EDUCATION IS NOT A RACE:
A NEW APPROACH TO HELPING MORE STUDENTS SUCCEED IN OUR PUBLIC HIGH SCHOOLS

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ABSTRACT

The policy of public education in the early North American Colonies was predicated on the need for a uniform process of teaching the basic essentials to develop a common social, religious, and economic society. As the nation developed, however, including immigrants from around the globe, society became larger, more complex, and less homogenous with sometimes competing and conflicting demands on its peoples. As early as the end of the 18th century it was clear that a “one-size-fits-all” approach to education was untenable. Ironically, recent programs like the No Child Left Behind Law, emphasize a return to “standardized” results, ignoring the diversity and creativity in the American community. This approach has drawn us back to the educational standards of the Colonial Period, with ever-widening gaps in academic and socio-economic success. The modern reliance on drugs such as Ritalin to focus student attention should be eschewed. Rather, much more emphasis should be placed on reaching students in ways that engage and motivate them to stay in high school, learn, graduate, and go on to experience success in higher education, careers or both. The place where this connection takes place is in the classroom, between students and their well-trained, experienced and
caring teachers. How teachers engage students is not what is important – whether they use the approaches described herein, or rely on their professional abilities to connect with their students – what is important is that this becomes the primary objective in our schools. The failure to refine individualized approaches to education has led to the over-medication of students whose learning styles do not mesh with the classrooms in which they are placed, and has caused a massive loss of enrollment in public schools nationwide, especially among minority students. The result has been a concomitant decline in the standard of living in some segments of society due to the inability to obtain employment -- contributing mightily to the national crime rate. The country must take what has been termed an “excellent risk” and look to the innovative curricula and assessment approaches in modern progressive schools, some of which are described herein, which have graduation rates that are conspicuously higher than the national average. Clearly the “standardized” approach to education “reform” has not only failed critically, it has caused a great deal of harm. If we are to avoid a national educational catastrophe that will have far-reaching social and economic ramifications as the 21st century advances, the current “standards” approach should be abandoned immediately. Maintaining the same level of education investment as is currently in place in 2013, the funds should be redirected to where they will make the most difference: more teachers; smaller schools; and more innovative programs designed to engage, educate, and launch our high school students into successful higher education or careers, or both.
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CHAPTER 1

A BRIEF HISTORY OF THE UNITED STATES SYSTEM OF PUBLIC EDUCATION

Education, for most people...has meant trying to lead the child to resemble the typical adult of his society...but...education means making creators....You have to make inventors, innovators – not conformists.

-- Jean Piaget

As is so often the case with human institutions, American education as a “system” went wrong from the beginning. At a time when people were task-oriented, the prevailing view was that education, like farm work or learning a vocation, was a rote, step-by-step process which applied across the board to any laborer, worker, or pupil. Even after the nation became industrialized after the Civil War, the concept of “mass production” engineered first by Eli Whitney, a Phi Beta Kappa graduate of Yale, emphasized the principle that “success” could be achieved by means of uniform, interchangeable parts. The purpose of education was not so much the acquisition of a predetermined set of skills, but rather the realization of the student's full potential and the


2. Richard Hofstadter, *et al.*, *The United States* (Englewood Cliffs, N.J.: Prentice-Hall, 1972), 333. See also, Regan A. Huff, *Eli Whitney: The Cotton Gin and American Manufacturing* (New York: The Rosen Publishing Group, 2003). Ironically, the genius of Eli Whitney (1765-1825) would contribute both to the cause of the Civil War by the South and the victory in the war by the North. His invention in 1794, of the cotton gin for removing the seeds from short-fiber, provided the basis for the rise of the slaveocracy in the South, making it a dominant antebellum economic and political power, and his devising the concept of interchangeable parts for weaponry helped give rise to the industrial North, which enabled the Union ultimately to prevail in the war.
ability to use those skills for the greater good. Thus, from the beginning, the very individualized goals and purpose of education were mismatched with a system of education that treated its students like interchangeable parts.

Perhaps the greatest flaw of the earliest approach to education was that it focused on educating young men, and virtually ignored half the population, thus depriving itself of the intelligence of most of the women in the country. And, of course, it need hardly be emphasized that its racist origins also excluded what were then the first “African-Americans” altogether. The deplorable educational treatment of Native Americans until the late 19th century was not any better.

In the modern age of science and technology, the fact remains that history does matter when it comes to studying education. As in every other field, it leads us from the past, emphasizes our mistakes, and provides us with the guidance of an experienced path to improvement in the future. As we will see in this chapter, however, learning from our


mistakes, and even righting the ship to a previously successful course, is not always the outcome.

The major historical events that have impacted the system of Education that we have today in the United States can be outlined as follows:

- The First Wave of Europeans Brought their Countries’ Concepts of Education:
  - Puritans in New England
  - Quakers in the Mid-Atlantic States
  - Anglicans in the South
- Americanization
  - Jeffersonian
  - Jacksonian
- The Civil War Era
- The Progressive Era
- Compulsory Attendance – Formation of the Federal Office of Education and the first Teacher’s Unions
- The Great Depression – and the Post-Depression Era
- World War II – and the Post-War Baby Boom
- The Civil Rights Era
- The Cold War – and Sputnik
- Education Presidents

The First Wave of Europeans

Early colonial Americans placed a high premium on education from the outset, establishing nine prestigious institutions of higher learning between 1636 and 1769.5 The colonists tried at first to educate by the traditional English approach to family, church,

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5. Richard B Morris, Encyclopedia of American History (New York: Harper & Bros., 1953), 555. These included Harvard (1636); William and Mary (1693); Yale (1701); Princeton (1746); University of Pennsylvania (1751); Columbia University (1754); Brown University (1764); Rutgers University (1766); and Dartmouth College (1769).
community, and apprenticeship, with schools later becoming the key agent in
"socialization." At first, the rudiments of literacy and arithmetic were taught inside the
family, assuming the parents had those skills. There was a heavy overlay of religious
influence, prompted by the perceived need to be able to read the Bible. The general
feeling was that there was a need for “baptized intelligence” – preferably Protestant.

Most New England colonies required towns comprised of 100 families or more to
set up schools. In 1642 the Massachusetts Bay Colony made "proper" education
compulsory; other New England colonies soon followed. The schools were all male,
with few options for girls. The priority was teaching the “norms” and the concept of a
“normal school” developed to train high school graduates to be teachers. Its purpose was

6. Morris, Encyclopedia, 554; see also Allan C. Ornstein, et al., Foundations of Education
(Belmont, CA: Wadsworth Cengage Learning, 2011). From a realistic historical perspective, it should be
noted that, in a world of limited travel and communications in North America, there were three distinct
sectors of American “colonists,” i.e., those in the northern colonies (New England), those in the middle
colonies (New York, New Jersey, Connecticut, Delaware, and Pennsylvania), and those in the southern
colonies (the Carolinas and Georgia) – with tripartite religious backgrounds in Puritanism, Quakerism, and
Anglicanism, respectively. Based on differing societies, customs, and economic systems, their
“sectionalist” approaches to education could not have been considered uniform or homogenous.

1974); Richard Middleton and Anne Lombard, Colonial America: A History to 1763 (Walden, MA: Wiley-
Blackwell, 2012); and Lawrence Cremin American Education: The Colonial Experience, 1607-1783
(Harper & Row, 1970); see also Maris A. Vinovskis, “Family and Schooling in Colonial and Nineteenth-

8. Hofstadter, United States, 282; Richard B. Morris, America: A History of the People (Chicago:

Press, 1965), 70, 530.

(September 1902): 513-31; and Morris, America, 200.
to establish teaching standards or norms, hence its name.11 The larger towns in New England opened grammar schools, the forerunner of the modern high school.12

By the 1780s, most such schools had been replaced by private academies. By the early 19th century New England operated a network of elite private high schools, now called "prep schools," that became co-educational in the 1970s, and remain highly prestigious even today.13 There are no data that speak to how effective these institutions were at educating their individual students. One must naturally wonder: what was so remarkable about the achievements of the students at these academies that would not have been achieved simply because of the student’s family and place in society?

Unfortunately for the vast population of students in the U.S. today, the regard that is felt for these schools and the desire to replicate their “results” is part of the problem with our current-day school “reforms.”

Books, of course, constituted one of the basic building blocks for any school, high or low. In that regard no one of his time made a greater contribution than the legendary


12. Morrison, Oxford History, 71; Four of these schools – Boston Latin (1635), Cambridge Latin (1642), Roxbury Latin (1645), and Hopkins Grammar School of New Haven (1660) – are still flourishing today.

Noah Webster (1758-1843). Destined to become known as the “Schoolmaster of the Republic,” Webster believed that as they grow, children pass through distinctive learning phases in which they master increasingly complex or abstract tasks with which they are not equipped to deal until at least the age of five, and even then, he believed that each student developed at his own rate. To help achieve the mastery of a distinctly American version of English, he provided a three-step set of learning volumes.

With this philosophy in mind, Webster introduced his famous "blue backed" Speller in 1783, which was by far the most common textbook for the next half-century. He believed students learned most readily when a complex problem was broken into its component parts so that each child could master one part before moving to the next. He therefore planned the Speller to start with the alphabet, then develop the different sounds of vowels and consonants, then syllables, then simple words, followed by more complex words, then complete sentences. This arrangement could be easily taught to students, and progressed by age. Quite contrary to the usual approach to education at the time, Webster's Speller was entirely secular. God was not mentioned and there were no

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15. Ornstein, Foundations, 137.

Biblical references. Based on Enlightenment philosophy, it utilized spelling exercises instead, to emphasize civic duty and morality, and sold tens of millions of copies nationwide. These textbooks were the precursor to our present-day classes on civics and social learning – so important to helping an individual develop a sense of a civil society and how they can be a part of it, and make an impact on it. Something that Webster clearly saw as being as important as learning English. Webster’s *Speller* was followed by his *Grammar* (1785) and then his *Dictionary* (1806) all of which made his name a synonym for language, literature, and learning in America.

The Quakers established schools in New York (then New Amsterdam) and Pennsylvania. Their Universalist view opened public schools to children of all religions and races. They also offered vocational and agricultural training, according to the needs of the individual students. Utilizing a lenient philosophy toward students, the Quakers rejected corporal punishment in favor of “gentle persuasion.” When the English took

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over the Dutch areas in 1664, they closed the Dutch language public schools, and did not establish new English public schools.\textsuperscript{20}

In 1785, soon-to-be President John Adams (1735-1826), of Massachusetts, advocated that “[t]he whole people must take upon themselves the education of the whole people and be willing to bear the expenses of it. There should not be a district of one mile square, without a school in it, not founded by a charitable individual, but maintained at the public expense of the people themselves.”\textsuperscript{21} The subsequent enactment of the Northwest Ordinance (1787) specified that “[r]eligion, morality, and knowledge, being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged.” The Ordinance established a central “sixteenth section” in each 600-square mile township as a public school district.\textsuperscript{22} Aside from this type of “general enablement,” the subsequent period of government under the Constitution left education to the states and localities for two reasons: first, it was as

\begin{footnotesize}
\begin{enumerate}
\item Orenstein, \textit{Foundations}, 132-134; and Urban, \textit{American Education}, 19-25.
\end{enumerate}
\end{footnotesize}
comprehended by the Tenth Amendment; and second, it was believed that educational need was best understood in the locale in which it took place.

Public “Education” was comprehended at the time as being “not an intellectual but a strictly practical concept…at every new industrial and commercial gateway to the fuller life.” It was during the Federalist Period that the initial swell of a wave of education began which, once crested, carried forward the initial industrialization of early America. But despite the oft-stated support for “free public education” in the early days of the Republic, there are historians today who view it as having been “hopelessly inefficient,” due largely to local “administrative indifference.” This view of the need for industrial quality efficiencies is an analysis of education that does not consider that learning, and especially individual, project-based learning can be messy. Another historian noted that “education on all levels continued to suffer from low salaries, poor equipment, primitive pedagogy, unmanageably large classes, and a short school term.” It’s interesting that these statements about the challenges facing public education, which

23. Orenstein, *Foundations*, 134. The endnote of the “Bill of Rights,” the Tenth Amendment (1791) was a concession to early “state rights” advocates, providing that “[t]he powers not delegated to the United States [the Federal Government] by the Constitution, nor prohibited to it by the States [Art. I § 10] are reserved to the States, respectively, or to the people.” Among those powers was that over local education.


we still read about today, were being voiced in the founding years of our nation and its early attempts at providing public education.

Americanization

Many presidents, from Jefferson onward have distinguished themselves as being “Education Presidents” and have passed legislation furthering access to public education. The first federal level department of education was initiated by President Andrew Jackson. However, it lasted only one year amidst much suspicion about the federal government trying to run what was deemed as a state’s responsibility. Webster’s publications were eventually replaced by the less secular *McGuffey Reader*, which was founded on the values of middle-class Protestantism, and engendered a learning form which “emphasized literacy, hard work, diligence, punctuality, patriotism, and civility.”

Horace Mann (1796–1859), a leading educational theorist, became Secretary of Education in Massachusetts in 1837. Mann worked to create a statewide system of professional teachers, based on the Prussian model of "common schools," which was based on the belief that everyone was entitled to the same content in education.

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early efforts focused primarily on elementary education and on preparing teachers to be professionals.\textsuperscript{31}

The common school movement quickly gained strength across the North, and were governed by locally elected school boards. By 1890, public high school enrollment was twice that of private academies.\textsuperscript{32} It was during the expansive Manifest Destiny Period that American education began to reach out more inclusively to female students.\textsuperscript{33} Ironically, in subsequent years, the task of teaching itself was deemed mostly “women’s work” and consequently, was underpaid and undervalued.\textsuperscript{34} To this day, teaching is not valued as highly as other professions for which the same, and in many cases less

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\textsuperscript{31} Davis, \textit{American Economic Growth}, 151-52; see also Bob Pepperman Taylor, \textit{Horace Mann’s Troubling Legacy: The Education of Democratic Citizens} (Lawrence: Univ. Press of Kansas, 2010).

