movement is a contemporary one and even the most serious observers of the movement find it very difficult to be objective when describing it or assessing its impact on public education. Consequently, this writer relied heavily upon authorities in the area of minimum competency testing when writing the following portion of this chapter.

The writer stated earlier in this chapter that some of the concerns expressed about education during the fifties were similar to those being voiced during this period. While the concerns were similar, the resulting actions taken were different. Concerns during the fifties resulted in efforts to reform curricula but the concerns during the seventies resulted in a movement toward minimum competency testing. Why? Haney and Madaus (1978) have suggested three basic reasons. First, the emphasis on testing stems in large part from the fact that the reform during the seventies was led (or pushed) by non-educators. The reforms during the fifties were basically led by educators. Second, the emphasis on minimum competency testing was an attempt at accountability, greatly influenced by the public's desire to cut the costs of education. The reforms during the fifties were, in large measure, generated by a desire for national security. Third, during the seventies the actions of local educational agencies were greatly influenced by agencies and organizations that cut across local and state boundaries—teachers unions, the courts, testing agencies, and a range of other educational lobby groups (pp. 475–476).
As more and more states mandated minimum competency programs, questions about how these programs should be designed arose. Brickell (1977) suggested that seven important questions had to be answered when composing policy relating to minimum competency testing.

1. What competencies will you receive?
2. How will you measure them?
3. When will you measure them?
4. How many minimums will you set?
5. How high will you set the minimum?
6. Will they be for schools or for students?
7. What will you do about the incompetent (p. 1)?

Other agencies, such as the Education Commission of the States, suggested policy recommendations concerning minimum competency testing.

1. States and local districts should adopt a comprehensive plan for setting standards and for establishing criteria for determining when those standards have been met.
2. The purpose of the testing and standards should be clearly determined.
3. Diagnosis of learning problems of pupils who do not attain minimum standards and implementation of instructional programs that focus on their particular deficiencies should be components of any minimum-competency program.
4. The federal government should not become involved in minimum-competency testing in states or establish a national testing program or national minimum-competency standards.
5. The procedures and processes for developing the implementing standards should encourage active involvement among all concerned groups.
6. Careful attention must be given not only to the content and administration of the test but also to the provision of compensatory and bilingual education programs, remediation, and any other instructional strategies necessary to ensure that application of the standards will not discriminate against minorities or the disadvantaged.
7. Development of minimum-competency tests and administration of minimum-competency standards cost money; sufficient funds should be provided to develop and implement them well.
8. Policy makers should give attention to ways in which the expertise located in institutions of higher education can be used in implementing a minimum-competency program (Haney and Madaus 1978, p. 477-478).
By 1978, evaluations of some state minimum competency testing programs were being conducted. One such evaluation that received nationwide attention took place in Florida. The evaluation panel criticized the strategy adopted as well as the implementation of the program. The panel found fault with the strategy which took the primary responsibility for setting standards out of the hands of the local schools. The panel criticized the haste with which the program had been implemented (The Florida Accountability Program: An Evaluation of Its Educational Soundness and Implementation 1978, p. 14). While such evaluations were themselves criticized, their findings often raised important issues about competency testing. During 1978, state action concerning minimum competency testing had slowed somewhat (Haney and Madaus 1978, p. 478), but interest remained high. Support for competency programs often came from both conservatives and liberals. According to Haney and Madaus (1978), the conservatives supported them because of concerns over costs and the liberals favored them to promote more quality education for all children (p. 477).

It is important to note that while the term "minimum competence" had been used frequently in literature only since 1973, the concept was not new to this period. Since the early 1900's tests of minimum essentials of academic subjects have been used. What then was so unique about the minimum competency testing movement of the seventies? Britell (1978), in an address before the American Educational Research Association Topical Conference on Minimum Competency Achievement Testing, stated that "The explicit imposition of the standard of minimum
competence represents a new stage in American education" (p. 5). She then proceeded to explain why she held such an opinion.

First, it substitutes a more egalitarian standard. It is an effort to reconcile proved individual differences with the political demands for equality of achievement in a society that espouses equality of opportunity.

Second, it recognizes that minimum competence may be the most realistic educational goal, given the variability among individuals and the limitations of our current educational programs.

Third, it provides a universal guarantee. It is an unprecedented obligation on the schools to serve everyone (Britell 1978, p. 5).

By the end of 1978, the possible benefits and problems resulting from minimum competency testing programs were still being discussed. The universal guarantee of minimum competence idea that had been born from concerns about egalitarianism and achievement had generated actions and policies that now needed to be evaluated in light of the societal expectations for schools.

**Summary**

During the sixties the demand for equal opportunity for all students to attain a certain level of education (normally the twelfth grade) had been dominant. The demand for egalitarianism, as defined by the social reformers, generated federal, state, and local efforts designed to provide equal educational opportunities for all students. While the desire for educational egalitarianism was not unique to the sixties, the breadth of the demands were unprecedented. "Separate but equal" no longer was acceptable, nor was the practice of categorizing certain groups of students as uneducable. It was demanded that all students should have an equal opportunity to realize their full potentialities
as the result of schools meeting their individual needs. As educational egalitarianism became more of a reality during the sixties and seventies, an additional demand was placed upon public education.

During the seventies educators were forced to focus on assuring that all students who reached a particular level of educational attainment also had achieved a standard of competency (usually minimal) in specific areas. This universal guarantee of minimum competence linked to educational egalitarianism refocused public education in such a way that school systems were now asked to concentrate equally on excellence and competence. Excellence (an absolute state of achievement and the highest level of performance) and competence (the state of adequate performance of a task) were now defined as separate but equally important. To define excellence and competence as being synonymous would assure that only a few would reach the highest level of performance expected—a fact in conflict with the new definition of egalitarianism.

Even though the standards of competence were usually listed as "minimal," this merging of egalitarianism and the demand for a universal guarantee of minimum competency (advocated most strongly by noneducators) presented a formidable task for public education.

The "attainment" emphasis of the sixties had now been merged with the more powerful "achievement" demands of the seventies. As the American society became more conservative during the seventies, the demand for accountability became more prevalent. As a result, school systems were once again asked to return to the "basics." While the "basics" were never clearly defined, the demand for them was fueled by reports of declines in standardized test scores, lack of discipline in
the schools, and a desire to cut out "frills" in order to cut costs in education.

The period of the seventies was "reactionary" in the sense that it was easier to identify what the general public did not like about their schools than it was to identify what they did like. In some ways, the origin of the reactionary stance can be traced from the lack of strong leadership from educators—a leadership greatly needed as public education was assigned the task of universally guaranteeing the competence of all students.
CHAPTER VII
CONCLUSIONS

This study was conducted with the purpose of historically tracing three specific American educational developments—the societal expectations for the schools; the make-up of the school population; and the emphasis placed on, and the methods used in assessing student learning—through a period from 1700 to 1978 in order to determine how these developments are related to the origins of the concepts of egalitarianism and a universal guarantee of competence in American public schools.

Throughout the course of the study, the writer used primary sources whenever possible. Sources of data were internally and externally criticized by the use of one or more other corroborating source. Special attention was given to this practice with regard to those sources which the writer relied upon most heavily when drawing the final conclusions.

Although timelines of important dates and events emphasized in each chapter were supplied for each period, the writer included a single timeline that covered the entire period from 1700 to 1978. In addition, a summary of analysis of the three questions asked for each period was provided in one figure that covers the years from 1700 to 1978.

Conclusions

1. The societal expectations for American public schools can be divided into three basic periods of time. The first covers the period
Figure 6. Timeline of Important Dates and Events Emphasized in Chapters II–VI (1700–1978).
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1894</td>
<td>Vocational achievement tests developed for the first time (Joseph Rau).</td>
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<td>1895</td>
<td>Commission of Ten report issued.</td>
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<td>1900</td>
<td>First tax-supported school for crippled children established (Chicago).</td>
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<td>1909</td>
<td>Edward Thorndike's handwritingscale published.</td>
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<td>1910</td>
<td>Carnegie was established.</td>
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<td>1916</td>
<td>IQ concept developed by (Paul Terman).</td>
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<tr>
<td>1920</td>
<td>Last state passed a compulsory school attendance law (Massachusetts).</td>
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<td>1929</td>
<td><code>From Critical Principles of Education, recommended as aims of education (NEA).</code></td>
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<tr>
<td>1931</td>
<td>Progressive Education Association founded.</td>
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<tr>
<td>1932</td>
<td>Trial of John Scopes held ( <code>monkey trial</code>).</td>
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<tr>
<td>1932-1940</td>
<td>Eight-year Study conducted (Progressive Education Association).</td>
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<tr>
<td>1933</td>
<td>Experience in Education published (John Dewey).</td>
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<tr>
<td>1934</td>
<td>The Purposes of Education in American Democracy published (NEA).</td>
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<tr>
<td>1939</td>
<td>Third White House Conference on Education held.</td>
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<tr>
<td>1944</td>
<td>Education for All Americans published (NEA).</td>
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<tr>
<td>1945</td>
<td><code>Harvard Committee Reports</code> published.</td>
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<tr>
<td>1946</td>
<td>Education for All American Children published (NEA).</td>
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<tr>
<td>1947</td>
<td>Supreme Court ruled that public school buildings were being illegally used for the dissemination of religious doctrine.</td>
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<td>1952</td>
<td>Education for All American Youth: A Further Look published (NEA).</td>
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<tr>
<td>1950</td>
<td>Quiz-kety in the Public Schools published (Albert Coe).</td>
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<tr>
<td>1954</td>
<td>Return to School of Education, Teachers (Massachusetts) Levels.</td>
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<tr>
<td>1955</td>
<td>Progressive Education Association disbanded.</td>
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Figure 6. (Continued)
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<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1955</td>
<td>- New physics curriculum introduced</td>
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<td></td>
<td>- &quot;Sputnik&quot; sent into orbit around the earth (USSR)</td>
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<tr>
<td></td>
<td>- New mathematics curriculum introduced</td>
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<td></td>
<td><em>The Pursuit of Excellence</em> (Rockefeller Report) published</td>
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<td></td>
<td><em>National Defense Education Act</em> passed</td>
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<td>- <em>The American High School Today</em> published (James Bryant Conant)</td>
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<td>1960</td>
<td>- <em>Education and Freedom</em> published (Hyman J. Rickover)</td>
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<td></td>
<td>- <em>Lawrence W. Downey Report</em> issued</td>
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<td></td>
<td>- <em>The Transformation of the Schools</em> published (Lawrence Crotzer)</td>
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<td>- 1961-1964 &quot;War on Poverty&quot; declared by Presidents Kennedy and Johnson</td>
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<td>- <em>Civil Rights Act</em> passed</td>
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<td>- <em>New Children's Aid</em> published (John H.)</td>
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<td></td>
<td>- <em>American Association of School Administrators Report</em> issued</td>
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<td>1965</td>
<td>- <em>Elementary and Secondary Education Act</em> passed</td>
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<td></td>
<td>- <em>Read Start Program</em> started</td>
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<td></td>
<td>- <em>Equality of Educational Opportunity Report</em> issued (James Leffman and others)</td>
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<td></td>
<td>1968-19 Career Education programs developed</td>
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<td></td>
<td>1969-10 Triarkana Performance Contract developed</td>
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<td></td>
<td>- <em>Great in the Classroom</em> published (Charles E. Silberman)</td>
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<tr>
<td></td>
<td>- <em>Education of the Handicapped</em> Act (PL 91-230) passed</td>
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<tr>
<td></td>
<td>1973 - Decline in standardized test scores published widely</td>
</tr>
<tr>
<td>1975</td>
<td>- <em>Education for All Handicapped Children</em> Act (PL 94-142) passed</td>
</tr>
<tr>
<td></td>
<td>1977 - <em>Winograd Conference on Basic Skills in American Education</em> held</td>
</tr>
<tr>
<td></td>
<td>1978 - Some form of 'minimum competency' testing program adopted by thirty-six states by the end of this year</td>
</tr>
</tbody>
</table>

*Figure 6. (Continued)*
**Societal Expectations for the Schools**

Education during this period was basically parochial and generally controlled by the dominant religion in the area. Reading, writing, and arithmetic were emphasized, but the societal expectations for the school was the Propagation of the Faith.

**Make-up of the School Population**

During this period only a small percentage of school-age children were actually attending schools. Most of those students who were attending were boys from well-to-do families. Boys from poorer homes were often participants in apprenticeship programs of various kinds. The lack of free public education, compulsory attendance laws, and child labor laws all contributed to the lack of educational egalitarianism. Education for minority students existed in only isolated instances and then only through the help of religious-oriented groups such as the Society for the Propagation of the Gospel in Foreign Parts.

**Assessment of Student Learning**

Students during this period were generally tested for competence and proficiency by the use of oral examinations. By the end of the period, written examinations were introduced basically because the large student enrollments made oral examinations too time consuming. Written examinations, however, were mostly used as "selection" instruments in determining student entrance into high schools and colleges. Comparative achievement tests did not appear until the very end of the period.
<table>
<thead>
<tr>
<th>Year</th>
<th>Event/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1890</td>
<td>Establishment of education as a function of the state, and the revival of the &quot;common&quot; (free elementary) school. The religious domination of school became less and less, the basic societal expectation for schools became the transmission of knowledge.</td>
</tr>
<tr>
<td>1890-1915</td>
<td>The Age of Standard (1890 - 1915)</td>
</tr>
<tr>
<td>1910</td>
<td>Concerns about &quot;national security&quot; fostered an emphasis on science and mathematics in the curriculum.</td>
</tr>
<tr>
<td>1910-1920</td>
<td>Lists of expectations similar to the Seven Cardinal Principles (1918) represent fairly well the societal expectations for schools for the entire period. While the composite list of expectations remained fairly constant, the emphasis placed on any one of these expectations did change.</td>
</tr>
<tr>
<td>1915</td>
<td>Concerns about egalitarianism and the &quot;War on Poverty&quot; fostered an emphasis on educational programs that assisted in &quot;social reform.&quot;</td>
</tr>
<tr>
<td>1915-1920</td>
<td>Concerns about the high cost of education and declining test scores precipitated a movement of &quot;accountability&quot; which emphasized the &quot;basics&quot; and minimum competency testing on a large scale.</td>
</tr>
<tr>
<td>1920</td>
<td>Some forms of written examinations appeared early in this period. However, widespread use of achievement and standardized tests was evident only after the first two decades of the twentieth century. Written examinations designed to show the specific measurement of a student's knowledge rather than a general evaluation of what a student knew appeared between 1910 and 1920 and dominated the testing process for the rest of the period. Tests of minimal essentials and those designed to certify competence appeared during this period but neither received widespread usage.</td>
</tr>
<tr>
<td>1920-1953</td>
<td>Concerns about the high cost of education and declining test scores precipitated a movement of &quot;accountability&quot; which emphasized the &quot;basics&quot; and minimum competency testing on a large scale.</td>
</tr>
<tr>
<td>1953</td>
<td>Some forms of written examinations appeared early in this period. However, widespread use of achievement and standardized tests was evident only after the first two decades of the twentieth century. Written examinations designed to show the specific measurement of a student's knowledge rather than a general evaluation of what a student knew appeared between 1910 and 1920 and dominated the testing process for the rest of the period. Tests of minimal essentials and those designed to certify competence appeared during this period but neither received widespread usage.</td>
</tr>
<tr>
<td>1953-1971</td>
<td>Concerns about egalitarianism and the &quot;War on Poverty&quot; fostered an emphasis on educational programs that assisted in &quot;social reform.&quot;</td>
</tr>
<tr>
<td>1971</td>
<td>Concerns about the high cost of education and declining test scores precipitated a movement of &quot;accountability&quot; which emphasized the &quot;basics&quot; and minimum competency testing on a large scale.</td>
</tr>
</tbody>
</table>

**Figure 7. Societal Expectations for the Schools; Make-up of School Population; the Emphasis Placed on, and the Methods Used in, Assessing Student Learning (1700-1978).**
from the colonial days to the creation of the academy concept during the middle eighteenth century. During this period the schools were dominated by various religious groups and the basic expectation for the schools was the propagation of the faith. The second period covers the time span from the middle of the eighteenth century to the second decade of the twentieth century. The societal expectations for schools during this period were represented by the concerns for citizenship and the transmission of knowledge. The last period is represented by the years from approximately 1918 to 1978. One characteristic of this period was the attempt at actually listing specific societal expectations. Comparisons made of these lists show great similarities throughout the period. The Cardinal Principles of Secondary Education published in 1918 remained a fairly accurate representation of the societal expectations through the entire period.

2. While the specific societal expectations for schools remained very constant from 1918 to 1978, the emphasis placed on particular expectations did vary. During the years of the progressive education and life-adjustment movements (the early 1900's until the early fifties) there was a special emphasis on the development of the personality as well as the vocational and social skills. The emphasis during the fifties and again in the seventies was placed on the "command of fundamental processes." During the sixties a special emphasis was placed on allowing the individual student to realize his own educational potential to the fullest possible degree.

3. The societal demand for schools to return to the "basics" is not unique to any one period. A demand of this nature is evident in
varying degrees throughout the entire time period covered by this study.

4. The articulation and interpretation of societal expectations for schools usually was done by educators prior to the late 1960's. Since that time, little evidence was seen of strong leadership on the part of educators with regard to expectations for the schools.

5. Educational egalitarianism is not yet a reality in American public schools. While efforts to equalize educational opportunities have made significant gains, some students are still deprived of their opportunity to educationally develop to their fullest potential.

6. Tests of minimal essentials of academic subjects in American public schools have existed in some form for at least five decades.

7. Tests that certified a minimum level of competence were introduced in America as early as the middle of the nineteenth century.

8. Given the present definition of educational egalitarianism, the efforts to merge this concept with a universal guarantee of minimum competence in American public schools is unique to the 1970's. The attention public education is asked to give to this merger is unprecedented in American education.

The merging of egalitarianism and the demand for a universal guarantee of minimum competence continues to be one of the challenges most in need of attention. The adequacy with which society meets this challenge may determine the effectiveness and role of public education for ensuing generations.
APPENDICES
APPENDIX A

BOSTON EXAMINATIONS: 1845
BOSTON EXAMINATIONS: 1845

**Worcester's History**

*Question 1.* What is History?

*Question 2.* What are some of the uses of History?

*Question 3.* Enumerate some of the sources of History.

*Question 4.* What nations are among the first mentioned in History?

*Question 5.* For what were the Egyptians distinguished?

*Question 6.* For what were the Phoenicians distinguished?

*Question 7.* Who was the founder of Babylon, and about what period did he live?

*Question 8.* Who was the founder of the Persian empire?

*Question 9.* Who were some of the most distinguished orators and poets of Greece?

*Question 10.* Who was the founder of Rome?