\textsuperscript{32} Ornstein, \textit{Foundations}, 144.


education and training are required. As we will see in Chapter 5, unionization further hinders the professional standing of teachers.

Civil War Era

The South has historically lagged behind the rest of the nation in the formation of public schools. “Yankee” ideas about education were no more welcome in the south than those about politics or race relations.\textsuperscript{35} During the Reconstruction Era following the Civil War, the Northern men who led it had particularly progressive records in the area of bolstering public education for both races.\textsuperscript{36} Reconstruction legislatures in every Southern State provided for public, albeit segregated schools.\textsuperscript{37} The chief educational institution of Congressional Reconstruction was the establishment of the “Freedmen’s Bureau.” By 1870, there were more than 1,000 schools for freedmen in the South, and the federal government had spent $5 million on them.\textsuperscript{38} As is the case with many federal efforts in education (even today), once the topic of the education of freed slaves was no longer popular enough to use as a campaign slogan, it lost support, and eventually


\textsuperscript{36} Current, \textit{Reconstruction in Retrospect}, 137, 143-44, 237, 289 & 378-80.


funding. The Freedmen’s Bureau was allowed to lapse in 1872, despite the fact that toward the end of the Reconstruction period, 85% of the non-white population was still illiterate, while only 10% of the white population fell into that category.\textsuperscript{39}

Between 1870 and 1890, national expenditures for public education rose from $63 million to $245 million and the number of teachers increased from 128,000 to 340,000. Between 1870 and the end of the century, public school enrollment more than doubled to 15 million.\textsuperscript{40} Although in general education experienced a significant upgrade in quality during this period, dubbed the “Gilded Age” by Mark Twain, with a concomitant influence on industrial expansion itself in certain areas and social classes,\textsuperscript{41} the overall quality of public education scarcely improved. The influence of the industrialization that was happening in the United States on educational policy appeared from the very beginning. For the labor force, public schools began to emphasize only basic skills that would be needed to work in industry, looking for the select few who would manage the masses; while the more elite institutions trained future executives.\textsuperscript{42}

\textsuperscript{39} Davis, \textit{American Economic Growth}, 149.


The great influx of European immigrants during the Industrial Era created enormous language barriers to everyday life as well as formal education. After 1870 (the first year that data are available), almost 90% of the foreign-born population was illiterate in any language. During this period, the modern “school year” was reversed, with the average student, outside the South, attending school only three months of the year. As emergent and rudimentary as the American educational system was, however, the United States took pride in leading the world with the highest portion of the national population enrolled in school between 1820 and 1890. Of course, a distinction must be made between enrollment and actual attendance; an individual data point that was neither tracked nor valued.

The Progressive Era

Emanating from Wisconsin during the first decade of the 20th century, under the leadership of U.S. Senator Robert M. LaFollette (1855-1925) of that State, was the “Progressive Movement.” Progressives worked hard to reform and modernize schools at the local level. The era was notable for a dramatic expansion in the number of schools and students served, especially in the fast-growing metropolitan cities. The result was


44. Davis, American Economic Growth, 150.

45. Ibid., 148, 207.

46. Substantive works on the period are: Arthur Zilversmit, Changing Schools: Progressive Education in Theory and Practice (Chicago: Univ. of Chicago Press, 1993); Lewis L. Gould, America in
the rapid growth of the educated middle class, the members of which were the grass roots supporters of progressive measures. As a result of their increasing political influence, many states began passing compulsory schooling laws.47

The leading educational theorist of the era was John Dewey (1859–1952).48 A psychology professor at the University of Chicago at the turn of the century, Dewey was a proponent of "Progressive Education," seeing schools not only as places to gain academic knowledge, but also as a place to learn how to live. The purpose of education was not just the acquisition of a predetermined set of skills, but to develop the individual student's full potential and the ability to use those skills for the general good. Dewey saw education as instrumental in creating social change and reform, thus coining the term “instrumentalism,” which he combined with the concepts of pragmatism and logical positivism. That curriculum, he believed, should be adapted to the needs and capabilities of children and the learning process should be centered on the child’s own experience, rather than rote memorization. Dewey and the other progressive theorists, however, encountered a system of school administration that was already highly bureaucratic, and


consequently, was not receptive to new methods.\footnote{John J. McDermott, \textit{The Philosophy of John Dewey} (Chicago: The Univ. of Chicago Press, 1981).} Nevertheless, as one prominent historian noted, “Dewey left such a deep imprint on American education that in practice he can be said to have accomplished, almost single-handedly, one of the most significant cultural revolutions of this time.”\footnote{Arthur S. Link, \textit{American Epoch: A History of the United States Since the 1890’s} (New York: Alfred A. Knopf, 1967), 33.} What would Dewey say about today’s emphasis on student standardized test scores as a measure of student, teacher, and educational success? As we will see in Chapter 3, the most successful schools of our time have adopted the tenets of progressive education.

\textbf{Compulsory School Attendance, Office of Education and Teacher Unions}

By the beginning of the 20\textsuperscript{th} century, 34 states had compulsory schooling laws, only four of which were in the South. As a result, by 1910, 72 percent of American children attended school. In 1918, every state required children to complete elementary school. Although America’s entry into World War I in April 1917, may have dampened school attendance, still between 1910 and 1920, public school enrollment increased from 20 million to 24.1 million.\footnote{Link, \textit{American Epoch}, 34; and Urban and Waggoner, \textit{American Education}, 17-23; see also Carol S. Gruber, \textit{Mars and Minerva: World War I and the Uses of the Higher Learning in America} (Baton Rouge: Louisiana State Univ. Press, 1975).}
School accrediting agencies for primary and secondary education, such as the National Education Association, began to appear just before the war, as State Departments of Public Education and the U.S. Office of Education were becoming more centralized with the publication of literature to inform teachers and school administrators of new research and practices. These institutions resulted in significant changes in secondary school curricula and the preparation of students for citizenship and occupations. Some of these changes were influenced by progressive tenets of educating the individual, and by the beginning of the 1930s, many subjects that had never been taught before found their way into the public schools, including typing, home economics, music, Latin, algebra and geometry, geology and physics, and civics. However, the need to justify government spending on public education was not far behind, and the harbinger of standardized testing was introduced by experimentation with IQ tests.

By 1920, the average length of formal schooling of people 26-34 years old was 8.4 years. As State Departments of Education assumed more control of public school


systems, enrollment steadily increased over the ensuing decades. The post-war prosperity of the “Roaring Twenties” was reflected in a dramatic increase in public school expenditures, which climbed from $556 million to $1.6 billion. In 1923, the downward graph of declining illiteracy intersected and crossed the upward graph of increasing high school graduates at 21% of the white population. Progressive education has long contended that educating the individual results in more time spent in school and better individual results in the long term. Better individual results lead to better community, society, and even economic results, as pointed out by scholars who contend that 23% of the growth of the GNP from 1929 to 1957 can be attributed to the increase in quality and expansion of public high school education.

The Great Depression – and the Post-Depression Era

Education, like all other sectors of society, was not spared the immediate economic disaster of the Depression, following the calamitous stock market crash of October 1929. Although progressive education remained the dominant philosophy, at

55. Link, American Epoch, 292. This movement into the $1 billion range for public education occurred despite the fact that it was at the center of the “trial of the century” with the 1925 case of public schoolteacher John Thomas Scopes (1900-70) in Dayton, Tennessee over the issue of teaching scientific evolution in public schools. See Edward J. Larson, Summer for the Gods: The Scopes Trial and America’s Continuing Debate Over Science and Religion (New York: Basic Books, 2006). The ensuing controversy is presented in Jeffrey P. Moran, American Genesis: The Anti-Evolution Controversies From Scopes to Creation Science (New York: Oxford Univ. Press, 2012), which survives in various areas of the country today. The Scopes case became the subject matter for the later play “Inherit the Wind” by Jerome Lawrence and Robert Edwin Lee and the 1960 motion picture of the same name, starring Spencer Tracey and Frederick March, directed by Stanley Kramer.

56. Nugent, Modern America, 323.

57. Davis, American Economic Growth, 152; and Urban and Waggoner, American Education, 229-32.
least at the elementary and secondary levels, capital outlays for new public school buildings dropped by about 85%. A similar catastrophic impact occurred in the private school sector. As with the rest of society, public schools were required to do more with less, their enrollment maintaining at about 29.6 million 1930-40. By the latter year, most children between the ages of five and six and 73% of high school age children were enrolled. Thus, just as the Second World War was about to interrupt them, 50% of young adults had earned a high school diploma.

World War II – and the Post-War Baby Boom

World War II siphoned off massive numbers of both students and teachers from public education for a global war. The 1.25 million teachers on the public payroll in 1941 were reduced by two thirds by the end of the war. There were massive school closings and those that remained open were inadequately staffed, particularly in the South.

61. Davis, American Economic Growth, 149; and American Epoch, 653.
At the same time however, just as women entered the industrial work force in great numbers in order to support the war effort in their collective role as “Rosie the Riveter,” schoolhouse doors were also thrown open to them ever-wider throughout the war, thus reinforcing the historical tradition that teaching was really “women’s work” and consequently, because women were traditionally paid less than men, even when performing the same job, and even if doing a better job, teaching was under-valued and under-paid. As mentioned earlier, this trend of undervaluing the profession of teaching continues today.  

Unexpectedly called upon to preside over the end of World War II and the onset of the “Cold War” and its nascent “Baby Boom,” was Harry S Truman (1884-1972). Truman was a self-educated President, and a product of the local public school system. As early as 1948, President Truman sent a special message to Congress calling for additional support for education, with an emphasis on increased pay for teachers. He spent the surprising 1948 presidential campaign against Governor Thomas E. Dewey of New York – whom virtually everyone expected to win – shellacking the Republican

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64. Nugent, Modern America, 321.
65. Urban and Wagoner, American Education, 279-80; and Morris, America, 628-35.
66. David McCullough, Truman (New York: Simon & Schuster, 1992), and Harry S Truman, Memoirs: Year of Decisions (Garden City: Doubleday & Co., 1955). Note that Truman’s middle initial does not contain a period because, in a dispute over which grandfather to name him after, his family could not reach an agreement so they left it at “S” without any punctuation.
67. Ibid., 42-45, 48.
68. Ibid., 586, 629.
Party for its foot-dragging in the 80th Congress, particularly on education reform, and threatened to call a Special Session of Congress to address that issue, among others. By the end of the Truman Administration, the investment in public education paid dividends in historically unparalleled gains in income, standards of living, and housing.

With the onset of the “Baby Boom” following the war, between 1947 and 1955, the percentage of the total population ages 5-34 enrolled in public schools increased from 42.3% to 50.8%. By mid-century, public school enrollment was at an all-time high of 31.3 million and rapidly growing. Massive expansion of the educational plant was undertaken to accommodate this new infusion of students. Almost 66% of the males reaching the age of 18 graduated from high school between 1946 and 1955; the females, not yet having escaped from the highly popularized “feminine ideal” of marriage and homemaking, over personal education, did not yet graduate high school in those same numbers. Although a progressive approach to education was improving the lives and livelihoods of graduates, during this same time, annual teacher salaries, still low given the


70. McCullough, Truman, 915.


72. Link, American Epoch, 33, 654-55.

73. Davis, American Economic Growth, 151; Link, American Epoch, 654-55; and Nugent, Modern America, 290.
level of education and time commitment required, increased only from $1,441 in 1940 to $4,940 in 1959.\textsuperscript{74}

During the Eisenhower Administration (1957-61), new post-war times and conditions led to a “re-appraisal” of the Progressive Education approach.\textsuperscript{75} Some of the attacks came from the virulent anti-Communist movement led by such zealots as Senator Joseph McCarthy (1908-57) – who was, ironically, from Wisconsin, the birthplace of “Progressive Education” – whose overreaching tactics gave their name to an entire political era.\textsuperscript{76} Other, possibly more objective critics faulted the existing philosophy as “increasingly out of touch with the changes that had transformed American society since” the Great Depression.\textsuperscript{77} This perception was driven by the belief that education’s primary purpose was to create productive workers in a booming post-war economy. These concerns were promoted widely, and eventually became popular. Instead of supporting the progress made in Education in the United States over the past 60 years, the proponents backed education reform that would meet the “staggering need for individuals

\textsuperscript{74} Link, \textit{American Epoch}, 654. The latter figure is about $38,000 in today’s dollars per S. Moran Friedman, “The Inflation Calculator.” \url{http://www.westegg.com/inflation/infl.cgi} (accessed February 2, 2013).

\textsuperscript{75} Urban and Waggoner, \textit{American Education}, 44-50, 285.


with the advanced professional skills” that would supply industry with the workforce it demanded.  

Thus began the movement in public education in the United States, away from the progressive approach, of educating the individual, toward the approach of educating the masses to meet a more limited set of industrial needs.

Civil Rights Era

Amidst the movement to change the tenor of progressive education in the United States was a more positive and enduring change that was long overdue, and that came in 1956 with the decision of the U.S. Supreme Court in the Kansas case of Brown v. Board of Education. 

There, the Court unanimously struck down the historical public policy of putatively “separate but equal” school systems for black and white races. Such a policy, it held, was a violation of the Equal Protection Clause of the XIV Amendment because such systems – separating students simply because of their race (leaving aside the under-funding of schools for African-American children) was “inherently unequal in public education.”

Though a bold step for equality and education, the Court’s


80. This policy had been approved previously by the Supreme Court in the infamous case of Plessey v. Ferguson, 163 U.S. 537 (1896).


unfortunate use of the phrase “with all deliberate speed” order opened the door for subsequent decades of what became “massive resistance” in the southern states and locales to delay desegregation of the public schools. This resulted in a “white flight” from the public schools and the creation of “private academies” solely to allow white students to avoid attending schools with African-Americans. The result of this state-sanctioned segregation was a “massive setback” for public education in the South, where the effect was to restore “separate” school systems, one for the privileged, and one for the poor – black and white alike. The federal government continued fighting the battle of segregation with southern states for years to come, culminating in the 1963 University of Mississippi case in federal court involving the admission of James Meredith. And as we will see further on, the presence of the federal government in formulating public K-12


education policy is not ideal, its presence was essential to opening up public education, at all levels, to African Americans and other Americans of color in the South.