*Question 11.* What was the character of the early government of Rome?

*Question 12.* Can you mention the names of the Roman Emperors?

*Question 13.* Can you give any account of the feudal system?

*Question 14.* What were the purposes of the Crusades?

*Question 15.* What is the Norm ans Conquest?

*Question 16.* What nation ruled Britain at the commencement of the Christian Era?

*Question 17.* Who were the Saxons, and how came they to invade Britain?

*Question 18.* What do you understand by the Roman Emperors?

*Question 19.* What was the period of the Commonwealth in England, and who was the most distinguished character in it?

*Question 20.* About what period did the first colonists come to New England, and what were the supposed motives for their leaving the mother country?

*Question 21.* How long did they continue subject to the mother country, and what were some of the assigned reasons for throwing off her government?

*Question 22.* About what period was the American Revolution commenced, and who were the allies of the Americans?

*Question 23.* When was the great Federal Constitution formed, during or after the war of the Revolution, and how many States accepted it at its formation?

*Question 24.* About what period was the embargo laid by President Jefferson, and non-intercourse substituted for it?

*Question 25.* About what period did the last war between Great Britain and the United States commence, and what were the causes assigned by the Americans for its declaration?

*Question 26.* What do you understand by an embargo?

* Asterisk signifies that the question was used in the 1919 tests.

**Question 27.** How many more members are there now, in the Senate of the United States than there were at its first adoption?

**Question 28.** What was the result of the invasion of Canada by the Americans in the last war?

**Question 29.** What is Chronology?

**Question 30.** What are the eras the most used in Chronology?

**Arithmetic**

* 1 — How much is § of § of 9 hours and 18 minutes?

* 2 — What part of 100 acres is 63 acres, 2 roods, and 7 rods?

* 3 — What is the quotient of one ten thousandth, divided by ten thousandth?

* 4 — A stationer sold quills at 10s 6d per thousand, by which he cleared § of the price — but the quills growing scarce, he raised the price to 12s per thousand. What per cent would he clear by the latter price?

* 5 — Suppose A owes me $100 due at the end of 3 months, and $100 due at the end of 9 months, and he agrees to give me a note for $200 payable at such a time that its present worth shall be the same as the sum of the present value of the two first mentioned notes. How long after date must this note be made payable?

* 6 — A man has a square piece of ground which contains one quarter of an acre and a quarter, on which are trees, which will make wood enough to form a pile around on the inside of the bounds of the land 3 feet high and 4 feet wide. How many cords of wood are there?

* 7 — A merchant in New York where interest is 7 per cent gives his note, dated at Boston, where interest is 6 per cent for $5,000, payable at the Merchants' Bank, Boston, on demand. Thirty days after the date of the note demand is made. A year after demand $800 are paid on the note. What sum remains due at the end of two years from the date of the note?

* 8 — A merchant in New York, where interest is 7 per cent gives his note, dated at Boston, where interest is 6 per cent for $5,000, payable at the Merchants' Bank, Boston, on demand. Thirty days after the date of the note demand is made. A year after demand $800 are paid on the note. What sum remains due at the end of two years from the date of the note?

* 9 — Who was the founder of Babylon, and about what period did he live?

* 10 — The City of Boston has 129,000 inhabitants, half males, and its property liable to taxation is one hundred millions. It levies a poll tax of § of a dollar each on one half of its male population. It taxes income to the amount of $50,000, and its whole tax is $770,000. What should a man pay whose taxable property amounts to $190,000?

**Geography**

**Question 1.** Name the principal lakes in North America.

**Question 2.** Name the principal rivers in North America.

**Question 3.** Name the rivers running eastward into the Mississippi.

**Question 4.** Name the rivers running westward into the Mississippi.
Question 5. Name the states which lie upon each bank of the Mississippi, and their capitals.

Question 6. Do the waters of Lake Erie run into Lake Ontario, or the waters of Ontario into Erie?

Question 7. Which is most elevated above the level of the sea, Lake Superior or Lake Huron?

Question 8. Write down the boundaries of Lake Erie.

Question 9. Quebec is (according to your maps) 4° 40' north from Boston; Ithaca in New York, is 5° 30' west from Boston. Which place is farthest from Boston?

Question 10. What is the general course of the rivers in North and South Carolina?

Question 11. What is the general course of the rivers in Kentucky and Tennessee?

Question 12. What is the cause of the rivers in these four contiguous states running in opposite directions?

*Question 13. Which is most accessible in its interior parts, to ships and to commerce, Europe or Africa?

Question 14. Name the empires of Europe.

Question 15. Name the kingdoms of Europe.

Question 16. Name the republics of Europe.

*Question 17. What is the nearest route from England to India,— by Cape of Good Hope, or by the Red Sea?

Question 18. What do you understand by the line of perpetual snow?

Question 19. On which range of mountains is the line of perpetual snow most elevated above the oceans, on the Rocky Mountains of North America, or on the Cordilleras of Mexico?

Question 20. The city of Mexico is in 20° of N. latitude; the city of New Orleans is in 30° of N. latitude. Which has the warmest climate?

Question 21. Name the rivers, gulfs, oceans, seas and straits, through which a vessel must pass in going from Pittsburg in Pennsylvania, to Vienna in Austria.

Question 22. On which bank of the Ohio is Cincinnati, on the right or left?

Question 23. What are the principal natural and artificial productions of New England?

Question 24. Over what continents and islands does the line of the equator pass?

Question 25. What parts of the globe have the longest days?

*Question 26. If a merchant in Moscow dines at 3 o’clock, p.m., and a merchant in Boston at 2 o’clock, which dines first?

Question 27. Name the countries which lie around the Mediterranean Sea.

Question 28. What countries lie around the Black Sea?

Question 29. What rivers flow into the Black Sea?

Question 30. Name the principal ports of Russia on the Black Sea, on the White Sea, and on the Gulf of Finland.

Question 31. Draw an outline map of Italy.
10. Punctuate the following sentences; correct all the errors you may find in them; and write them out grammatically if you think them to be ungrammatical:

Your brother was there and he said to my sister and I am tired and must go and lay down to rest me and when he was laying down we tried to lie a veil over his face.

11. I shall come to see you this afternoon unless it rains.

12. Vain man thou presumest too much neither the lion nor the tiger will bow their necks to thee.

13. To be or not to be that is the question.

14. The property of such rules are doubtful.

**Astronomy**

**Question 1.** What is the radius of a circle?

**Question 2.** What is the are of a circle?

**Question 3.** How many degrees are there in the quarter of a circle?

**Question 4.** Which circle contains the greater number of degrees, the equator or arctic circle?

**Question 5.** What do you understand by the terms zenith and nadir?

**Question 6.** What is the horizon?

**Question 7.** What is the axis of the horizon?

**Question 8.** What is a vertical circle?

**Question 9.** What is the altitude of a heavenly body?

**Question 10.** What is the azimuth of a heavenly body?

**Question 11.** Has the earth the greatest velocity in the rotation upon its axis, or the revolution around the sun?

**Question 12.** In the diurnal revolution of the earth, who are moved with greatest velocity, the inhabitants of Mexico or of Boston?

**Question 13.** What difference will there be in the velocity with which the inhabitants of the above named cities are moved in the annual revolution of the earth around the sun?

**Question 14.** Suppose one man is on the top of a mountain, another at its foot, and a third in a deep cavern, — all on the same parallel of latitude, — which will pass through the greatest space in one revolution of the earth upon its axis?

**Question 15.** Which moves with the least velocity?

**Question 16.** At what angle is the axis of the earth inclined to the plane of its orbit?

**Question 17.** Suppose the angle of the earth were perpendicular to the plane of its orbit, what effect would it have upon the order of the seasons?

**Question 18.** Explain the causes of the change of seasons.

**Question 19.** How many times does the moon revolve around the earth in one year?

**Question 20.** How often does the moon revolve upon her axis?

**Question 21.** Why is it that we see only one side of the moon?

**Question 22.** What causes an eclipse of the moon?

**Question 23.** What causes an eclipse of the sun?

**Question 24.** How many primary planets are there in our solar system?

**Question 25.** How many secondary planets?

**Question 26.** How many satellites has Jupiter?

**Question 27.** How many satellites has the earth?

**Question 28.** Which way does the earth move around the sun, from east to west, or from west to east?

**Question 29.** What is the principal cause of the tides?

**Question 30.** What do you understand by neap tides?

**Question 31.** What do you understand by the transit of a planet?

APPENDIX B

PHILADELPHIA EXAMINATIONS: 1864
PHILADELPHIA EXAMINATIONS: 1864

EXAMINATION QUESTIONS set at:
1. The Boys' Central High School, Philadelphia.
2. The Girls' High School, Providence.
3. To Candidates for Admission to the High Schools, Providence.

QUESTIONS OF EXAMINATION set at the Boys' Central High School,
PHILADELPHIA.

The course is four years, each year being divided into two terms. The students are arranged in eight divisions, corresponding to the terms of the full course, indicated by the letters of the alphabet, from A to H respectively.

**DIVISION A.**

Logic.

1. What is meant by an illicit process? Give an example.
2. What is figure? Give the forms of the four figures.
3. Why can we prove only negatives by the second figure?
4. Give in tabular form all the moods which can be made with O, as a major premiss, and mark those which violate some logical rule or principle.
5. Construct a syllogism in \textit{Felippon}.
6. Reduce said syllogism to first figure by direct reduction.
7. Reduce said syllogism by indirect reduction.
8. How do we frame a destructive conditional syllogism?
9. Frame a simple constructive dilemma.
10. Name three fallacies which grow out of a false or undue assumption of premisses.