The Cold War, Sputnik, and the “Industrialization” of Education

In August 1957, the Soviet Union unexpectedly (to the United States) launched Sputnik, the first man-made satellite to successfully orbit the earth. This extraterrestrial event was a shock to the American educational psyche, particularly in the sciences. Rather than viewing this event as a momentous scientific achievement to be celebrated around the world, the reaction in the United States, at the federal government level, was to judge our science education as inadequate and to suggest that the US was drastically falling behind the Soviet Union in the sciences. Barely two months after the Soviet satellite had achieved orbit, the President sent Congress a special message on education, recommending a fivefold increase in programs approved by the National Science Foundation for furthering science education, and for accelerating the training of science teachers. The next year Congress passed the National Defense Education Act (NDEA), the first massive support of all levels of education by the federal government in the name of national security. In addition, President Eisenhower’s program provided


support to industries in the form of legislation that was enacted to grant states $60 million for vocational programs that trained students for industrial jobs. By 1958, enrollment in public schools had increased to 36.3 million, and expenditures rose to $14.2 billion. Given the scale of public education in the United States, it is not surprising that the effects of the narrowing of our national curriculum, and moving away from the successful progressive approach of educating the individual were not immediately apparent. However, by the mid-1960’s overall high school graduation rates began to decline, a trend that unfortunately continues today, and one that subsequent efforts at education “reform” have not remedied.

“Education” Presidents

During his presidency, John F. Kennedy continued to press hard to uphold federal desegregation laws. He also supported the belief that “education was essential to employment in a high-technology society.” During the presidency of Lyndon B. 


Johnson (1963-69), placed the entire power and prestige of his Presidency behind education “reform.” As part of his “War on Poverty,” Johnson succeeded in securing the passage of the Economic Opportunity Act 1964), which established the Head Start Program, providing federal funds for poor pre-school children, as well as the Job Corps which provided both academic and vocational training for older children. In sum, during Johnson’s Presidency, annual federal funds, just for education, increased from $2.3 billion to $10.8 billion.

The federal government acted responsibly to make public education equally available to all people regardless of creed or color. Indeed, the proportion of African-American students who completed high school rose from 38% in 1960 to 58% in 1970.

1965). Sorensen, Kennedy’s long-time speechwriter, does not even have an index listing for the term “education” in his 764-page book.


98. Ibid., 343.

99. Nugent, Modern America, 309; see also Stuart Buck, Acting White: The Ironic Legacy of Desegregation (New Haven: Yale Univ. Press, 2010); and Ron Christie, Acting White: The Curious History of a Racial Slur (New York: Thomas Dunne, 2010) for a discussion on how African-American students continued to excel in school during the ensuing decades, when an unexpected and disappointing phenomenon occurred – many who strove to achieve excellence in academics were accused by many of their peers as “acting white.”
These gains are more reasonably attributed to the changes brought about by the Civil Rights movement, than by “education reform.” Notwithstanding this detail, the focus of federal expenditures for education continued to align with an agenda of educating for the purpose of developing our industrial capabilities rather than for the sake of improving the education experience of the general population. With this increase in education spending, came the need to continually demonstrate the “outcomes” resulting from these national expenditures, especially in the face of overall declining high school graduation rates.

After Lyndon Johnson made a name for himself by increasing federal government expenditures on education, it seemed that every subsequent President has attempted to outdo him in becoming the “Education President.” The exception to this rule was President Ronald Regan, who supported abolishing the federal Department of Education altogether. Most notable among the education “reforms” was the one enacted as a bi-partisan effort by President George W. Bush (2000-2008) and the late Senator Edward Kennedy (D-MA) called the “No Child Left Behind Act” (NCLB). President Bush stated that he was “appalled by the results coming from our public schools” which showed that American students “routinely trailed their peers in other countries” in the


“key subjects” of math and science.103 The NCLB was designed to increase “accountability,” at a national level, for teachers and schools. The statute requires all public schools receiving federal funding through the Elementary and Secondary Education Act of 1965, to administer annual state-wide standardized tests and to report the results in annual yearly progress reports (AYPs). For a school to continue receiving federal funds, each year’s scores must be better than those of the previous year. If the school repeatedly has poor scores, it is required to take steps to improve its educational processes, depending on how many years it “falls behind.” In defense of his law’s imposition of annual standardized testing in order for schools to receive the additional federal funding, President Bush was famously quoted as saying “Rarely is the question asked: Is our children learning?”

The NCLB statute has fared better in theory than in practice. A major criticism is that, under the pressure to attain satisfactory test scores, teachers are “coaching” students for the AYPs, rather than making a genuine effort to provide them with a quality education in general. This criticism is not aimed at the teachers, who are doing what is prescribed. Rather, the criticism is of the Act that judges students, teachers, and schools based on student test results, and therefore takes precious time away from educational activities other than test preparation. This is a common fault found with standardized

103. Ibid., 273-74.
tests on which many students of average or above average intelligence are notoriously unable to score highly. And the results are more devastating for disadvantaged, foreign-born, and disabled students. A more probing criticism is that it is unfair to hold teachers and schools responsible for absolute test improvement. Another is that it discounts, and therefore discourages, participation in coursework in arts, history, civics, and other electives, and completely disregards the individual interests and capabilities of the students. Clearly, as with all of its predecessors, the NCLB arbitrarily focuses too much on test results and not enough on the methodology of genuine learning. There is hope, however, as the future of NCLB and standardized testing in general remains uncertain.

104. The issue of standardized testing is discussed more fully in Chapter 4 of this thesis.


107. See Jesse H. Rhodes, An Education in Politics: The Origins and Evolution of No Child Left Behind (Cornell Univ. Press; 2012).
Conclusions

Review of public education in the United States throughout its history is, ultimately, a history of the ebb and flow of public funds for education, starting with “pauper” and “free” schools of the Colonial Period, expanding westward with the Northwest Ordinance in 1787, proceeding through the “common” schools era, finally admitting women, and broadening to include African Americans during the Reconstruction Period. During the Gilded Age, more federal funds than ever before were made available for educational purposes, culminating in the Progressive Era at the turn of the 20th century. The benefit to education during the prosperity of the 1920s was eclipsed by World War I; and when it was revived with the compelling needs of World War II, the focus of education seemed to change from a general need for an educated population, to a need to educate people to fill the jobs of industry: the perceived life-and-death struggle of the Cold War with the Soviet Union resulted in the greatest infusion of federal funds in history, driven by the perceived need for more science education. Almost Every President since Truman has advanced his own version of “education reform” – and with each change coming from the national level, we have seen a more rigid definition of educational success. Although accompanied by ostensible “standards” the most recent attempt to “modernize oak” with the NCLB Act remains problematic. Schools continue to struggle amidst a maze of growing bureaucratic complexity in which they are asked to resolve problems – caused by this bureaucracy. Finally, the focus on educating for industry continues today as we continue narrowing our national educational priorities,
creating more rigid definitions of success, and causing more children to “fail” to meet the rigid standards being set for subjects like math and science.

For well over the first half of the history of the United States, the competing philosophies of education were whether children should be taught in order to create a common culture and to unite diverse groups into a homogeneous nation, or to derive strength from creative diversity among differing cultural values. The success of public education in the United States during the Progressive Era demonstrated that the two philosophies could meet on common ground and sustain a common culture of creative diversity.

As we will see in the following chapters, effective education can be a messy process and is not conducive to the “black and white” scenarios imposed by standardized testing. In the words of Deborah Meier, an unabashed social democrat and senior scholar at NYU’s Steinhardt School, who spent 45 years working as an educator in K-12th grade public schools in New York City (East Harlem) and Boston (Roxbury) first as a parent, then as a teacher, and finally as a principal of several public schools:

My ideas on teaching and learning focus on small “d” democratic values, by which I mean a respect for diversity, a respect for the potential of each individual person, a respect for opposing points of view, and a respect for considerable intellectual vigor. My concern is with how students become critical thinkers and problem solvers, which is what a democratic society needs. If we believe that our schools are failing us and that children can’t learn the basic skills, then what we are saying is that democracy is a utopian ideal, an impossibility, and I just don’t
believe that. There is nothing in the nature of being human that makes democracy an impossibility.\textsuperscript{108}

By returning the United States system of public education to its more successful progressive approach, we can help to create what Meier calls “a better informed, better equipped, and more engaged person who can play a greater part in her community”\textsuperscript{109} and indeed in our American society.


\textsuperscript{109} Ibid.
CHAPTER 2

EDUCATING THE INDIVIDUAL – IN LARGE NUMBERS

Darwin confessed that his brain was not constructed for much thinking and wisely gave up the attempt to use it for pursuance of his special subjects for more than an hour or so at a time. Had he not done so, much of his invaluable work might never have seen the light. If a man of Darwin’s gigantic intellect found it impossible to concentrate his attention for any lengthy period without fatigue, surely allowance should be made for children who doubtless suffer as he did. Yet bright intelligent children are often expected to concentrate their attention for many hours at a time, and when they fail are regarded as simply lazy.

-- Leonard G. Guthrie, Functional Nervous Disorders in Childhood (1909)

The Importance of Recognizing Individual Learning Styles

As early as Aristotle, good teachers have known that all students have the capacity to learn, and that no two of them will do so in the same way.1 This chapter addresses the importance of individual learning styles, some methods and tools for indentifying them, and how teaching methods can be adapted to foster each individual student’s creativity and lifelong love of learning.

The term “learning style” refers to the ways in which a student learns.2 Some students are visual learners, while others are more verbal; some will learn best by experience, and others will want to first consider all of the possibilities before trying

1. See Aristotle, Poetics (334 BC), Chapter IX, line 1, “each child possesses individual talents and skills.”

something for the first time. Some students think first of the broad brush strokes and big
picture, and others think first of the details, and are most “at home in the weeds.” Some
students are drawn to abstract concepts, while others are much more comfortable in the
concrete. A learning style is a particular set of these tendencies that impacts how a
student creates his or her own knowledge.  

In his book, A Mind at a Time, Dr. Mel Levine refers to learning styles as
“different kinds of minds.” He believes that understanding these in the context of the
classroom is critical: “the growth of our society and the progress of the world are
dependent on our commitment to fostering in our children, and among ourselves, the
coexistence and mutual respect of these many different kinds of minds.” Yet, this vital
distinction continues to be ignored despite the lessons of history and scientific evidence
that demonstrate that students, indeed humans in general, possess different learning
styles. Our national education policy, as addressed in Chapter 1, continues to hold that
standardized test scores are the only way to demonstrate academic success, even though

3. J.W. Keefe, Learning Style: An Overview. NASSP's Student Learning Styles: Diagnosing and


5. Ibid.

6. See M. A. Mastropieri and T. E. Scruggs, Teaching Students Ways to Remember (Cambridge,
MA: Brookline Books, 1999); L. J. Meltzer and B. N. Roditi, Strategies for Success: Classroom Teaching
Techniques for Students with Learning Differences (Austin, TX: PRO-ED, 1996); and Mel Levine, Keeping
they do not take into account any of these unique individual characteristics, and their use as a measurement of success has created an education system in which many children, teachers, and schools are “failing.”

In this environment, where standardized metrics are driving public education policy and funding and the definition of educational success, teachers are given little flexibility to teach to the needs of their students. The only way for a student’s individual learning style to be met in the conventional classroom is to have it “diagnosed and treated as a learning disability.”

Thus, in order to be diagnosed with a learning disability, the student must first fail in one way or another, academically or behaviorally, to show the need for special accommodations in order to “succeed!” In this environment, students who do not learn best in the conventional classroom model – many of them bright, creative individuals – must suffer the demoralizing and sometimes humiliating effects of failing, and/or being separated from their classmates in order to learn.

Learning Specialist Priscilla Vail emphasizes the impact of this approach toward addressing individual learning styles when she points out that these students, often very gifted, are

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8. As seen further on in this Chapter, this is true despite the research and practice in many progressive classrooms of addressing the needs of many different types of learners – at once and in the same place.
also typically more vulnerable: “A look at real children shows that intellectual strength
confers no immunity to emotional pain.”

The increased use of standardized test score metrics to determine education
success has been accompanied by a concomitant increase in diagnoses of learning
disabilities. Is this coincidence or corollary? Consider that as the national definition of
success in public high school continues to narrow, the simultaneous diagnoses of learning
disabilities continues to expand. According to the Centers for Disease Control and
Prevention, the reported prevalence of Attention-Deficit/Hyperactivity Disorder
(AD/HD) in U.S. children between the ages of 3 and 17 years increased by more than
17% between 1997 and 2008, the same period during which standardized testing has
become ubiquitous in American K-12 public education. The long-term implications to
our democratic society of “diagnosing” learning differences as medical conditions to be
treated by the standard tools of our medical (psychiatric) profession, including:
pharmaceuticals, many different types of therapy, and institutionalization, are likely to be
both dire and dramatic.

The definitive guide for classifying “learning disabilities,” among other
“disorders” is the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV –


1997–2008,” Pediatrics 127, no. 6 (June 2, 2011): 201; see also, Centers for Disease Control and
version V is due out in 2013). This 886-page corpus is produced, marketed, and used by the American Psychiatric Association to diagnose learning disabilities. The largest single section in the DSM-IV is that entitled: “Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence.” Within this section, the largest sub-section, “Learning Disorders,” refers to problems that children have in school. Interestingly, although not coincidentally, this section was previously entitled “Academic Skills Disorders,” providing a view into its beginnings: the classroom. As our education system has become more focused on a narrowing definition of educational success, more students are failing to meet that definition of a successful student. This has a cascading negative impact on teachers, schools, and communities. Schools and parents (who have little control over the testing requirements mandated at the state and federal levels) have instead turned to the medical profession to diagnose learning disorders in order to get help for their students when preparing for and taking these tests. There are indeed real and challenging learning disorders, such as Dyslexia (difficulty with letters), that require a diagnosis and special approaches to help the Dyslexic student learn and succeed. This is not the issue. Rather, what have historically been understood as individual learning


12. Ibid, 37.

13. Ibid, 46.

14. Ibid.
differences are now being diagnosed as learning disorders and are being treated with 
medication, therapy, and expensive special education services.