**DIVISION B.**

Logic.

1. Define the following terms: Syllogism, major term, minor term, copula.
2. State the \textit{dictum de omni et nullo}, by the use of ordinary symbols.
3. Explain how the translation of the dictum of Aristotle applies to the first branch of the symbolic \textit{de omni}, as stated in the second question.
4. What is a concrete term? Give an example.
5. What is the difference between a property and an accident?
6. Why do we consider the use of a common term, as either species, genus, differentia, &c. to be a relative use?
7. In what form is a definition usually put? Is this strictly correct?
8. Give two elliptical sentences of our ordinary speech, and then express them in simple logical form.
9. What is meant by the distribution of a term? What propositions distribute the subject, and what the predicate?
10. What must determine how far a hyperbole may be carried without overstretching it?

**DIVISION C.**

Rhetoric.

1. What is Apocope? Give an example.
2. What is Metonymy? Give an example.
3. Name three of the essentials to beauty in figures.
4. Name all the varieties of style arising from the amount of ornament employed.
5. What quality of a good style is deficient in the following sentence? Show how.—The wisest princes need not think it any diminution of their greatness, or derogation to their sufficiency, to rely upon counsel.
6. What is the difference between entire and complete? Illustrate by example.
7. What is necessary in order to avoid equivocation?
8. What must be observed in the arrangement of words with respect to Harmony?
9. Give an example to show how the sounds of words may represent motion.
10. What is meant by the unity of sentences?
DIVISION F.

Rhetoric.

1. What is the province of rhetoric as a science? What as an art?
2. By what process have the rules of rhetoric been formed?
3. When we speak of the concurrent tastes of men as being the standard of taste, what must be understood?
4. Define the term imagination.
5. How many, and what are the degrees of novelty?
6. What state of society is favourable to sublime writing? Why?
7. Into what faults are those who aim at the sublime apt to fall?
8. What can you say of figure, in connexion with the beautiful?
9. Define the term beauty, as applied to writing.

DIVISION G.

History.

1. Who was the first Christian Emperor of Rome? What changes were made by him?
2. How was the career of Attila first stopped?
3. What was the origin of the Venetian nation?
4. What was the date of Justinian's reign? Describe his Gothic wars.
5. Give an account of the fate of the Alexandrian Library.
6. What was the origin of the Carolingian dynasty of France?
7. Describe three prominent Norman expeditions.
8. What were the manners of the early Germans?
9. Who were the monarchs of Poland and Russia in 1000 A.D.?
10. Describe the beginning of the Hapsburg Dynasty.

DIVISION II.

History.

1. Give, with names and dates, an important event in the 19th, 18th, 17th, 16th, and 15th centuries before Christ.
2. Give two instances of decisions of oracles.
3. What was the fate of any Trojan survivor of the destruction of Troy?
4. Describe the changes in the government of Athens caused by the death of Codrus.
5. Describe the military exploits of Darius Hystaspes in the fifth century, B.C.
6. What were the actions of Alexander the Great in Egypt?
7. Describe the inventions by which the Romans gained their first sea-fight; by which Archimedes defeated Syracuse; by which Epaminondas defeated the Spartans.
8. Mention two instances in Ancient History in which statutory occupied a prominent place.
9. When and how was Macedonia made a Roman province?
10. Write a short account of the beginning and end of the Ptolemy dynasty in Egypt.

DIVISION B.

Integral Calculus.

1. Integrate \( \frac{b}{x} dx \); illustrate the case by a geometrical example, and determine the value of the definite integral between the limits \( a = 2 \) and \( b = 3 \).
2. Explain the case in which the rule to find the integral of a monomial differential fails.
3. Show how every binomial differential can be reduced to the form \( x = a \).
4. Obtain the length of an arc of the semi-cubical parabola, whose equation is \( y^2 = ax^3 \).
5. Find the integral of the expression \( du = a(1 + bx^2)^{1/2} dx \).
6. Determine the area of the hyperbolic spiral.
7. Integrate the expression \( du = a(1 + x^2)^{1/2} dx \), and give the rule.
8. State the rule for obtaining the cubature of a solid, and apply it in determining the solid content of the solid produced by the revolution of the cycloid about its base.
9. Explain the calculus of Finite Differences; state in what it agrees with integral calculus, and in what it differs from it; how it is usually divided, and for what purposes it is commonly employed.
10. Define the Calculus of Variations, and state the principles on which it is based.
**Division C.**  
Differential Calculus.  
1. Define a function, and explain the different kinds of functions.  
2. Prove that the differential of the product of a variable quantity by a constant is equal to the constant multiplied by the differential of the variable.  
3. Differentiate the expression $\frac{a^2}{x^2}$ and give the rule.  
4. If the diameter of the base of a cone increase uniformly, at the rate of one-tenth of an inch per second, at what rate is its solidity increasing when the diameter of the base becomes ten inches, the height being constantly one inch?  
5. Explain Maclaurin’s Theorem, and state the principle which is supposed in the demonstration of Taylor’s Theorem.  
6. Prove that the tangent of the angle, which a tangent line at any point of a curve makes with the axis of abscissas, is equal to the first differential co-efficient of the ordinate of the curve.  
7. What is the length of the axis of the maximum Parabola which can be cut from a given right cone?  
8. Show that the length of the subnormal to any point of a curve is equal to the ordinate multiplied by the differential co-efficient of the ordinate.  
9. If the diameter of a circle be ten feet, what is the length of the tangent and subtangent corresponding to an abscissa of three feet, measured from the centre?  
10. Give the definition of an isolated point, and determine whether the curve represented by the equation, $y^3 = x^3 + x^2 + x$ has such a point.

**Division D.**  
Analytical Geometry.  
1. Give all the equations which indicate the position of a straight line.  
2. Find the equation to the straight line which passes through the points whose co-ordinates are $x=3, y=3$, and $x=4, y=5$.  
3. Prove that the distance between two points is equal to $\sqrt{(x' - x)^2 + (y' - y)^2}$.  
4. Obtain the formulas for passing from a system of rectangular to a system of polar co-ordinates.  
5. The radius of a circle is five inches, and the variable angle is 30 degrees; what is the length of the tangent and subtangent corresponding to an abscissa of three feet, measured from the centre?  
6. Give the definition of a hyperbola, its equation when referred to its centre and axes, and its equation when the origin is on the vertex of the transverse axis.  
7. State what is meant by asymptotes, and whether any curve of the second order except the hyperbola has asymptotes.  
8. Define the logarithmic curve, write its equation, and show how it may be described by points.
9. Find a number such that, the 9th of its square being taken from it, a leaves a remainder of 4.
10. Given \( 3x^2 - 9 + 2x = 76 \) to find the two values of \( x \).

**DIVISION H.**

**Algebra.**

1. What is Algebra, and how does it differ from arithmetic?
2. Show that every quantity having a cipher for its exponent is equal to unity.
3. Explain the definition of positive and negative quantities. Give an illustration.
4. Explain the reason for changing the signs of the subtrahend in performing subtraction.
5. Divide \( 8a^2 - 22a^3 - 17a^4 + 8a^5 + 2 + 6a^6 - 8a^7 - 4b^8 \) by \( 2a^2 - 3ab - 4b^8 \).
6. From \( 2a + 2 + 2 \) take \( a - 6 \).

7. What are literal equations? Give an example of a numerical equation.
8. Divide \( a^2 + y^2 \) by \( a - y \).
9. Multiply \( 3x^2 - y^2 \) by \( -4xy \).
10. Given \( \frac{1}{4} - \frac{5}{2} = 6x - 12 \) to find the value of \( x \).

**DIVISION F.**

**Trigonometry and Surveying.**

**Practical Part.**

1. Being desirous of obtaining the height of a fir tree, I measured 100 feet from its base, the ground being level. I then took the angle of elevation of the top, and found it \( 45^\circ 57' 30'' \). Required the height of the tree, the centre of the theodolite being 5 feet above the ground. Perform, using logarithms.
2. Perform the same example without the aid of logarithms.
3. One corner, \( C \), of a tract of land, being inaccessible, to determine the distances from the adjacent corners, \( A \) and \( B \), I measured \( AB = 9.57 \) chains; the angle \( BAG = 52^\circ 19' 15'' \); and \( ABC = 63^\circ 19' 45'' \). Required \( AC \) and \( BC \). Perform without logarithms.
4. In a triangle, \( ABC \), the angle \( A = 49^\circ \); \( AB = 527 \) yards; and \( AC = 493 \) yards. What is the radius of \( B \)? Use logarithms.
5. Determine the area of a tract of land, the difference of latitude and departures of whose sides are as follows:

<table>
<thead>
<tr>
<th>Differences of Latitudes</th>
<th>Departures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ws.</td>
<td>E.</td>
</tr>
<tr>
<td>24.15</td>
<td>18.03</td>
</tr>
<tr>
<td>11.26</td>
<td>6.68</td>
</tr>
<tr>
<td>9.16</td>
<td>11.31</td>
</tr>
<tr>
<td>8.09</td>
<td>1.68</td>
</tr>
<tr>
<td>22.57</td>
<td>30.12</td>
</tr>
</tbody>
</table>

**Theoretical Part.**

1. What is the arithmetical complement of a logarithm? What is its use in logarithmic computations? Prove the correctness of such use.
2. What is the sine of an arc? What is its relation to the chord of double the arc?
3. Prove that in any right-angled triangle radius is to the hypotenuse as the cosine of either acute angle is to the adjacent side.
4. Prove that in a triangle \( ABC \), \( AB + AC : AB - AC :: \tan \gamma : \tan \alpha \).
5. Explain the method of solving the following example: A tower, \( BC \), standing on the top of a declivity, I measured 75 feet from its base, to a point \( A \) and then took the angle \( BAC = 47^\circ 30'' \); going on in the same direction 40 feet further to a point \( D \), I took the angle \( BDC = 38^\circ 30'' \). What was the height of the tower?