In a criticism of the prevalence of learning disorders being diagnosed in the 
United States, the World Health Organization (WHO) states that the diagnosis of AD/HD 
can represent “inadequacies in the educational system rather than individual 
psychopathology.” 15 The WHO has publicly criticized the use of the DSM-IV as the 
definitive diagnostic tool for defining learning disabilities too broadly. It believes that 
use of the DSM-IV in evaluating children experiencing difficulty in school is one of the 
primary reasons the United States has a much higher rate of AD/HD diagnoses than any 
other country. They contend that the DSM-IV’s expansion of definitions of learning 
disabilities has followed complaints of students, parents, teachers, and school 
administrators as students have struggled in school. Rather than looking at the system of 
education as a causative factor, the American Psychiatric Association simply continues to 
expand the definition of learning disabilities in the DSM-IV. For example, a student 
struggling to learn math can have a “Mathematics Disorder” that is defined much more 
broadly than Dyscalculia (difficulty with numbers, rather than letters), and is 
characterized by an inability to keep up with the math regimen presented in his school. 
Likewise, a student failing to learn to read can have a “Reading Disorder” that is defined

15. World Health Organization, Mental health of children and adolescents, EUR/04/5047810/B14 
(accessed March 28, 2013)
much more broadly than Dyslexia, and is characterized as a failure to learn to read at the rate expected by her school.\textsuperscript{16}

An eye-opening data point for how learning differences are being treated medically is the increased rate at which Americans are medicating students so that they can experience success at school, the medication of choice being Methylphenidate, also known as Ritalin.\textsuperscript{17} The United States consumes 85\% of all Methylphenidate produced; the remaining 15\% is spread across many other countries.\textsuperscript{18} The New York Times recently reported than nearly 20\% of all high school boys, 10\% of high school girls and 11\% of all school-aged children have been diagnosed with AD/HD, and more than two thirds of these students are treated with medication, Ritalin being the drug of choice.\textsuperscript{19}
The following chart produced by the United States Drug Enforcement Agency, best illustrates the dramatic rise in the United States’ production of Methylphenidate (Ritalin), 85% of which is consumed in this country.\textsuperscript{20}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{U.S. Annual Production Quota (Kilograms)}
\end{figure}

The WHO produces its own diagnostic manual, ICD-10,\textsuperscript{21} which is used in most countries other than the U.S. A report by the British Psychological Society urged physicians and psychiatrists not to follow the United States example of applying medical labels to, and prescribing medication for such a wide variety of attention-related

\textsuperscript{20} The United States Drug Enforcement Agency regulates the production of Methylphenidate because it is a narcotic that is known to be abused and used illegally.

Students diagnosed with AD/HD, typically characterized as being very bright, cannot seem to consistently focus in the confines of today’s typical classroom. These students do not perform well on the lengthy standardized tests that they are required to take to demonstrate their facility with the curriculum. Instead, the AD/HD student feels the need to be in motion – whether moving his feet or fidgeting with something manually. Often, this student is gifted, whether in history, music, sports, or something else, and prefers a great deal of hands-on activities such as creating art, science projects, planting gardens, and building things.

It is not just the fidgety students with short attention spans that the DSM-IV categorizes as having a learning disorder. On the other end of the learning difference spectrum is “Asperger’s Disorder,” which describes a student who is often referred to as the “little professor.” Such a student possesses the ability to focus on a subject or task to the complete exclusion of all else. The student is an “expert” and can be relied upon to absorb and process a tremendous amount of information regarding the subject of interest. The problem is that she is a child, and, in the words of Dr. Mel Levine, is expected to be a Jack-of-all-trades – good at all subjects being taught. In our society and system of

education, only adults are allowed to be experts. An Asperger’s student is too gifted to fit into today’s typical classroom.

These two “disorders” describe bright, creative children who have learning differences that are incompatible with today’s conventional classroom environment. If the learning styles of these students were being met, they would experience great academic success, not to mention the contributions that they would bring to their classrooms. However, only those children who fall into the narrowing “sweet spot” of today’s educational environment are capable of experiencing academic success. Perhaps the most significant evidence that learning styles are being diagnosed as disorders in order to explain why these students are not succeeding in school is a study led by Dr. Holly White at the University of Memphis. Dr. White determined that in every single area of college study, from engineering to drama, students who had been diagnosed with AD/HD answered the most difficult creative questions and had the highest levels of creative achievement in the form of prizes at juried art shows, science fairs, and similar endeavors.23 When developing our education policies, doesn’t it make more sense to support a classroom learning experience that respects and addresses all individuals and their learning styles and that benefits these students as well as those that represent the average student?

The intellectual and emotional costs to students, teachers and schools of not teaching to individual learning styles are significant, but are not the only ones. There is a growing economic cost to our current approach to public education. The financial burden of accepting our current approach to learning style differences in the classroom, and turning learning styles into medical disabilities can only be estimated. This burden is borne by the families of students – when they can pay – insurance companies in the rare cases where these services are covered, as well as taxpayers when neither the individual nor the insurance company can or will bear the cost because the public school system is required to provide these services. Private firms providing special education services have flourished in this environment;\footnote{Stephanie Simon, “Private firms eyeing profits from U.S. public schools,” \textit{Reuters}, August 2, 2012. 389 billion dollars of private venture capital investment was poured into the K-12 for profit education industry in 2012, just a fraction of the value of this market as reported by Reuters.} not to mention the businesses that create and administer the tests, the psychiatric professionals involved with diagnosing learning differences, and the pharmaceutical companies providing the drugs used to medicate students in order to help them perform in the average classroom.

A recent article published by Reuters featured a meeting of U.S. venture capitalists looking at the business opportunities in the area of special education services. It begins with a consultant, Rob Lytle, a partner with the Boston-based Parthenon Group, telling the audience:

Think about the upcoming rollout of new national academic standards for public education.
schools...If they're as rigorous as advertised, a huge number of schools will suddenly look really bad, their students testing way behind in reading and math. They'll want help, quick. And private, for-profit vendors selling lesson plans, educational software and student assessments will be right there to provide it.²⁵

Imagine the return on investment if this group of venture capitalists took the $389 billion dollars of private venture capital investment that was poured into the K-12 for profit education industry in 2012, and instead used it, along with their considerable political clout, to help make public education more inclusive and progressive!²⁶

In the same report, longtime educator Diane Ravitch argues as follows:

Schools have, in effect, been set up by a bipartisan education reform movement that places an enormous emphasis on standardized test scores, labels poor performers as "failing" schools and relentlessly pushes local districts to transform low-ranked schools by firing the staff and turning the building over to private management.

President Barack Obama and both Democratic and Republican policymakers in the states have embraced those principles. Local school districts from Memphis to Philadelphia to Dallas, meanwhile, have hired private consultants to advise them on improving education; the strategists typically call for a broader role for private companies in public schools. This is a new frontier. The private equity guys and the hedge fund guys are circling public education.²⁷

Simply put, standardized testing as a measure of educational success is ruining public education in the United States. It narrows the education experience so that many students are required to get diagnosed with learning disabilities, and medicate, in order to perform

²⁵. Ibid.
²⁶. Ibid.
²⁷. Ibid.
In the typical public school classroom. The result of our system of testing, special services, diagnosing, separating, and medicating, creates large cost inefficiencies that then become the target of the “corporate take-over” factions. As Dr. Ravitch put it, “I look around the world and I don't see any country doing this but us. Why is that?”

In this environment, the importance of embracing, understanding, and reaching individual students, indeed teaching to individual learning styles, is at the core of what needs to be done to improve our system of public education in the United States. Awareness of an individual student’s learning style can help a teacher meet or reach a student, whether conventionally or creatively. It can also help the teacher see and hear the student in new ways. A learning style does not preclude a person from being good at one subject or another (i.e., it does not mean that there are subjects that are off-limits to certain types of learners). It also does not determine whether someone is creative.

Good teachers will help students take advantage of their strengths and abilities in order to access and even master tasks or subjects that might fall well outside their comfort range. Providing students with multiple ways to learn has been shown to improve student learning. This is why progressive educator, Deborah Meier, among many others,

28. Ibid.

29. Lehrer, Imagine, 52.

believes that being able to understand students’ individual learning styles is at the heart of why “schooling is so difficult to do well.”

**Tools for Identifying Individual Learning Styles**

While an understanding that individuals may possess different learning styles has been around since the ancients, it was not until the early 1970s that the formal process of assessing the learning styles of students began in earnest. That process, however, has led to the development of hundreds of assessment frameworks and instruments. The Center for Applications of Psychological Type database lists at least 300 publications relating students’ learning styles to their academic performance and attitudes. Long-time educator Deborah Meier believes that in a progressive education environment, the most important tool for identifying the individual learning styles of the students in a class is the close observation of their experienced and intuitive teachers. However, even the


best teachers can use a framework, or formal training to help improve observation and communication skills.

This section identifies two very different tools/frameworks that have been used successfully by experienced teachers to identify students’ learning styles and preferences: 1) The Prospect Descriptive Review Process (Descriptive Review Process); and 2) The Myers-Briggs Type Indicator (MBTI). These approaches represent two very different ways of discovering students’ learning styles and preferences. The Descriptive Review Process is a method that has been successful in small classrooms, where the teacher is afforded the time and space to observe and document a student’s learning preferences and styles over time; and the MBTI process can be used for any size classes, including large classroom settings where the teacher is not able to engage one-on-one with individual students as much as is required by the Descriptive Review Process. In both cases, the tools provide a framework that can help reveal to the teacher the student’s individual needs, making it easier for the teacher to make adjustments to help all of her students succeed.

**Descriptive Review Process**

Deborah Meier says that “a good teacher does not need any ‘devices’ to analyze or ‘diagnose’ student learning differences.” Rather, she believes that these good teachers will “recognize a pattern of behavior or thinking and delve into it as a more general
phenomenon, such as: Why do so many X’s think Y, while some others think Z?”\footnote{35}

However, while at the helm of the Central Park East School (CPE) in East Harlem, she introduced the Descriptive Review Process.\footnote{36} Patricia Carini, the primary author of the Descriptive Review Process, was brought in to work with the CPE teachers to guide them through the process of “making students visible to teachers without prejudgment.”\footnote{37}

Carini writes that “a teacher who has the student’s best interest in mind is always available to observe something about her students in an effort to understand how she can best help them learn. She understands that the children are always learning, and that her job is to find a way to bring them all into the process of understanding what is being taught, whether in the classroom or otherwise.”\footnote{38}

The Descriptive Review Process is unlike any other education assessment tool or framework that has been published. The process came out of the Prospect School, founded in 1965 in Bennington, Vermont, by Patricia Carini, Louis Carini, Marian

\footnote{35} Deborah Meier, interview by author, New York, March 3, 2013.


\footnote{37} Ibid.; See also, Patricia F. Carini, Starting Strong: A Different Look at Children, Schools, and Standards (New York: Columbia University, Teachers College Press, 2001); Patricia F. Carini and Margaret Himley, eds. From Another Angle: Children’s Strengths and School Standards: The Prospect Center’s Descriptive Review of the Child (New York: Columbia University, Teachers College Press, 2000); and Patricia F. Carini, et al., Jenny’s Story: Taking the Long View of the Child (New York: Columbia University, Teachers College Press, 2010).

\footnote{38} Deborah Meier, interview by author, New York, March 3, 2013; See also, Dr. Sharon Feiman-Nemser, “Beginning to Develop a Professional Identity and Inquiry Stance,” Foundational Skills and Dispositions in Teaching, (Waltham, Massachusetts: Brandeis University, 2008).
Stroud, and Joan Blake. All had school-aged children and were enthusiastic followers of the progressive educator, and Vermont native, John Dewey. Stroud was a teacher from the United Kingdom skilled in teaching according to progressive, Dewey ways. Patricia Carini had an advanced degree in psychology, and was a particularly gifted at observation and writing. Louis Carini was a professor at Bennington College, and a scholar of language and perception. Joan Blake was a psychologist familiar with modes of testing children’s skills. The Prospect School Philosophy, published in 1974, was closely aligned with the Vermont Design for Education, published six years earlier by the Vermont State Department of Education. Like the Vermont Design for Education, the Prospect School Philosophy emphasized “a commitment to the person, to flexibility of practice, to individual learning rates and styles, and to the evolution of curriculum as well as a commitment to the formulation of a philosophic educational outlook at the community level.”

Ms. Carini described the Descriptive Review Process as follows:


40. Ibid.


A collaborative effort that brings teachers and parents together to share their knowledge of the child. The student’s primary teacher, or the parent, or both, make a presentation to the other teachers, administrators, and anyone else who knows or is in contact with the student. Everyone pulls their thoughts together to share what they have noticed, and to explore ways to expand the child’s interests.

A very useful exercise is to focus on a student and begin to reflect; then, write down what you know. Use these five headings. Do one, let a little time go by, then, do another.

1. Physical Presence and Gesture (how a student enters a room, her level of energy, the rhythm of her voice, her body attitude).
2. Disposition and Temperament (a student's general tenor, what the student cares for deeply).
3. Connections With Other People.
4. Strong Preferences and Interests (authors, books, art, vocations, hobbies, and so on).
5. Modes of Thinking and Learning.

This is all done in a collaborative fashion. The Descriptive Review Process does not describe behavior, e.g., the student moved six times between the two centers. Rather, it develops a balanced picture of the student using language that is nonjudgmental. Our last question in this process is always “Do we think we respected the student and the family and if we did, how did we reflect it in our course/classroom/program/school?”

Ms. Carini goes on to describe the importance of taking the time to let the process unfold, as follows:

Describing I pause, and pausing, attend. Describing requires that I stand back and consider. Describing requires that I not rush to judgment or conclude before I have looked. Describing makes room for something to be fully present. Describing is slow, particular work. I have to set aside familiar categories for classifying or generalizing. I have to stay with the subject of my attention. I have to give it time to speak, to show itself.

43. Carini, Starting Strong, 7-10.
44. Ibid, 10.
Dr. Carol Rodgers, Associate Professor of Educational Theory & Practice at the State University of New York at Albany, describes the Descriptive Review Process, as she learned it first hand from Patricia Carini, as “process and not protocol, meaning that there was no one right or complete way of teaching or of seeing the student or the world, and, therefore, there was always room for improvement in the descriptive review process.”45 The results of the process may seem nebulous to those who are looking for a neat system, including a rubric or metrics. Dr. Rogers goes on to say that “any one description of a student or a student’s work would never be considered a definitive document that had in any way captured the whole of the person.”46 Ms. Carini describes this concept as follows:

To describe teaches me that the subject of my attention always exceeds what I can see. I learn from describing a painting or a rock or a student or a river that the world is always larger than my conceptualization of it. I learn that when I see a lot, I am still seeing only a little and partially. I learn that when others join in, the description is always fuller than what I saw alone.47

Like most progressive educators, Patricia Carini understands that learning is in no way a neat and orderly process. Regarding assessment in general, she says that parents


should trust their understanding of their children, and that teachers “know more than they think they know [about their students’ needs and preferences]…and should trust themselves. The Descriptive Process takes away the worry and fretting and allows a close look at and description of some very interesting and unique people.”

It seeks to create within the teacher “a reflective, inquiring orientation toward the world.”

Dr. Margaret Himley, Associate Provost for International Education and Engagement at Syracuse University said of Pat Carini’s Descriptive Process, “The work, based on a commitment to human capacity…makes the bold proposition that it is only by attending with care to one child that the democratic goal of educational equality for all children can be achieved.”

Using the Descriptive Review Process in a large public school setting may seem impractical. However, Deborah Meier did just that while at the helm of Central Park East School in the East Harlem neighborhood in New York City. The process is still being used there today. The benefit to students of having the attention, involvement, and support of their teacher, school, and family in meeting their individual learning needs is measurable – but not using a standardized test. As is detailed in Chapter 3, a far more

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significant outcome is students being engaged in school and community, and developing the roots of a lifelong love of learning.

**Myers-Briggs Type Indicator**

A different approach to getting at variations in individual learning styles is the Myers Briggs Type Indicator (MBTI). Based on the personality types first developed by Carl Jung in the early 1920’s, the MBTI, as a personality preference and learning style assessment tool, was first published in 1962 by Katherine Briggs, and her daughter Isabel Briggs Myers, who were students of Jung’s work, and who were interested in classifying people’s observable behavior. Like the Descriptive Review Process, the origins of the MBTI are in observation and documentation of behaviors and preferences.

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However, Myers and Briggs, neither a psychologist, set out to develop a way to measure and categorize the differences between people according to Jung’s theory of personality types.\textsuperscript{54} Jung proposed the existence of two different pairs of cognitive functions in each person: 1) The "rational" (judging) functions: thinking and feeling; and 2) The "irrational" (perceiving) functions: sensing and intuition. Jung also believed that for every person, each of the functions is expressed primarily in either an introverted or extraverted way (or form).\textsuperscript{55} Like Jung’s model, the MBTI regards psychological preferences as similar to left or right handedness: individuals are either born with, or develop, certain preferred ways of perceiving and making decisions, and it uses the same four sets of preferences as follows:\textsuperscript{56}

1. **Energizing** - How a person is energized or re-energized. Preferences are:
   a) *Extraversion* (E) - Preference for getting one’s energy from the outside world, other people, activities or things that one does.
   b) *Introversion* (I) - Preference for getting one’s energy from one's own ideas, thoughts, emotions, or impressions.
2. **Attending** - What a person pays attention to:
   a) *Sensing* (S) - Preference for using the senses to notice what is real.
   b) *Intuition* (N) - Preference for using the imagination to envision what is possible - to look beyond the five senses. Jung calls this "unconscious perceiving".
3. **Deciding** - How a person decides:

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\textsuperscript{55} Isabel Briggs Myers with Peter B. Myers, \textit{Gifts Differing: Understanding Personality Type} (Mountain View, CA: Davies-Black Publishing, 1995).

\textsuperscript{56} See Hans J. Eysenck, \textit{Genius: The Natural History of Creativity} (Cambridge, UK: Cambridge Univ. Press, 1995), 179. Jung also believed that for each set of preferences, a person had a conscious and an unconscious preference. Because it was not feasible to question people based on their unconscious preferences, this aspect of Jung’s type theory is not addressed in the MBTI.
a) *Thinking (T)* - Preference for organizing and structuring information to decide in a logical, objective way.

b) *Feeling (F)* - Preference for organizing and structuring information to decide in a personal, value-oriented way.

4. *Living* - Life style a person prefers:
   a) *Judgment (J)* - Preference for living a planned and organized life.
   b) *Perception (P)* - Preference for living a spontaneous and flexible life.

Combining these four sets of preferences generates the 16 different learning style preferences identified by the MBTI and described in the table below, produced by Isabel Briggs Meyers and Mary McCaulley, and used in a Master Teaching courses at Georgia State University and the State University of New York.57

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CHARACTERISTICS OF EACH OF THE 16 MBTI LEARNING STYLES

<table>
<thead>
<tr>
<th>Sensing Types</th>
<th>Intuitive Types</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introverts</strong></td>
<td><strong>ISTJ</strong> Serious, quiet, earn success by concentration and thoroughness. Practical, orderly, matter-of-fact, logical, realistic, dependable. See to it that everything is well organized. Take responsibility. Make up their minds as to what should be accomplished and work toward is steadily, regardless of protests or distractions.</td>
</tr>
<tr>
<td><strong>ISTP</strong> Cool onlookers. Quiet, reserved, observing and analyzing life with detached curiosity and unexpected flashes of original humor. Usually interested in cause and effect-how and why mechanical things work, and in organizing facts use logical principles.</td>
<td></td>
</tr>
<tr>
<td><strong>ISFJ</strong> Quiet friendly, responsible, and conscientious. Work devotedly to meet their obligations. Lend stability to any project or group. Thorough, painstaking, accurate. Their interests are usually not technical. Can be patient with necessary details. Loyal, considerate, perceptive, concerned with how other people feel.</td>
<td></td>
</tr>
<tr>
<td><strong>ISFP</strong> Retiring, quiet, sensitive, kind, and modest about their abilities. Shun disagreements; do not force their opinions or values on others. Usually do not care to lead but are often loyal followers. Often relaxed about getting things done, because they enjoy the moment and do not want to spoil it by undue haste or exertion.</td>
<td></td>
</tr>
<tr>
<td><strong>INFJ</strong> Succeed by perseverance, originality, and desire to do whatever is needed or wanted. Put their best efforts into their work. Quietly forceful, conscientious, concerned for others. Respected for their firm principles. Likely to be honored and followed for their clear convictions as to how best to serve the common good.</td>
<td></td>
</tr>
<tr>
<td><strong>INTJ</strong> Usually have original minds and great drive for their own ideas and purposes. In fields that appeal to them, they have a fine power to organize a job and carry it out with or without help. Skeptical, critical, independent determined, sometimes stubborn. Must learn to yield less important points in order to win the most important.</td>
<td></td>
</tr>
<tr>
<td><strong>INTP</strong> Quiet and reserved. Especially enjoy theoretical or scientific pursuits. Like solving problems with logic and analysis. Usually interested mainly ideas, with little liking for parties or small talk. Tend to have sharply defined interests. Need careers where some strong interests can be used and useful.</td>
<td></td>
</tr>
</tbody>
</table>
**CHARACTERISTICS OF EACH OF THE 16 MBTI LEARNING STYLES**


<table>
<thead>
<tr>
<th>Extroverts</th>
<th>Sensing Types</th>
<th>Intuitive Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESTP</td>
<td>Good at on the spot problem solving. Do not worry-enjoy whatever comes along. Tend to like mechanical things and sports, with friends on the side. Adaptable, tolerant, generally conservative in values. Dislike long explanations. Are best with real things that can be worked, handled, taken apart, or put together.</td>
<td>ESFP</td>
</tr>
<tr>
<td>ESTJ</td>
<td>Practical, realistic, matter of fact with a natural head for business and mechanics. Not interested in subjects they see no use for, but can apply themselves when necessary. Like to organize and run activities. May be good administrators, especially if they remember to consider others’ feelings and points of view.</td>
<td>ESFJ</td>
</tr>
<tr>
<td>ENTJ</td>
<td>Hearty, frank, decisive leaders in activities. Usually good in anything that requires reasoning and intelligent talk, such as public speaking. Are usually well informed and enjoy adding to their fund of knowledge. May sometimes appear more positive and confident than their experience in the area warrants.</td>
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</tbody>
</table>

MBTI learning style preferences can be ascertained by having students answer a series of questions on a written questionnaire, having the teacher or a counselor evaluate
the answers, and discussing the outcome with the student for confirmation. Because the
MBTI is also helpful in identifying the communication preferences of the teacher, he may
also want to take the assessment. The MBTI assessment tool and review process can
benefit both teacher and student by bringing the details of the student’s learning style
preferences and the teacher’s communication style preferences to each other’s attention.
Many students and teachers will find the process fun and interesting as it helps build a
stronger student-teacher connection, so important to the learning process. As the
following chapter will demonstrate, facilitating these bonds between students and
teachers, and other caring adults in the school environment, is critical to educational
success. Therefore, whether the teacher and students undergo the MBTI assessment, or
any other assessment, having an understanding of the range of different learning styles,
and developing lesson plans that provide an opportunity to address as many of these as
possible, will help reach as many students as possible.

Critics point out that having lessons presented to students in the way with which
they are most comfortable, is not the best educational experience. Learning how to take

58. I. Myers and McCaulley, Manual; Miller, "The Magical Number Seven", 81-97; Ausubel,
Educational Psychology, and Benjamin Bloom, et al., Taxonomy.

59. See, e.g., J. Lee Hunsley, et al., “Controversial and Questionable Assessment Techniques” in
ed. S.O. Lilienfeld, Science and Pseudoscience in Clinical Psychology (New York: Guilford Press, 2003),
39-76; Dean Burnett, “Nothing Personal: The Questionable Myers-Briggs Test,” The Guardian (Mar. 19,
2013), http://www.guardian.co.uk/science/brain-flapping/2013/mar/19/myers-briggs-test-unscientific
Human Performance (Washington, DC: National Academy Press, 1992); and T.G. Carskadon and D.D.
in information, and produce materials in ways that are outside of a student’s comfort zone has important real-life value, they claim. Notwithstanding these few critics, there is overwhelming evidence showing that enabling a student to engage in learning according to her learning style preference, at least some of the time will result in a more positive and motivating education experience for both the student and teacher. Based on the four sets of learning preferences above, the following sections provide example teaching approaches. These demonstrate matching teaching to learning styles, as well as teaching students how to work and learn when the presentation does not match the student’s preferred learning style, thus addressing the criticism of these approaches.

*Extraverted* students tend to learn best by explaining things to others. In fact, some Extraverts may not believe that they understand a subject until they are given an opportunity to explain it to someone else; if they express their understanding successfully, they demonstrate to themselves and others their mastery of the information. These students may enjoy working on group exercises and projects, and using the Thinking Aloud Paired Problem Solving (TAPPS) approach as follows:

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Cook, “Validity of MBTI Descriptions as Perceived by Recipients Unfamiliar with Type,” *Research in Psychological Type* 5 (1982), 89-94.

TAPPS
1. Teacher poses question and provides quiet time for students (this quiet time is also beneficial to more introverted learners).
2. Teacher designates the explainer and listener within each duo.
3. Explainers explain ideas to listeners. Listeners can (1) ask questions of clarification, (2) disagree, or (3) provide hints if explainers become confused.
4. Teacher provides feedback to as many explainers' answers as possible, and helps bring closure to discussion, if needed.

Introverted students may do their best work when they understand the interrelatedness of the subject matter that is being presented. Mastery of the information means interconnecting material and seeing the "big picture." A good teacher will show students how to group and connect the information being presented. Cognitive psychologists tell us that through grouping and interconnecting information, all students, not just introverts, are more likely to master the material. Teaching students how to build a compare/contrast table, flowchart, or concept map will help them make these important connections for themselves.

Sensing students may tend to be more detail-oriented, trust facts, and prefer to be presented with hard data. These students typically prefer organized and linear presentations. A popular method for organizing the presentation of information for

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61. George A. Miller, “The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information,” *Psychological Review* 63, no.2 (1956): 81-97. George Miller noted that people can hold $7 \pm 2$ chunks of knowledge in their minds at any given time. If each knowledge chunk contains a specific fact, then the amount of knowledge possessed is limited. But if each chunk contains many interconnected facts, a network or framework of facts, then the amount of knowledge is almost unlimited.

62. Ibid.
Sensing types is the What Must Be Known (WMBK) approach. In the WMBK approach, the teacher first asks, “What is (are) the topic's most essential general principle(s) or goal(s)?” Place the answer in a goal box. Then ask, “What topic(s) must be known such that students can achieve the goal(s)?” Place these sub-goal boxes below the goal box and show an arrow leading from each sub-goal box to the goal box. Continue to ask WMBK questions until you connect all of the material that needs to be covered. When presenting the lecture, start at the bottom of the diagram and work upwards to the top-level goal(s) box. Interestingly, this method is a good teaching tool for both Sensors and Intuitors. Sensors tend to prefer starting at the bottom, getting all of the details, and working their way up to the big picture. As shown in the next paragraph, Intuitors will appreciate having the visual diagram that shows the big picture concept at the top. With this connection to the larger concept, the Intuitors are in a better position to consume the detailed information.