**DIVISION G.**

**Geometry.**

1. Define similar figures, and explain the use of the word homologous with regard to them.
2. Prove that parallelograms which have equal bases and equal altitudes are equivalent.
3. Prove that a straight line drawn parallel to one side of a triangle cuts the others proportionally.
4. How may a straight line be drawn parallel to another, through a given point?
5. What is the area of a regular polygon equal? Prove your answer.
6. Prove that if two planes cut each other their common section is a straight line.
7. Prove that if two planes which cut each other are each perpendicular to a third plane, their common section is also perpendicular to that plane.
8. Prove that if three plane angles containing a solid angle are correspondingly equal to three plane angles containing another, equal plane angles are equally inclined to other equal plane angles.
9. Define polyhedron, prism, right prism, a pole of a circle, a sphere, and a spherical pyramid.
10. Prove that if from the vertices of a given spherical triangle as poles, arcs of great circles are described, a second triangle is formed, whose vertices are poles of the sides of the given triangle.

**DIVISION H.**

**Geometry.**

1. Define hypotenuse, hypothesis, diagonal, parallelogram, and mutually equiangular polygons.
2. Give three corollaries to the proposition: The angles which one straight line makes with another, upon one side of it, are either two right angles, or are together equal to two right angles.
3. Prove that the angles at the base of an isosceles triangle are equal.
4. Prove that if, from a point within a triangle, two straight lines are drawn to the extremities of a side, their sum will be less than the sum of the other two sides of the triangle.
5. Prove that, if from a point without a straight line, a perpendicular is drawn to this line, and oblique lines to different points of it, two oblique lines meeting it at points equally distant from the foot of the perpendicular are equal.

6. Define alternate angles formed by a straight line meeting two other straight lines, a segment of a circle, a straight line inscribed in a circle, a tangent, if a circle, a polygon described about a circle.

7. Prove parallel straight lines everywhere equally distant.

8. Prove opposite sides and angles of a parallelogram equal.

9. Prove a radius perpendicular to a chord bisects it.

10. Prove that in a circle (or in equal circles) equal chords are equally distant from the centre.

**DIVISION A.**

**Latin.**

Translate into English the following passage:

*Horace—Satires—Book I., Sat. I.—lines 9-19.*

1. Agricolam bulbis, juris legumque peritus,
2. Sub galli cantum consultor ubi ostia pulsat.
3. Ille, data vaddibus qui rare extractus in urbem est.
4. Solos fulces viventes clamat in urbe.
5. Cetera de genere hoc adeo sunt multa, loquacem.
6. Delassare valent Fahium. Ne te morer audi,
7. Quo rem deduam, Si quis deus—" En ego," dicit.
8. " Jam faciam quid valuis; eris tu, qui modo miles.
9. Mercator; tu, consultus raodo, rusticus: liinc vos,

**DIVISION B.**

**Latin.**

Translate into English the following passage:

*Horace—Odes—Book I., Ode 3, lines 25-40.*

1. Audax omnia perpeti
2. Gens humana ruin per vetitum nefas.
3. Audax Japeti genus
4. Ignem fraude mala gentibus intulit.
5. Subductum, macies et ova febrium
6. Terris incubuit cohors;
7. Terris incubuit cohors.
8. Semotique prius tarda necessitas
9. Lethi corripuit gradum.
10. Expertus vacuam Dedalus era
11. Pennis non homini datis.
12. Perrupit Acheronta Herculeus labor.
13. Nil mortalis arduum est.
14. Celum ipsum petirnus stultitia; neque
15. Per nostrum patimur scelus.

**Translation into English the following passage:**

*Horace—Epistles—Book I., Ep. X., lines 12-21.*

1. Vivere nature si convenienter oportet,
2. Ponendaque domo querenda est area primum,
3. Novisme locum poterem rare beato?
4. Est ubi plus sepeant seinves? Lui gratior aura
5. Leniet et rabiem canis, et momenta Leonis,
6. Quam semel accept solem furibundus acetum?
7. Est ubi divellit somnium minus invida cura?
8. Deterius Lyrus olet aut nitet herba lapillis?
9. Purior in vieis aqua tendit rumpere plumbum,
10. Quam que per prouum trepidal cum murmure rivum?
Translate into English the following passage:

**Latin.**

Cicero vs. Catiline—Oration I.—Chap. 3.

1. Dixi ego in senatu, cadens te optimatum contulisse
2. In ante diem quintum Kalendas Novembris, tum
3. Cum multi principes civitatis Roma, non tamen
4. Sui conservandi quam tuorum consiliorum
5. Reprimendorum causa, profugurunt. Num
6. Idi tibi non illo ipso die meis praevidis,
7. Mea diligentia circumclusum, commovere
8. Te contra rempublicam non potuisse, cum
9. Tu, discessu ceterorum, nostra tamen, qui
10. Remansistis, caede contentum te esse
11. Dicebas? Nihil agis, nihil inoliris, nihil
12. Puer regius. In ante diem quin turn Kalendas Noverabris, turn
13. Mirantur, et arce locatam. Primus quoc Thymacetes
14. Et molem mirantur equi. Primus quoc Thymacetes
15. Dives, opum, Friam dum regna manebant;
16. Nunc tantum sinus, et statio male fida carinis:
17. Dives, opum, Friam dum regna manebant;
19. Hae se provecti deserto in litore condunt.
20. Dives, opum, Friam dum regna manebant;
22. Dives, opum, Friam dum regna manebant;
24. Dives, opum, Friam dum regna manebant;

Translate into English the following passage:

**Latin.**


1. Est in conspectu Tenedos, notissima fama
2. Insula, dives opum, Friam dum regna manebant;
3. Nunc tantum sinus, et statio male fida carinis:
4. Hae se provecti deserto in litore condunt.
6. Ergo omnis longo solyit se Teucria luctu;
7. Panduntur porta; / cimt ire et Dorica castra
8. Desertaeque videre locos, litusque relicta.
9. Pars stupet inopnis dominum exitiale Minerva,
10. Et molem mirantur equi. Primusque Thymetes
11. Dives, opum, Friam dum regna manebant;

Translate into English the following passage:

**Latin.**


1. Est in conspectu Tenedos, notissima fama
2. Insula, dives opum, Friam dum regna manebant;
3. Nunc tantum sinus, et statio male fida carinis:
4. Hae se provecti deserto in litore condunt.
6. Ergo omnis longo solyit se Teucria luctu;
7. Panduntur porta; / cimt ire et Dorica castra
8. Desertaeque videre locos, litusque relicta.
9. Pars stupet inopnis dominum exitiale Minerva,
10. Et molem mirantur equi. Primusque Thymetes
11. Dives, opum, Friam dum regna manebant;
10. Timotheus belli gerendi fuit peritus. In what case is

Translate the following Latin sentences:

9. Hac oratione habita, consilium dimisit. What do the words

8. Negat jus esse, qui miles non sit, pugnare cura lioste. What sort of a

2. Translate into English the following:

1. Translate into English the following:

Give the principal

Give the attributes of

Give the voc. sing, of the noun

Give the voc. sing, and gen. pin. of

Give an example of

Give an example of

Give an example for each case.

Give the meanings. «

Give the meaning in French of the following colloquial English expressions:

What is the difference between


Et, comme elle, craindront de voir finir leurs jours

La grste décorait son front et ses discours,

S'eveillait, (fcoutant ces plaintes, cette voix,

Et j'ai des serviteurs, et ne suis point servi.*

Enfin je vois par eux votre exemple suivi,

La grâce décorait son front et ses discours.

De sa bouche aimable et naive.

S'eveillait, (fcoutant ces plaintes, cette voix,

Raisonner est l'emploi de toute ma maison,

Ces chants, de ma prison témoins harmonieux,

Et le raisonnement en bannit la raison.

Et j'ai des serviteurs, et ne suis point servi.*

Et le raisonnement en bannit la raison.

Raisonner est l'emploi de toute ma maison,

Et j'ai des serviteurs, et ne suis point servi.*

Et, comme elle, craindront de voir finir leurs jours

La grste décorait son front et ses discours,

S'eveillait, (fcoutant ces plaintes, cette voix,

Raisonner est l'emploi de toute ma maison,

Et j'ai des serviteurs, et ne suis point servi.*

Et le raisonnement en bannit la raison.

Raisonner est l'emploi de toute ma maison,

Et j'ai des serviteurs, et ne suis point servi.*

Et, comme elle, craindront de voir finir leurs jours

La grste décorait son front et ses discours,

S'eveillait, (fcoutant ces plaintes, cette voix,

Raisonner est l'emploi de toute ma maison,

Et j'ai des serviteurs, et ne suis point servi.*

Et le raisonnement en bannit la raison.

Raisonner est l'emploi de toute ma maison,

Et j'ai des serviteurs, et ne suis point servi.*
8. Give the meaning in English of the following French idiomatic expressions:
   — au dire de chacun; il n'importe peu; s'il en arrive; à l'abri du danger.
   — tout à fait; l'homme du siècle; c'est là-bas; debout.

9. Translate into French the following:
   Coffee, a native of Arabia, is one of the most extensively cultivated plants of America. Some stocks of the shrub having been brought to Paris, were there carefully cultivated in hot-houses, and from that city have proceeded all the plantations of coffee that have been made in the new world.

10. Correct the following sentence, and mention the grammatical rules which are violated in it: — J'étais en ma chambre, occupé à lisant, quand mon ami parut avant moi et me proposa de sortir avec lui.

**DIVISION B.**

**French.**

1. Translate into English, (Littérature française, page 114,) from "Cependant que ces eaux," to aux hommes; (8 lines).

2. Translate into English, (Littérature française, page 248,) from "Soudain un bruit," to "de la chapelle."

3. Give the meaning in English of the following French idiomatic expressions: — il ne prend point le change, à sa portée, ainsi que, faire peur, tous les dix ans.

4. Translate into French the following: — The boys of this Division are all intelligent enough, but they are not always attentive to the instructions which I give them. England without her colonies would be among the smallest states of Europe. The good people are not always happy in this life, but all the poor people are generally unhappy now.

5. Give the form of the Infinitive present of the following verbs found in your Textbook:
   - aller, inouir, souffrir, asseoir

6. Into what three classes may the Prepositions be divided in French, and illustrate its use in a French sentence of your own composition.

7. "Give the simple forms of the verb y avoir," illustrate its use in a French sentence of your own composition.

8. What tenses are derived from the Infinitive present, the Present participle and the Preterit definite, and how are they formed?

9. Make some French sentences in which the following forms of verbs will be properly used, and state to what mood, tense, person, and number each one represents:
   - avoir; aimer

**DIVISION C.**

**French.**

1. Translate into English, (Grand-Père, page 289,) from "Monseur le Capitaine," to "profond respect."

2. Translate into English, (Grand-Père, pages 299-299,) from "Le Concierge" to "à coup de pierres."

3. Give the meaning in good English of the following French idiomatic expressions: — il s'agitait de savoir, à la bonne heure, en joint, — on a beau faire, — congé de convalescence.

4. Give the meaning in French of the following colloquial phrases: — Must I buy anything else? — Is this all that you want? — Why did you not lock it up? — Try not to miss your lesson. — I was quite afraid of making mistakes.

5. State in what mood, tense, person and number the following verbs, taken from your second question, are used, and give the form of the Infinitive present of each one:
   - avoir; espier; tiens; pléurer; sourire; chasser.

6. What is observed of the present participle; what does it express, and what do grammarians call Gerund? Give an example.

7. When does the past participle agree with its object direct, and when does it never agree with it? Give an example for each case.

8. Give the irregular forms of the following verbs: — acquérir, assister, pueur.

9. What adverbs are placed before the verb which they modify? Give an example.

10. Translate into French the following sentences: — The sister of your friend was sent to the city, but she did not go there. — Has she sent back the books which you had lent her last week? — I hope that you have not forgotten your pen this morning.

**DIVISION D.**

**French.**

1. Translate into English, (Grand-Père, page 216,) from " Ils restèrent."

2. Translate into English, (Grand-Père, page 200,) from " J'apportais du souffre."

3. Give the meaning in English of the following French idiomatic expressions: — C'est entendu; j'en suis; de travers; cette fenêtre donne sur la rue; se fit battre.

4. Give the meaning in French of the following colloquial phrases: — That will not be enough. How many must there be? He must be thirsty too. — What are you going to do with it? In the same manner as silk worms.

5. Give the Preterite indefinite of the verb se lever, to rise, in the following forms: — 1st, affirmative; 2d, negative; 3d, interrogative; 4th, negative and interrogative combined.

6. What is the only mode of conjugating passive verbs in French? Give an example.

7. Give the simple forms of the verb y essoir, and illustrate its use in a French sentence of your own composition.

8. What tenses are derived from the Infinitive present, the Present participle and the Preterit definite, and how are they formed?

9. Give the irregular forms of the following verbs: — aller, inouir, tenir.

10. Make some French sentences in which the following forms of verbs will be properly used, and state to what mood, tense, person, and number each one represents:
   - Ecrire; court; dors; ouvert; senti.
6. Conjugate the verb tomoder, to fall, in all its moods, tense, persons, and numbers.

7. In what mood, tense, person, and number are the following forms of verbs used? Give their meaning in English: — Erdite, sommer, pariren, favoraient, repoci, cancers.

8. What are the different forms of the possessives my, thy, his, her, its, our, your, theirs, and what is to be observed in using them? Give an example.

9. Translate into French the following sentences: — You will be blind. The shoe scratches my foot. We sell some milk. My brother was in the city. The son of this man is very cunning.

10. How are the personal pronouns to be translated in French in the following sentences: — You see me; come with me; I speak to him; they beat him; go with her; receive her well give her the book; owe money to them; we perceive them.

**DIVISION F.**

**German.**

1. What prepositions govern the dative and accusative, and according to what rule?

2. Translate: — What lies upon the table? The book lies upon the table. Who has laid the hat upon the table? What have you laid under the table? I have laid the lead under the table.

3. What classes of words are declined like the definite article?

4. Translate: — Do you go into that garden? Into which garden? Into the garden of that man. I shall come into that garden. Who sits upon that bench?

5. What classes of words are declined like the indefinite article?

6. Translate: — Do you see my house? Which house? I see that house. Have you a field? I have no field.

7. Give the singular and plural nominatives of the following words in German: — The mother, the daughter, the brother, the man, the shoe.

8. Give the rule of Class 4 of irregular verbs.

9. Give the three principal parts of the following verbs in German: — To break; to speak; to see; to give; to eat.

10. Give the rule about the gender of compound substantives.

**DIVISION F.**

**German.**

1. What kind of verbs take in their compound tenses the auxiliary verb "do" instead of "tyafren"?


3. How is the third person singular present formed?

4. Translate: — Does the mother sing? She sings. Does the father dance? He dances. Does it cost?

5. How is the first person singular formed?


7. How is the corresponding tense in German where in English the auxiliary verb did is used?


9. What is the rule about the translation of "is"? What is the rule about the translation of "it"?

10. Translate: — Is the flute good. It is good. Is the wagon large? It is large. Is the flesh red or white? It is white.

**DIVISION A.**

**Mental Philosophy.**

**Disordered Intellectual Action.**

1. Define the term Somnambulism. Give the principal characteristics of this state of mind. In what respect is a Somnambulist like, and in what is he unlike, a dreamer?

2. Give a classification of insane states of mind.

3. What is the prominent point of difference between the mental condition of the Maniac and Monomaniac?

4. Describe the special effects of Mania on each of the cerebral functions.

5. Define the terms Moral Insanity and Dementia.

6. Give the root of the word Hypochondriasis, and explain the nature of the disorder.

7. Why have legal decisions been made in favor of Life Insurance Companies when policy-holders have "died by their own hands"?
8. Explain the ways in which a man can “die by his own hands” without committing suicide.
9. What is the Legal Test employed in cases of Homicidal Monomania? Show the fallacy of it.
10. What is the true test of Moral Responsibility in such cases?

DIVISION B.

Mental Philosophy.

1. What are the characteristics of emotions? What are the characteristics of emotions of beauty?
2. Give an example of the mock-heroic, and explain it.
3. Explain the difference between gladness and joy; between sorrow and grief.
4. How do the affections differ from all other branches of the desirous nature?
5. What are the checks which nature has imposed on the excessive action of anger?
6. What are the proofs that the Parental Affection is an implanted principle?
7. What argument in favour of the existence of God proves more than any other? Why?
8. What are the suppositions by which the conclusion may be escaped, that design manifested in an effect implies intelligence in the cause?
9. State the argument known as “the fortress of Atheism,” and refute it.
10. State Hume’s Sophism, and refute it.

DIVISION C.

Mental Philosophy.

1. What are the methods by which we make use of intentional memory in recalling facts?
2. State the rules for the improvement of the memory.
4. What are the occasions upon which the idea of power is suggested to the mind?
5. State four principles which are developed by original suggestion.
6. Explain the foundation of Antithesis.
7. What is Relative Suggestion? What are the most important relations with which we are acquainted?
8. Explain the difference between the origin of our ideas of duration and that of those of succession.
9. What are the characteristics of appetites? At what particular point do they partake of morality?
10. What is the imagination, and what is its practical value?

DIVISION D.

Mental Philosophy.

1. What three suggestions does Dr. Wayland make in answer to the suggestion that the thinking principle is man in material?
2. Explain accurately the difference in materialism, idealism, and utilitarianism.
3. In what respects is the perception of an object endowed with colour, unlike the perception of an object endowed with form?
4. How does an object appear when seen on the shore from the water? Why?
MINERALOGY.

1. Give the position of the axes in the oblique rhomboidal prism.
2. What is the primary form from which the rhombohedron is derived? Give its derivation and position of axes.
3. Describe the trigonal trioctahedron, and show how it is obtained from a cube.
4. Give an example of dimorphism.
5. Give the properties of Iceland Spar.
6. Give the different forms in which carlion occurs.
7. How can quartz be distinguished from calcite?
8. What is the composition of talc?
9. What is hornblende?
10. How is silver cupelled?

PHYSICS.

1. What are anomalous magnets?
2. To what variations are magnetic needles subject?
3. Explain what is meant by electrical tension.
4. Why does electricity reside only on the outer surfaces of excited bodies?
5. What is the principle of the galvanometer?