*Intuitive* students tend to seek out patterns and relationships among the facts they have gathered or with which they are presented. They will trust their intuition and look for the "big picture" in order to understand the context of the information being presented. One of the most famous intuitive types was Albert Einstein, whose “thought experiments” were revolutionary; he could see patterns where others saw only

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63. See Ausubel, *Educational Psychology*. 
randomness. Because “Intuitive” students mostly prefer understanding the big picture for context first, “Discovery” learning may be most effective for them, whereby, the teacher begins by demonstrating a concept, explaining and demonstrating the overarching theory, preferably with a visual aide, and concluding with the question, “Why?” The discussion that follows to answer the “Why” question should include a real-world application of the concept to something that is relevant to the students. It is during the Why discussion that the facts and supporting information is discovered. This type of lesson will conclude with a review of the concept, followed by the details, allowing students get the big picture before tying in the details, for maximum understanding.

The Discovery method may appeal to Intuitive students because of its integrating framework, but it can also be useful in teaching sensing students how to extract the details when presented with the big picture at the start. Using this method, Sensing and Intuitive students can be combined into learning groups: Intuitive students can help the Sensing students to discover the theory; while the Sensing students can help identify and marshal the facts of the exercise to prove the application of the concept, and therefore reinforce everyone’s understanding of the information.


Thinking students tend to approach school work, or work in general, using analysis, logic, and set principles. They tend to value fairness, based on a situation's logic, and place the most value on objective criteria. Thinking students mostly prefer course objectives that are as action-oriented as possible, and include verbs that clearly describe what students will do. They, like most students, will work best when they have a clear understanding about what is expected of them. Indeed, this is an example of how a universal teaching concept geared to this particular learning style can benefit all students.

Feeling students tend to value the ‘human element’ above other variables when evaluating information. They may prefer working in small groups, especially when there is group harmony. They tend to enjoy the small group exercises like TAPPS, and may need guidance to keep the group discussion focused on the topic; keeping track of the time being spent; and encouraging equal participation by each member; and ensuring that the students’ objectives for the session are realistic so that they can feel successful.

Judging students tend to be very decisive planners who work well when coursework is well organized. Deadlines are sacred and they may have the ability to embark and focus on completing a task, knowing only the bare essentials. They are risk-takers who are typically ready to take action, even if not fully prepared. The following suggestions for note and test taking will help judging students prepare for and perform better on tests, especially standardized tests. Judging students may need occasional
reminders to practice these steps after initially having them explained, especially before tests.\textsuperscript{66}

- **Speedwriting**
  Most students can learn speedwriting in several minutes. Just omit most or all vowels when taking notes. For example, mst stdnts cn lrn spdwrtng in svrl mnts. Jst omt ll or mst vwls.

- **Split Notes Page**
  Draw a line down the center of a notebook page, label one side ‘Class Notes.’ During class, write the class notes in this column using a speedwriting method. After class, review the notes and in the opposite column, restate the ideas by answering the question, “What does this mean to me (the student)?”

- **AOR Model**
  When writing an essay or answering an essay question, the student should always Analyze, Organize, and Respond. This is challenging for most Judging students, as they will typically want to go directly to the response. Instead, encourage students to Analyze the question, noting key ideas, Organize the ideas logically, and then draft the essay (Respond). Encourage Judging students to double check by reading the essay and writing a question that is answered by the essay. Then compare the question to the original question being asked. If different, revise the essay.

- **Treat Objective or Multiple Choice Questions as Essay Questions**
  Read the question and write a brief answer/mini essay. Then compare the mini essay to the four or five choices, and select the answer most similar to the mini-essay. Unfortunately, this approach may not work well in the timed standardized tests.

*Perceptive* students tend to be curious, spontaneous, and adaptable. They may start many tasks and often fail to complete them. Tasks have a tendency to grow in scope as the Perceptive student strives to learn everything about each detail. Deadlines are “guidelines” for Perceptive students. In an effort to look at projects from every angle, they may postpone beginning work on an assignment until the very last minute. Breaking

a complex project or assignment into a series of sub-assignments and providing deadlines for each sub-assignment tends to work well with Perceptive students. Having deadlines as well as work product reviews along the way will help to keep the perceptive students on target. As with many of the other suggestions, “chunking” a project or assignment and having scheduled deliverables is a strategy that will help most students succeed, not just those who fall into the Perceptive category.

As can be seen by the suggestions above, there are methods that a teacher can use to teach many students with different learning styles at once. Teaching across the spectrum of learning styles may represent the most practical approach when there is a large class size and/or little or no time or budget for formal assessments. Faced with these challenges, a good teacher will attempt to craft lesson plans to reach as many students as possible, observing and addressing individual challenges as they arise.

As a tool to assess learning preferences, the MBTI satisfies those educators who are looking for a methodology that allows them to encapsulate each student’s set of needs and preferences in a simple and proven way. It’s important to remember that the MBTI is a set of preferences, rather than abilities. Students of all types have the capacity to learn any subjects, and in many different environments. Being able to present information using an approach that is most compatible with a student’s learning style will add to his chances of success. The corollary to this is that if a teacher is faced with large classes and too little time and money to do the assessments or get to know the students
personally, the best approach is to teach across the learning style spectrum, as described above.

As stated in the beginning of this chapter, recognizing and teaching to different learning styles is an important step toward avoiding the student’s “repeated frustration [that] has the potential to downgrade a kid’s estimates of self-worth.” More important than focusing on a student’s difficulties, is the need to “identify and celebrate students’ strengths.” Dr. Mel Levine says:

It’s taken for granted in adult society that we cannot all be generalists skilled in every area of learning and mastery. Nevertheless, we apply tremendous pressure on our children to be good at everything. Every day they are expected to shine in math, reading, writing, speaking, spelling, memorization, comprehension, problem solving, socialization, athletics, and following verbal directions. Few if any children can master all of these “trades.” And none of us adults can. In one way or another, all minds have their specialties and their frailties.

According to Deborah Meier, whether learning styles is important is a “big question full of implications!” She points out that while it’s important for teachers to draw upon their past experience, it's even more critical to “divorce oneself, temporarily at least, from thinking of patterns or past history, and just observe afresh what one student is

67. Levine, A Mind at a Time, 245.
68. Ibid, 47-48.
69. Levine, A Mind at a Time, 23.
70. Ibid.
doing, saying, or acting upon.” Both Deborah Meier and Pat Carini agree that it is important that a teacher not try to “tie it all together too neatly.”

The two approaches outlined here represent two very different ways of discovering students’ needs, learning styles, and preferences, and suggestions for how to present and manage information in ways that will help take advantage of a student’s strengths. In small classrooms, where the teacher is afforded the time and space to observe and document a student’s learning preferences over time, the Descriptive Review Process can be a successful framework to use to understand the individual needs of students. In any size classroom, and especially a large one, the MBTI process can be a very effective and efficient tool for the teacher to engage and understand individual student’s needs. Both approaches provide a way to bring teachers closer to their students, and students closer to their teachers. As Dr. Margaret Himley, Associate Provost for International Education and Engagement at Syracuse University, says, “it is only by attending with care to one [student], that the democratic goal of educational equality for all can be achieved.” Empowering teachers by giving them the latitude in the classroom to understand students’ needs, teach to many different learning styles, and be open to the possibilities that exist in each student should be a critical objective in our

71. Ibid.


national, state, and local education policy. Doing so will help teachers reach the most students in ways that allow those students to become actively engaged in a lifelong love of learning, improve student outcomes, enhance teacher development, and improve school success overall while reducing the cost of public education to society.

Training teachers on how to use learning style differentiator tools is not the solution to our education problems. These tools, like many others, belong in the teacher’s toolkit and should be used when s/he needs help crafting a lesson plan to meet the needs of her/his students. High stakes standardized testing obstructs good teachers from connecting with students on an individual basis. A discussion about the impact of this disconnection (or the importance of facilitating the connection) is what is missing from all of the grand “one size fits all” education policies that come down from on high (e.g., education boards, states, and the feds) – all tied to school funding. The following chapter addresses the impact that some successful teachers and programs are making, and asks the question, “If the high-stakes testing money was instead invested in training, hiring, and retaining the best and the brightest teachers, and giving them the latitude to create lesson plans and programs that engage and challenge students in tried and true or new and inventive ways, what would the outcomes be then?
CHAPTER 3

“AN EXCELLENT RISK:”¹
WHY STAYING ENGAGED IN SCHOOL AND GRADUATING ARE THE MOST IMPORTANT MEASURES OF HIGH SCHOOL SUCCESS

When elephants fight, the grass suffers.
   --Ancient proverb of the Kikuyu Tribe of Kenya²

Approximately 75 percent of all American students in the United States earn high school diplomas; among Asians, 92 percent and among Whites, 82 percent graduate from high school; among Latinos, 66 percent successfully finish high school; while 64 percent of African-Americans and 65 percent of Native Americans graduate. On average, only two-thirds of male students earn a high school diploma, a rate seven percentage points lower than that for female students. Rates of high school completion for males from historically disadvantaged minority groups consistently fall at or below the 50 percent mark.³ These gaps persist despite a decade of the “No Child Left Behind” law, which mandated efforts that were intended to reduce the racial gap in high school graduations. However, while the overall U.S. graduation rate has plateaued, the graduation rates for minority groups have gotten worse. These persistent achievement gaps are of particular concern as the demographics of the U.S. population continue to change, and minorities

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³ Christopher B. Swanson, “Progress Postponed,” Education Week 29, no. 34 (June 10, 2010): 22-23, 30.
become majorities, as is now predicted for our Latino population. In 2009, the U.S. landed near the bottom internationally for its overall high school graduation rate of 78 percent; ranking 21st out of 26 OECD countries.\(^4\)

Hope springs eternal, however, that our education policy will focus more on U.S. high school graduation rates.\(^5\) Time and again, dedicated teachers, principals, coaches, mentors, parents, and other caring adults come together in caring communities around students who need help to succeed in high school. This chapter highlights two important efforts being made today to engage high school students to meet and exceed educational goals and expectations. And while these programs were designed with the neediest students in mind, they are programs with universal tenets that will work equally well for many different kinds of learners. Most importantly, these programs are successful, scalable, and easily replicated in any high school environment. The question remains, will we as a society do what is needed, and what has been proven to work, to reach out to help the students who are most in need to get a good education and graduate from high school?


The “Dropout Standard”

Critics have argued that using high school graduation as a measure of success
opens the door to “passing” students who are not “qualified” to graduate. Indeed, this is a
risk, but in the words of James LaSpina, it is an “Excellent Risk.”\(^6\) In support of taking
this risk, are the following numbers:\(^7\)

<table>
<thead>
<tr>
<th>High School Dropout Statistics (US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data assembled by author from source: “Statistic Brain,” <em>Education Week, Children Trends Database</em> (October 12, 2012).</td>
</tr>
<tr>
<td>Total number of high school dropouts annually(^8)</td>
</tr>
<tr>
<td>Number of high school students who drop out each day</td>
</tr>
<tr>
<td>Percent of all dropouts that happen in the ninth-grade</td>
</tr>
<tr>
<td>Percent of students in the largest 50 U.S. cities that graduate high school</td>
</tr>
<tr>
<td>Percent of US crimes committed by a high school dropout</td>
</tr>
<tr>
<td>Percent of African American dropouts that have spent time in prison</td>
</tr>
<tr>
<td>Percentage of Latino dropouts that were due to a pregnancy</td>
</tr>
<tr>
<td>Percent of US jobs for which a high school dropout is not eligible</td>
</tr>
</tbody>
</table>

This table shows that the public school system is “bleeding” at least 8,300
students a day, nearly 3,100 of whom do not last beyond the 9\(^{th}\) grade. Excluded almost
by definition from 90% of the country’s jobs, they almost inevitably account for 75% of

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8. The percentage of high school dropouts varies widely from state to state, e.g., Nevada, at the bottom of the spectrum, has a dropout rate of 42.2%, and Vermont, at the top of the list, has a dropout rate of 8.6%; see also Vermont Design for Education at the end of this chapter.
the national crime rate. The ultimate societal issue then becomes whether we would rather fund schools or prisons.

Still, critics complain that the cost of preventing three million students from dropping out of high school each year is prohibitive. However, the costs of inaction are far greater. Spending the time and money to reduce the current number of dropouts by one half is the obvious ethical choice for a democratic society, and would more than pay for itself. The typical high school graduate is likely to earn up to 100 percent more in lifetime income than a non-graduate, is far less likely to draw on public support for health care or other services, and will be unlikely to get involved in the criminal justice system.\(^9\)

In addition to adding significantly to our national Gross Domestic Product (GDP), graduates will contribute much more into our state and federal tax coffers than non-graduates.\(^{10}\) According to Henry M. Levin, and Cecilia E. Rouse, when the costs of investment to produce a new graduate are taken into account, the return is between 150 to 350 percent for every dollar invested, depending on the intervention. This is a “risk” that any investment analyst would happily get behind. By investing in an education strategy that actually works, U.S. taxpayers get in return approximately $127,000 for each


\(^{10}\) Investopedia, http://www.investopedia.com/terms/g/gdp.asp (accessed March 1, 2013). GDP is defined as “the monetary value of all the finished goods and services produced within a country's borders in a specific time period, though GDP is usually calculated on an annual basis. It includes all of private and public consumption, government outlays, investments and exports less imports that occur within a defined territory.
graduate over their lifetime. Reducing the number of high school dropouts each year by 700,000, would net $90 billion per year, or $1 trillion over 11 years. As the United States faces budget deficits growing into the trillions of dollars, liberals and conservatives alike should get behind progressive education strategies as an element of economic recovery, in addition to the obvious benefit of educating our young people. In their analysis, Levin and Rouse note that:

Some might argue that these estimates are too large, that the relationships among the time-tested interventions, high school graduation rates and adult outcomes have not been proved yet on a large scale. Those are important considerations, but the evidence cannot be denied: increased education does, indeed, improve skill levels and help individuals to lead healthier and more productive lives. And despite the high unemployment rate today, we have every reason to believe that many of these new graduates would find work – our history is filled with sustained periods of economic growth when increasing numbers of young people obtained more schooling and received large economic benefits as a result.

Of course, there are other strategies for improving educational attainment – researchers learn more every day about which are effective and which are not. But even with what we know, a failure to substantially reduce the numbers of high school dropouts is demonstrably penny-wise and pound-foolish. 11

Lamenting the dearth of vocational schools or programs a decade ago, Dr. Mel Levine wrote, “the identification and celebration of strengths may well be even more important than identifying the trouble spots where facets of a child’s learning style do not mesh with a school….Discovering a place for [a student’s] kind of mind, a place where [a student] can thrive, almost always works wonders. Sadly, vocational schools…are not as

prevalent as they once were. This shortage discriminates against great minds…” In the decade since Dr. Levine wrote his groundbreaking book, A Mind at a Time, a new version of vocational programs, often mini-schools within schools, have begun to re-emerge in our public high schools.

“West Philly Hybrid X Team”

The West Philadelphia High School Academy for Automotive and Mechanical Engineering (Academy), also known as the “West Philly Hybrid X Team,” is a program that exists within the public West Philadelphia High School. Taking a different approach toward “vocational” education, the city of Philadelphia partnered with the non-profit Philadelphia Academies (Academies), which has created nearly a dozen “career-oriented” academies within other high schools in the city. These programs, initiated and run by public high school teachers, operate as “schools within schools” and work with area businesses to blend college preparation with vocational education in careers ranging from electronics and the environment to business technology and tourism.

The Academies take a different approach to vocational education, and are focused on academic rigor rather than specific career paths. It is through hands-on projects that

13. West Philadelphia High School, http://webgui.phila.k12.pa.us/schools/w/westphila/ (accessed February 15, 2013). Appropriately, as noted in Chapter 1, it was Benjamin Franklin’s Academy in Philadelphia which led the way for classical education in the U.S. in 1751.
students are engaged in a rigorous science and math curriculum, including applied mathematics, physics, and electronics. "They're figuring out these things because they need to and they're invested," says Simon Hauger, “If the students replace your brakes, they either work or they don't. You don't get a C in brakes, you get an A or an F." he says.  

Art and Design are also critical components of some of the projects done in the Academy. For this reason, the program attracts students of all ability levels and interests. The approach taken by the Academies gives students a reason to stay engaged and focused. Instead of typical high school classrooms where students compete with one other, if they are engaged, students are grouped into small teams to collaborate on projects. These teams always identify one of the students as their captain, and one or two adults as team members, subject-matter experts, and mentors. The Academy’s success rate is impressive, with nearly 90% of the participants graduating high school (as compared to a 60% graduation rate for the high school as a whole). Thus, more Academy participants are college bound than in the school as a whole, and 18 months after

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finishing the program, 90 percent of the graduates are either working in their chosen field or attending college. These are metrics of success.\textsuperscript{16}

The Academy has a simple, successful, three-pronged approach toward high school education, “1) Put the work first; 2) Trust Students to Make Decisions; and 3) Make the Most of Failures.”\textsuperscript{17} These tenets are explained by Simon Hauger, the program’s founder, academic teacher, and administrator, as follows:

1. Put the work first.

At the Workshop, authentic problems drive and define the curriculum, and dictate what specific knowledge and skills students need to develop. Student work is assessed using real-world criteria that are known to students, staff, and external partners. When we accepted Mayor Michael Nutter’s challenge to reduce energy use in our building by 10-30 percent; that became a project. When we decided we needed an actual Workshop space where we design and build things, or meet as a whole group; that became a project. Whether those projects are successful is not determined by how our students did on a test, but rather by whether we achieve our objectives.

2. Trust students to make decisions.

Even when they make a decision their teachers would not have made; Even when they make mistakes; We want our students making, explaining, and justifying as many decisions as possible. It’s what they will be expected to do when they get jobs. It makes them responsible for their work and their ideas. It reinforces the idea that the problems we’re trying to solve really don’t have one right answer.


\textsuperscript{17} Ibid.
3. Make the most out of failure.

Some reformers like to say that “failure is not an option.” We agree – it’s a necessity! Failure is an indispensable part of all innovation and all problem solving. When you build something and it fails, everyone can see that it failed. There is nothing abstract or removed about it. But the really important part is what happens next: trying to figure out why it failed, and what can be done to fix it. That’s where the learning happens. It’s also how we learn to be resilient. Failure is supposed to happen. It’s what happens next that really counts.

The Academy program epitomizes what Rief calls “multi-sensory instruction,” where the students use multiple senses while learning. The theory is that when we learn, information takes one path into our brain when we use our eyes, another when we use our ears and a yet a third when we use our hands. By using more than one sense, new information reaches our brain via multiple pathways, and as a result we retain more. Rief says that students retain as follows:

- 10% of what they read
- 20% of what they hear
- 30% of what they see
- 50% of what they see and hear
- 70% of what they say
- 90% of what they say and do

In addition to the impact that this program has had on the lives of these students, the achievements of Academy students, many of whom are from extremely challenging situations, are nothing short of amazing.

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19. Ibid.
− In 1997, the Academy began a year-long after-school project building an electric car. Their retrofitted battery-powered Saturn won a competition in 2002.
− Next, the group created an environmentally friendly hybrid that is both fast and cool. Their car, the K-1 Attack, is a from-the-ground-up construction based on K1-Engineering's body and frame, with a Volkswagen TDI engine that gets more than 60 miles to the gallon and accelerates from zero to 60 miles per hour in four seconds.
− For several years running, West Philadelphia's cars have won top honors in the Tour de Sol, a national green car competition, defeating not only teams from elite colleges and universities, but also production vehicles from Toyota and Honda.
− Students demonstrate their cars at the Philadelphia Auto Show each year, requiring them to develop and refine their verbal communication and presentation skills.
− Students work nights and on weekends to participate in these competitions, while maintaining their other school work and many times jobs to support themselves and their families. Through this model, they have learned the all-important lesson about keeping your goals “achievable.”

Expeditionary Learning

Another public high school model that is successful at helping many different kinds of learners succeed is the Expeditionary Learning School (ELS) Model. The ELS model was originally developed in a partnership between the Outward Bound Project and the Harvard University Graduate School of Education.20 The ELS model promotes experiential education with academic rigor. The Kaufmann Family Foundation, along with other private foundations, provides ongoing support for ELS, and describes their mission as follows:

Expeditionary Learning Schools Outward Bound (ELS) is a comprehensive K-12 educational design that combines rigorous academic content and real world experience...
projects called Learning Expeditions with active teaching and community service. This model focuses on teaching in an engaging way while emphasizing learning by doing, character growth, teamwork, and literacy.\(^{21}\)

There are currently 38 ELS Consortium schools in New York State, including the James Baldwin High School (JBS) in New York City. JBS is a college preparatory school that graduates over 95% of its students, with approximately 88% going on to succeed in college. Unlike many high-achieving schools, JBS has the goal of being inclusive, and works hard to attract students who have previously experienced “school as unresponsive to their needs as individuals.”\(^{22}\) Using the progressive Expeditionary Learning model, JBS students complete a challenging curriculum that successfully prepares them for the rigors of college work. JBS sets forth its primary goal as follows:

> It is our mission to provide a philosophical and practical education for all students, an education that features creativity and inquiry, encourages habitual reading and productivity, as well as self-reflection and original thought. We are committed to inspiring the love of learning in our students. This mission can best be accomplished in a school that exemplifies the values of democracy: mutual respect, cooperation, empathy, the love of humankind, justice for all, and service to the world.\(^{23}\)

As an ELS school, JBS students are combined into “crews” and a staff member is assigned to each crew as their academic advisor, mentor, and primary parent/family contact. In the beginning of each school year, all students travel to upstate New York with their crew to participate in a one-week Outward Bound group orientation. Teaching


\(^{23}\) Ibid.
and learning at JBS is hands-on and project-based, as students are encouraged to “seek” their answers to problems and assignments, individually and in small groups.\textsuperscript{24}

All students attend a weekly town meeting type of assembly at the school to discuss issues important to them, the school, and the larger world. Classes are small enough that the students get individualized attention from teachers, and might include a blend of students from various grades. One of the teachers reported that having this close relationship with the students "keeps us honest as teachers."\textsuperscript{25}

JBS classes are called “academic expeditions,” which might involve an in-depth study of a particular work of literature such as Ralph Ellison's Invisible Man, or a given period or event in history.\textsuperscript{26} Urban expeditions involve extensive field trips for research and exploration outside the school. Once back at school, the students engage in reflection and discussion as part of producing their project work. The students also engage in service expeditions, including trips to build houses with Habitat for Humanity. In addition to the work being project-oriented, the teachers work to make most courses inter-disciplinary. For example, the course "Crime and Punishment" was offered for both social studies and science credits, and focused on a central question, “Does the United

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\item[26.] Ibid.
\end{enumerate}
States need so many prisons?” Students examined criminal behavior and crime from historic, sociological and biological perspectives. Another example of the interdisciplinary approach is the "Math for Social Justice" class that looks at how economics and statistics relate to social studies. For their course project, the students created a budget for a company that they created based on their research from the Bureau of Labor Statistics as well as other sources.

The relaxed atmosphere at JBS, where teachers may wear t-shirts to school and are on a first name basis with students, may give the appearance of being lax about the work they are doing. The opposite is true. Students and teachers alike share a serious commitment toward learning and achieving academic excellence. This excellence however, is not always demonstrable using the traditional standardized tests, on which JBS students typically do not perform well. Notwithstanding this, more than 88% of JBS graduates go on to succeed in college and beyond, outperforming the New York State and national high school averages. If programs like the ELS model at JBS are going to continue to take root and have a positive impact on high school education in this country, a new method of assessing their success is required.

Performance-Based Assessments

The ELS approach is antithetical to that geared toward “standardized education.” In the article “Keeping Accountability Systems Accountable,” educator Martha Foote criticizes the shroud of secrecy surrounding the current standardized tests, especially
given that the results claim to measure student academic capability, and impact teacher livelihoods as well as a school’s continuity. Moreover, Ms Foote provides evidence refuting the claim that these standardized tests are the only accurate predictor of college-level academic success. In proposing a more transparent and effective approach to assessment, she postulates, “Isn’t it time that we hold these tests accountable for what their proponents claim they can do, especially when children’s futures and adult livelihoods hinge on the results? At the New York Performance Standards Consortium, we believe the answer is yes.”

Ms Foote and the New York Performance Standards Consortium (Consortium) have created an assessment tool that is being used for a small number of progressive public schools in New York State. Called the Performance-Based Assessment (PBA), the tool is used by the Consortium, which consists of 38 small, diverse public high schools across New York State, including the James Baldwin School, profiled earlier in this Chapter. These schools exemplify innovative curricula and teaching strategies, using primarily hands-on, project-based assignments that promote inquiry-based methods of learning, as well as student choice. Performance-based assessment is not new, having been formalized by the Prospect School and Patricia Carini in the 1960’s, and used for

28. Ibid.
29. Ibid.
decades by Deborah Meier at the Central Park East Secondary school in the East Harlem neighborhood of New York City.\textsuperscript{30}

Consortium schools have long understood the importance of performance-based assessments to determine student learning. Under PBA, students must complete four specific performance projects required for graduation, including “an analytic literary essay, a social studies research paper, an original science experiment, and the application of higher level mathematics.”\textsuperscript{31} In turn, these projects are graded first by teachers, using detailed pre-determined criteria. In a second layer of accountability, the work is reviewed by external evaluators, similar to the outside evaluation done for Advanced Placement (AP) and International Baccalaureate (IB) course and project work. In the spirit of transparency, these projects and assessments are further reviewed by a Performance Assessment Review (PAR) board that compares the assessments across all of the schools in the consortium. While this procedure can be compared to “double-blind” accuracy reviews in scientific studies, there is no secrecy around this rigorous assessment process, leading the New York State Commissioner of Education to grant the consortium a waiver of the state’s Regents exam requirements for graduation in lieu of the PBAs.\textsuperscript{32}

\begin{footnotesize}
\begin{enumerate}
\item Carini and Himley, \textit{From Another Angle}.
\item Ibid.
\item Foote, “Keeping Accountability,” 361-362.
\end{enumerate}
\end{footnotesize}
Based on the PBA, the results of which are readily disseminated to students, teachers, parents, and New York State education officials, these progressive high schools have been able to show that they consistently engage (as shown by attendance numbers) and graduate college and career-bound students at a much higher rate than other New York State schools. This is particularly impressive in lieu of the notable fact that these schools have more students who qualify for free or reduced-price lunch and many of whom were receiving special education services prior to enrollment.33

The Consortium has not been content to rest on its progressive assessment laurels, however. In an effort to confirm that the PBA effectively determines the likelihood of future college success of its students, it has performed a detailed longitudinal analysis of how PBA-assessed students fared once they got to college. The results of its study showed that over 84% of the students enrolled in 4-year colleges re-enrolled for their second year, as compared to a national re-enrollment rate of 73%. Moreover, these students achieved an average GPA of 2.7, or a B minus. The ACT defines college-readiness as being able to achieve a GPA of 2.0, or a C average in college-level courses.

These schools, programs, and assessment approaches could easily serve as models for a new high school paradigm for all kinds of learners and subjects. Whether the motivation comes from supplemental programs that operate as an adjunct to the school

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day, or ideally the principles of hands-on, outcomes-based work are introduced to every student in every classroom, this style of instruction will increase the relevancy of the work, the engagement of the students, and the learning outcomes for all. These hands-on, project-based programs provide an opportunity for students to make the best use of their individual learning style strengths, while often shouldering heavy challenges. This educational approach also uses all of the tenets of the most recent research findings about motivation, including: working autonomously and in small groups; the attention of a caring adult with subject-matter expertise; clear, relevant project objectives in which the student is invested and engaged, and through which the student achieves mastery, and work that has a purpose in the larger world in which the student lives.  

Vermont Design for Education

As pointed out earlier in this chapter, staying engaged in high school and graduating will have the single biggest impact on the future of students, their community, and our nation. Interestingly, there are large gaps in the rates of high school graduation between the states, with Utah at the bottom (58%) and Vermont at the top (92%). Not surprisingly, the Vermont Design for Education (Design), published by the Vermont Department of Education and referenced in Chapter 2, describes a very progressive approach to education, “that…an educational philosophy should center around and focus

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upon the individual, his learning process, and his relationship and interaction with the teacher.”