CHEMISTRY.

1. How is steel manufactured?
2. How is cast iron changed to malleable iron?
3. What are the ores of cobalt?
4. Give the tests for manganese.
5. What is the reaction of nitric acid upon copper?

DIVISION B.

1. What are anomalous magnets?
2. To what variations are magnetic needles subject?
3. Explain what is meant by electrical tension.
4. Why does electricity reside only on the outer surfaces of excited bodies?
5. What is the principle of the galvanometer?

CHEMISTRY.

1. What are the properties of oxygen?
2. Give all the laws of chemical combination.
3. In what parts by volume do oxygen and hydrogen unite to form water?
4. What is the density of oxygen, the weight of one volume of hydrogen being taken as unity?
5. How may a hospital, infected with yellow fever, be best disinfected?
6. When a vessel leaving on board persons ill with yellow fever, arrives in the Delaware, what should our Board of Health require in regard to it?
7. Name three endemic diseases which are never contagious, and three contagious diseases which are never epidemic.
8. What is known of the causation of Cholera?
9. What physical conditions in a locality are attended by the lowest mortality from phthisis?
10. State the comparative salubrity, according to statistics, of the three great regions into which the United States and Territories are naturally divided.

**Division B.**

**Hygiene.**

1. What reasons are sufficient for the rejection of the principle of exclusive vegetarianism?
2. Name four nitrogenous proximate principles of animal food, and give their characteristic properties.
3. State the constituents of milk, and their respective places and uses among the alimentary substances.
4. By what signs may we judge, in any case, of the utility or injurious effect of alcohol, as an accessory food?
5. What is meconium, and what other diseases may result from the same cause?
6. Compare the effects on the body of the cold, warm, and hot baths.
7. What are the evils which may follow from neglect of the bowels?
8. State why the following employments are unfavorable to health; making of phosphorous matches, needle-grinding, vulcanising India-rubber, working in lead, coloring green paper-hangings.
9. What is one of the modes by which tape-worm is known to be introduced into the human body?
10. How may a young person, inheriting a predisposition to pulmonary consumption, best favor its prevention in himself?

**Division C.**

**Anatomy and Physiology.**

1. What are the differences between the muscular tissue of the stomach, and that of the temporal muscle?
2. Mention examples of rudimentary muscles in man; and explain the term.
3. What muscles are attached to the patella?
4. What muscle is the principal flexor, and what the chief extensor, of the fore-arm?
5. Name and describe the membranes of the brain.
6. Explain and give examples of excito-motor, sensori-motor, and excito-secretory actions.
7. Mention the functions of the 1st, 3d, 7th and 9th pairs of cephalic nerves.
8. Describe the coats of the human eye.
9. Describe the iris; and explain its action and use.
10. Name the parts composing the middle and internal ear.

**Division D.**

**Anatomy and Physiology.**

1. State the locality in the body of the patella, hyoid bone, olecranon process, carpus and astragalus.

2. Name all the parts which intervene to protect the brain from injury by a blow on the head.
3. Describe the hip joint, and the knee joint.
4. State what you know of the functions of the liver and of the uses of its secretion.
5. Name the digestive fluids, and mention their respective action upon articles of food.
6. What is the blood-heat of man; and how is it believed to be maintained?
7. Describe the minute anatomy of the skin; and state the uses of its different parts.
8. Name all the valves of the heart, with the position of each.
9. What are the differences between arteries, veins, and capillaries?
10. Name five different offices or actions of organic cells.
3. Received an account-sale from Lewoss & Cavada, N.Y., of Starch and Flour (Adventure No. 2) shipped them. Net proceeds, $3,890. Give the Day Book entry.

4. Sales were made as follows:
   - June 28, amount $4,433 75
   - July 11, $1,225 00
   - July 31, $657 50
   What is the average date of the gross sales? Show the work.

5. The after charges on the above sales were $224 90. The Cash charges, $388 75, were due from the 15th of June. What are the net proceeds, and when are they due? Show the work.

6. What is an account current?

7. Give the different steps in order, in closing an account current.

8. On closing J.D.'s account current, we find that there is a balance of interest in our favour of $99. Give the Day Book entry.

9. Drew on Lewoss & Cavada, N.Y., at ten days date, my favour, for $3,850 46. Give the words of the draft.

10. How are the entries made on the two sides of the Sundry Creditors account, and how is that account closed?

DIVISION II.

Book-keeping.

1. Describe Double Entry Book-keeping.

2. What is an account?

3. What is the object of the merchandise account? What should be entered on each side? How should it be closed?

4. What are the three rules for journalizing?

5. What should be the Journal entries, and why, when you sell goods on account? When you pay money on your note? When you gain anything?

6. Explain the process of posting.

7. What is the form and use of a Trial-balance?

8. By what entries should the Cash book be journalized?

9. If goods are purchased amounting to $700, for which you pay one-half in cash, and give your note for the remainder, what accounts should be debited and credited, and why?

10. Give the Day Book, Cash Book, and Bill Book entries for the following transaction:—January 23, 1865. Received from William Martin, in full for merchandise amounting to $823 75, on which a discount of five per cent, is allowed, his accepted draft on Kennedy & Co., of this date, our favour, at three days sight for $700, and cash for the balance.

EXAMINATION QUESTIONS set at the Girls' High School, Providence.

SENIOR CLASS.

Questions for written examination.

Virgil—Aeneid, Book I.

1. When and where was Virgil born? What were his favourite studies? How many years did he devote to the composition of this poem?

2. Translate, commencing at ventus (line 283) as far as cruento.

3. Decline domus (line 264). Which are more frequently used in the genitive and accusative plural, the forms of the 2nd declension or those of the 4th? What difference in meaning between domus and doma? How many other exceptions in gender? Give the quantity of the penult? What is the rule? What other exceptions to the rule?

4. Translate ten lines, commencing at Cui mater (314 line).

5. Divide Harpalyce (317th line) into its syllables, giving the rules for division. By what exception to what rule do we decide the quantity of the final syllable?

6. Give the derivation of rematrix (319th line). What is denoted by this termination—rix, when added to the root of a verb? What is the corresponding masculine termination?

7. Give the quantity of each syllable in deferat. How many and what other perfects of two syllables have the same penultimate quantity?

8. Parse diffandere. Is this a common use of the infinitive? Is such a construction ever employed in prose?

9. What kind of pronoun is situm (322nd line)? Decline it. How many and what other kinds of adjective pronouns? What determines the gender of words used partitively?

10. Translate nine lines, beginning with the 494th.

Intellectual Philosophy.

1. Name the laws of association, both objective and subjective.

2. Illustrate the law of association by resembling effects.

3. Define memory. What two functions are ascribed to it?

4. Give examples of extraordinary memory.

5. In what does reasoning consist?

6. What is a syllogism?

7. What are sophisms? Give examples.

8. Compare that kind of reasoning by which we arrive at absolute certainty with that by which we arrive at practical certainty, in respect to their process, matter, and result.

9. What are the rules which govern us in receiving circumstantial evidence?

10. Show, by an illustration, that the coincidence of direct and indirect evidence gives the strongest possible ground of belief.

GIRLS' SENIOR CLASS.

Astronomy.

1. Find the length of the moon's diameter in miles.

2. How is the figure of the moon's orbit ascertained?

3. Explain libration in latitude.

4. How did Dr. Halley discover the acceleration of the moon's motion in her orbit?

5. Explain why a lunar eclipse does not occur at every full moon.

6. Describe the mode of investigation pursued by Newton in determining gravity to be the force which binds the moon to her orbit.

7. Describe the phases of Venus.

8. Give a full account of the discovery of the velocity of light.

9. Give the history of the discovery of Neptune.

10. Give some particulars respecting the comet of 1843—(viz., velocity at its perihelion, distance from the sun, temperature, length of its tail, &c.)

Evidences of Christianity.

1. What is a prophecy? Give some instance of fulfilled prophecy.

2. What peculiarity in the argument for the divine authority of Christianity?

3. Exhibit the difficulty experienced by the apostles in disseminating Christianity, arising from the fact that the idea of propagating a new and exclusive religion was a novelty to both Jew and Gentile.

4. Describe the persecutions in the early centuries.

5. Compare the progress of Mohammedanism with the spread of the Gospel.

6. Compare that kind of reasoning by which we arrive at absolute certainty with that by which we arrive at practical certainty, in respect to their process, matter, and result.
Origin and History of Language.

1. On what does the growth of language depend?
2. What is the geographical line of division between the monosyllabic and the polysyllabic languages?
3. What classes of words are found to bear a close resemblance in all languages?
4. How is the original unity of language indicated?
5. Into what classes are written symbols divided.
6. What families are included in the Indo-European stock of languages?
7. What languages now spoken in Europe are derived from the ancient Latin of the Romans?
8. When did the plural form in—en disappear from the English?
9. How do you account for dialectical differences existing in the United States?
10. Give examples of words, Americanisms, borrowed from other languages with which the English has come in contact in this country.

Girls' Senior Class.

Kane' Elements of Criticism.

1. What is meant by the figurative sense of a word? Give illustrations.
2. On what does the beauty of figures of speech depend?
3. Give, from standard authors, examples of these errors, viz.:—
   1st. Of crowding different figures of speech into one thought or period.
   2d. Of grafting one figure on another.
   3d. Of intricate and involved figures.
4. On what is excellence in composition dependent?
5. What is the general law which underlies the prominent maxims in Rhetoric?
6. What are the characteristics of poetry?
7. To what does poetry owe its peculiar impressiveness?
8. Give some facts illustrating the fluctuations of taste in architecture, eloquence, and poetry.
9. What is the foundation of taste?
10. Mention some works of genius that have been universally approved.

Middle Class.

Study of Words.

1. State the first theory of the origin of language.
2. What are the objections to this theory?
3. Give an account of the mingling of the Saxon and Norman languages.
4. Give the Latin word from which Sacrament is derived, and the changes in signification which the word has undergone since its first use by the Romans.
5. Give examples of words in which we may trace the record of customs and states of society which have now passed entirely away.

Chemistry.

1. What are the four effects of a word? Give illustrations.
2. Describe the process by which thermometers are constructed.
3. At what rate do gases expand on the application of heat? Define latent heat?
4. Define Inorganic Chemistry?
5. How is chemical affinity distinguished from all other kinds of attractive forces?
6. Define an alkali and a salt.
7. In what substance is nitrogen found in abundance?
8. Describe the action of chlorine as a bleaching agent.
9. Name and describe the two most important compounds of carbon and hydrogen.
10. Name the metals which, by oxidation, produce alkalies.

Geometry.

1. The sum of the interior angles of a polygon is equal to two right angles taken as many times as the polygon has sides, less two. (Book I., Prop. 13.)
2. If two quantities be increased or diminished by like parts of each, the results will be proportional to the quantities themselves. (Book II., Prop. 5.)
3. Define a tangent and a secant.
4. Through any three points not in the same straight line, one circumference may be made to pass, but one. (Book III., Prop. 7.)
5. In equal circles, radii making equal angles at the centre, intercept equal arcs of the circumference; conversely, radii which intercept equal arcs, make equal angles at the centre. (Book III., Prop. 15.)
6. Define similar polygons.
7. Rectangles having equal altitudes are proportional to their bases. (Book IV., Prop. 3.)
8. In any triangle, the square of a side opposite an acute angle is equal to the sum of the squares of the base and the other side, diminished by twice the rectangle of the base and the distance from the vertex of the acute angle to the foot of the perpendicular drawn from the vertex of the opposite angle to the base, or the base produced. (Book IV., Prop. 12.)
9. If in a right-angled triangle, a perpendicular be drawn from the vertex of the right angle to the hypothenuse:
   1st. The triangles on each side of the perpendicular will be similar to the given triangle and to each other:
   2nd. Each side about the right angle will be a mean proportional between the hypothenuse and the adjacent segment:
   3rd. The perpendicular will be a mean proportional between the two segments of the hypothenuse. (Book IV., Prop. 23.)
10. If two chords intersect in a circle, their segments will be reciprocally proportional. (Book IV., Prop. 28.)

Poetry.

1. Define the leading divisions of dramatic poetry and the three dramatic unities.
2. Define elegiac and didactic poetry, and give examples.
3. Define epic poetry.
4. Who were the great epic poets of Greece, Italy, and England.
5. Define metre and scanning.
6. What advantage has poetry over the other fine arts?
7. What are the characteristics that distinguish poetic from other literary productions?
8. What does Lord Byron say of the creative power of poetry?
9. What advantage arises from the mere form of poetry? Give an illustration of this?
10. What are some of the uses of poetry?

Latin.—Cæsar. Book I.

1. In third paragraph, translate from Is ubi to Perficite facta.
2. Translate the fifth paragraph.
3. In the last sentence, why is the passive participle extensis used? Give principal parts of verb from which it comes?
4. In six paragraph, construe from Extremum to Omnibus, and translate the remainder.
5. Why are *possent* and *ducerentur* in subjunctive? What words are to be supplied after *prohibere*?
6. Translate the eighth paragraph.
7. In the second sentence, explain the use of both the present and imperfect depending on the historical present.
8. In what sense is *dies* used in the seventh? Why is *dierent* subjunctive?
9. In the *oratio directa*, what form of the verb would be used instead of *reverterentur*?
10. Translate eight lines of the ninth paragraph.

**Junior Class—First Division.**

**Ancient History.**
1. State the classes into which Romulus divided the people of Rome.
2. Give the laws that were passed for the protection of the plebeians.
3. Give an account of Coriolanus.
4. Give an account of the invasion of Rome by the Gauls.
5. Give the causes and results of the first Punic war.
7. Give an account of the formation and dissolution of the First Triumvirate.
8. Name the 12 Caesars.
9. State how many times and by whom Rome was sacked.
10. Name the last Roman Emperor and the year of his resigning the crown.

**Rhetoric.**
1. Define Taste.
2. State what must be considered the standard of Taste.
3. State the advantages derived from the use of figurative language.
4. Give the four observations respecting the use of figures.
5. State the difference between the beautiful and the sublime.
6. State the difference between wit and humour.
7. State the different forms in which sublimity develops itself.
8. State when a writer may attain to sublimity in style.
9. Name and define the faults opposed to sublimity.
10. Define the moral sublime.

**Natural Philosophy.**
1. Name the essential properties of matter.
2. State the three facts established respecting gravitation.
3. Give the laws that govern falling bodies.
4. Explain specific gravity.
5. Explain the cause of capillary attraction and give familiar illustrations of it.
6. Define hydraulics.
7. Explain the construction and use of the barometer.
8. Explain mirages.
9. State the three properties contained in a ray of solar light.
10. Give the nature and origin of sounds.

**English Literature.**
1. Name the first English Reformer and give an outline of his labours.
2. Name the distinguished men of the 16th century.
3. Give the plan of the "Faerie Queene."
5. State the design and character of Hudibras.
6. Give an account of the life of Bishop Berkely, from the year of his arrival in Rhode Island, until his death, naming the works written during that time.
7. Name the most distinguished novelist of the 18th century, and give the names of his works.
8. Name Gray's poems. Give the argument of the bard as set down by the poet himself.
9. Give the life of Goldsmith previous to his commencing his literary career.
10. Give an analysis of Burke's intellect and style.
pretences.

vulnere Pyrrhus insequitur, jam jamque manu tenet, et premit hasta. Ut tandem mult a.

Dido, longumque bibebat ainorem! Multa super Priamo rogitans, super Hectore ant oculos evasit et ora parentum, concidit ac multo vitam cum sanguine fudit. hostes porticibus longis furjit, et vacua atria lustrat saucius; ilium ardens infisto a vobis hujus horribilis belli ac nefaripericulum depellatur.

mihi tanti, Quirites, hvjus intidia fa ls a atqueiniqua tempestatem subire, durnmodo teecorrigas? Tu ut ullamfugam meditere?

2. Repeat the rules for the accent of

6. Translate Book I, Chap. 3, Section 3.

4. In what direction did Cyrus journey, for what purpose, and with what,

3. Translate Book I, Chap. 2, Sections 2 and 3.

9. Inflect every noun and adjective in this section.

8. Mention all the anomalous verbs in this section.

5. Conjugate all the verbs in full in this section.

3. What was the character of Catahne?

6. In Book III, translate from the 281th to the 300th line inclusive.

Nunc quales Diomedis equi, nunc quantus Achilles.

Nunc quibus AurorcB}

Necnon et vero noctem xermone trahebat in f d ir

Writtten Writtten

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Questions Recently Submitted to the Candidates for Admission to the Providence High School.*

Examination May 18th and 19th, 1863.

Practical Arithmetic.

1. Divide \[\frac{0.634}{2}\] by \[\frac{374}{62}\].

2. What is the least common multiple of 6, 8, 12, 16, and 28?

3. A merchant sold \(\frac{1}{4}\) of his flour at an advance of twelve per cent.; \(\frac{1}{4}\) at an advance of 10 per cent., and \(\frac{1}{4}\) at a loss of 8 per cent. How should he sell the remainder so as to gain 5 per cent. on the whole?

4. A man bought a horse and two carriages. For the first carriage he paid \$250; and if this sum were added to what he paid for the horse it would amount to \(\frac{2}{3}\) of the sum he paid for the second carriage; and if the sum he paid for the horse were added to the sum paid for the second carriage, it would amount to three times the sum paid for the first carriage. What did he pay for each?

5. A merchant bought 500 barrels of flour at \$6\; \text{a barrel}, and sold them immediately at \$7\; \text{a barrel}, and received in payment a note due three months hence, which he had discounted at a bank at \(\frac{1}{4}\) per cent. What did he gain on the flour?

6. A man bought 2400 bushels of corn at 90 cents a bushel; but in measuring it he found that he had more bushels than he paid for, and that he had gained 2\(\frac{1}{2}\) per cent. by the increase in the number of bushels. He sold the corn without delay for \$1.10 per bushel. What did he gain per cent. by the whole transaction?

7. If A owes \$500 due in 6 months, \$400 due in 4 months, and \$300 due in 9 months, and pays \(\frac{1}{2}\) of the whole in 3 months, when ought the remainder to be paid?

8. A merchant sold a lot of flour for \$500, and gained 25 per cent.; he then invested the proceeds in flour, on which he lost 20 per cent. Did he gain or lose by the transaction, and how much?

9. The base of a right-angled triangle is one-half of the sum of the perpendicular and hypothenuse, and the sum of the length of the three sides is 96 feet. What is the length of each side?

* These questions indicate the point of attainment a scholar is expected to reach in the Grammar School by the age (say) of 14 years. It should be remembered that the questions have direct reference to particular "text-books," and particular "tests."
APPENDIX C

SAMPLE REPORT CARD: 1848
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