Published in 1968, and still referenced in today’s state education policy for Vermont, the Design goals mirror the objectives of the progressive education programs detailed earlier in this chapter. Its 17 goals for the process of education are as follows:

1. The emphasis must be upon learning, rather than teaching.
2. A student must be accepted as a person.
3. Education should be based upon the individual’s strong inherent desire to learn and to make sense of his environment.
4. All people need success to prosper.
5. Education should strive to maintain the individuality and originality of the learner.
6. Emphasis should be upon a child’s own way of learning – through discovery and exploration – through real rather than abstract experiences.
7. The development of an individual’s thought process should be primary.
8. People should perceive the learning process as related to their own sense of reality.
9. An individual must be allowed to work according to his or her own abilities.
10. The teacher’s role must be that of a partner and guide in the learning process.
11. The development of a personal philosophy, a basic set of values, is perhaps one of the most important of human achievements.
12. We must seek to individualize our expectations of a person’s progress as we strive to individualize the learning experiences for each person.
13. The environment within which students are encouraged to learn must be greatly expanded.
14. The school should provide a structure in which students can learn from each other.
15. To provide a maximum learning experience for all students requires the involvement and support of the entire community.

36. Ibid.
16. Schools should be compatible with reality. Learning which is compartmentalized into artificial subject fields by teachers and administrators is contrary to what is known about the learning process.  

17. Individuals should be encouraged to develop a sense of responsibility.  

The programs described in this chapter embody these tenets which were laid out 45 years ago. Given Vermont’s record of retaining and graduating high proportions of high school students, and the success and scalability of the programs described herein, this model can be replicated to meet our national goal of 90% high school graduation by 2020.37 We need to move away from the current federal, state and local policies that focus on standardized testing as the only mechanism for demonstrating educational success, and look to model the 21st century high schools after a combination of these approaches. Moreover, we need to allow students, with the guidance of their families, teachers, or other caring adults in their lives, to choose the education and related assessment model that best meets their learning style (i.e., real choice within public education, not between public and private). The next chapter addresses some of the obstacles to changing our current system of public education, including its sheer bureaucratic mass.  

CHAPTER 4

CHALLENGES AHEAD

Knowledge can be communicated, but not wisdom. One can find it, live it, be fortified by it, do wonders through it, but one cannot communicate it and teach it. -- Hermann Hesse, Siddhartha (1951)

The challenges to improving the American public school education experience, and student outcomes through a more individualized approach to education, include a myriad of issues and problems. Selected for consideration here are: bureaucracy and funding; class and school size; the impact of teachers unions; and national reform efforts.

Bureaucracy in Education

As reviewed in Chapter one, public schools had their origins in the earliest colonial towns, governed by committees composed of local leaders and supported by community financial contributions. These were the first “school boards” and their purpose was predicated on the theory that a “free” public education was a necessary requisite to religious training and good citizenship.1 Originating as it did, within the community, public education is historically rooted in local control which has established standards for curricula, teacher credentials, and facilities. For many years, all school

funding came from taxes paid by the locality (i.e., village, town/city, county).\(^2\) And while there have always been detractors, proponents of local school control and decision-making point to the advantage of having a sense of control by the community of families, teachers, and students engaged in the school. This sense of control over one's destiny is essential to a positive feedback loop: teachers and families feel empowered and are engaged; children benefit from the attention that they get from their families, teachers, and communities.\(^3\)

Locally elected school boards have always been charged with responsibility for student learning; what is taught; and framing the right policies to ensure that educators and students can be successful.\(^4\) School board members have generally been average citizens, who carry full-time jobs in addition to their school board responsibilities. Some school board members are professional educators. One major study in the early 1990s found that the mean salary for board members was $4,280 a year and even among the districts with 250,000 or more residents, the mean annual salary was only $6,160. Many school board members do not take a salary at all. It’s clear that school board members


\(^3\) See Jacqueline Edelberg and Susan Kurland, *How to Walk to School: Blueprint for a Neighborhood School Renaissance* (Lanham, MD: Rowman & Littlefield Pub., 2009).

are not in it for the money. While there are always exceptions to the norm, when school boards are small, and live and work in small school communities, the members are genuinely interested in securing the best possible public education experience for the students, teachers, and families in their local schools.\(^5\)

One of the ironies of the administration of the American system of public education is that it has been at once a process of both expansion and contraction – the population has expanded, and with it the need for an increasing number of schools, while at the same time, control over them has become more and more centralized and bureaucratic. In the early 1940s, there were approximately 128,000 local school districts, each with its own board, when states began requiring consolidation. By 1948, the United States had 89,000 school districts, and by 1953, even with the Baby Boom, the number decreased to 55,000; dropping again to 31,000 by 1961. Thirty-five years later, the number had declined again by more than one half to under 15,000.\(^6\) During this time, the trend to consolidate schools also brought a decline in the total number of public schools in the United States. In 1929–30, there were approximately 248,000 public schools, compared with about 99,000 in 2009–10. In the same timeframe, the US population increased from 123 million in 1930 to 308 million in 2010. Therefore, during the period between 1930 and 2010, when the US population more than doubled, the number of US

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public schools was reduced by more than half, resulting in much larger schools, with larger classroom sizes: a topic addressed later in this chapter. 7

School boards have been criticized as being ineffective and even irrelevant for failing to make educational reforms. As with any organization, the effectiveness of a local school board depends, in large part, on its members, who historically have been elected by their neighbors and fellow citizens. However, the ability of a school board member to be effective is directly tied to the number of the families and students in his school district. In the 1930s a typical school board member represented approximately 200 people. In this situation, the board member typically interacted on a personal level with most of his constituents. By 1970 however, he represented 3,000 people, and today that number has almost tripled. Unfortunately, as school board control has been more centralized, their position as a local voice, understanding the education needs of their communities is diminished. Indeed, as school governance has become more political and “professional,” school board efficacy has been called into question. With the concurrent population growth, associated consolidation of schools and districts, and the shift to state and national-level assessments that determine education success and therefore funding,


might we be setting school boards, and indeed individual schools, teachers, and students up to fail? Small, local school boards, in general, are not as bad as Mark Twain believed them to be when he said “In the first place God made idiots. This was for practice. Then He made school boards.” However, while returning to small, local school boards, overseeing their small local school districts would be a huge improvement over the present approach of consolidation, when looking at bringing education back to the individual, eliminating school boards altogether might be even better. Not because of a perceived incompetence of school boards, but because if you have good teachers, and good school management, ideally, we would give them the autonomy to educate in a way that they believe is most effective for their students. In this scenario, the principals of the schools would have the autonomy to run the school in the way that best meets the needs of the students.

Most Americans agreed to the need for a curriculum that would both empower professional educators and protect students from undue local influences. Most Americans also agreed to a need to demonstrate basic proficiency in Math and Reading. However, Americans did not agree to the latter at the expense of the former. The common thinking was that a more progressive curriculum, developed in tandem with educator input from around the country, would be implemented at the local level, where


educators were best suited to teach to the learning styles of their students. As seen in Chapter 1, curriculum standards are not a new concept: the push for curriculum standards began as early as the mid-1800’s with Horace Mann, one of the earliest education “reformers.” The irony, however, is that, once in place, centralization began to exclude the desires of local educators, and moved very quickly away from a focus on curriculum standards to the lowest common denominator: testing for basic proficiency in math and reading. Eventually, with the wheels of bureaucracy continuing to turn, and without creating any curriculum standards, the Federal Department of Education, and the State Boards of Education, dictated an education policy based on standardized testing and test results. As the bureaucracy continued to grow, the result was “an increased focus on testing and test results, and tying a school’s funding, indeed it’s very existence in some cases to test results; undermining school autonomy” which in turn has impeded effective education, and consequently school performance.

Our constitution gives states control over education within their domains. As detailed in Chapter 1, during the Civil Rights Era, it was important for the United States


federal government to get involved in some states’ education systems to ensure that all United States citizens’ constitutional rights were protected. Segregation, a common practice in the southern states, had been outlawed, and the federal government was needed to enforce desegregation of public schools. Since then, federal funding for education has continued to grow and now touches every state, as detailed in Chapter 1. With this expansion in federal funds came the strings of metrics to determine their “Return on Investment” (ROI): standardized test results. While its intentions were honorable and admirable, like most bureaucratic ventures, once begun, they took on a life of their own. The federal Department of Education has continued to grow, and has needed to justify its existence by pushing standardized testing under the moniker of “national education standards and education reform.”

Since the 1980s, when the Department of Education became a Cabinet-level agency, the federal government has funded over 3,500 separate public school “reforms.”15 In 1983, the National Commission on Excellence in Education, a bi-partisan commission, published a federally-funded study called *A Nation at Risk*, which warned of “a rising tide of mediocrity that threatens our very future as a nation and people.”16 It called for more rigorous academic curriculum standards for both teachers and students. It


16. David Pierpoint Gardner, (Chairman), *A Nation at Risk: The Imperative for Educational Reform* (Washington, DC: The President’s National Commission on Educational Excellence, 1983), 5. Its basic recommendations: (1) four years of English; (2) three years of mathematics; (3) three years of science; (4) three years of social studies; (5) one semester of computer science; and (6) for the college-bound, two years of a foreign language. Ravitch, “Search,” 180.
did not call for any fundamental change in the nation’s educational system. In her latest book, *The Death and Life of the Great American School System*, Diane Ravitch, one of the authors of the *Nation at Risk* report, said of their recommendations:

“A Nation at Risk is notable for what it did not say. It did not echo [Ronald] Reagan’s oft-expressed wish to abolish the U.S. Department of Education. It did not support or even discuss his other favorite education causes: vouchers and school prayer. It did not refer to market-based competition and choice among schools; it did not suggest restructuring schools or school systems. It said nothing about closing schools, privatization, state take-over of school districts, or other heavy-handed forms of accountability. It referred only briefly, almost in passing, to testing. Instead, it addressed problems that were intrinsic to schooling, such as curriculum, graduation requirements, teacher preparation, and the quality of textbooks; it said nothing about the governance or organization of school districts, because these were not seen as causes of low performance.”

Perhaps the committee was going for the low-hanging fruit, as is so often the case in committee work. Or perhaps they were too politically divided to agree on what changes were needed. In any case, they did not begin to address the negative impact of consolidation and bureaucratization inherent in the top-down approach to education management, and thus missed an opportunity to move the national conversation about education reform away from demonstrating proficiency, and toward a more individualized approach to education that is respectful to all of those who are directly affected.

Today, politics permeates every phase of the public education world. Politics not only determines membership on school boards but also school superintendents; public education policy, funding and issues of choice in schools; remedies in equity, and, of course, the nature and extent of education reform in general. The “web surrounding … schools is so complex, fragmented, and incoherent that it drastically


restricts school autonomy and effectiveness.”25 The bureaucratic hurdles to effecting change that will help more students have a better education experience are daunting at best. As Agnes Repplier, the famous literary critic of the late19th century, observed, “Democracy forever teases us with the contrast between its ideals and its realities.”26

The problem of the “bureaucratization” of education was recently addressed by California Governor Jerry Brown in his January 2013 State of the State speech:

“We seem to think that education is a thing—like a vaccine—that can be designed from afar and simply injected into our children. But as the Irish poet, William Butler Yeats said, “Education is not the filling of a pail but the lighting of a fire.” This year, as you consider new education laws, I ask you to consider the principle of Subsidiarity. Subsidiarity is the idea that a central authority should only perform those tasks which cannot be performed at a more immediate or local level. In other words, higher or more remote levels of government, like the state, should render assistance to local school districts, but always respect their primary jurisdiction and the dignity and freedom of teachers and students.

Subsidiarity is offended when distant authorities prescribe in minute detail what is taught, how it is taught and how it is to be measured. I would prefer to trust our teachers who are in the classroom each day, doing the real work – lighting fires in young minds.”27

In summary, the biggest challenge to taking a more individualized approach to educating our students is the shift away from local control to city, state and national control over what constitutes educational success, and how it is to be demonstrated.

26. Quoted in Maeroff, School Boards, 3.
Education funding, which drives the size and quality of our schools and classrooms, the number and quality of our teachers, the quality of education materials, and the education experience of our students, is being tied to the performance by students on tests that are designed, managed, and evaluated far from the place where education actually takes place.

Funding Education

Finances are perhaps the most complex and compelling issue for public schools. From our earliest national history, communities have deemed public education a factor which touches and concerns everyone and which is, therefore, to be supported by the commonweal. As one of the leading experts on funding public education has observed, it “must not become an unfunded mandate” so that “higher standards are imposed without support to improve … conditions.” In general, that supportive task includes (1)

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providing appropriate funds for meeting educational needs of the general and specific student populations and (2) raising student performance outcomes to specified levels.  

The threshold factor is costs. These include salaries, benefits, and pensions for personnel at all levels; payments to suppliers, vendors, lawyers, experts, maintenance, transportation, back office operations, advocacy groups, and services for families or their surrogates, to name but a few. Beyond that, for students in public schools, districts must provide meals, limited health care, and transportation to and from school via vans and busses. During the 2005-06 school year, the average expenditure in school systems of the United States was $10,615 per pupil. The top three were New Jersey ($16,587), New York ($15,837), and Connecticut ($15,219), while Utah ($6,629) Idaho ($7,343), and Oklahoma ($7,623) were at the bottom.


32. See Gerard Giordano, Capping Costs: Putting a Price Tag on School Reform (Lanham, MD: R&L Education, 2012) and Baker and Green, 311-37.


34. The U.S. Department of Agriculture reimburses school boards at the rate of $9.3 billion a year for providing 5.2 billion lunches to 31 million children of elementary and secondary school age. Maeroff, 40.

35. Rothstein, Class and Schools, 37-47.

36. Maeroff, School Boards, 39. Thirty states mandate that school districts provide pupil transportation.

37. Ibid., 35.
Funding these needs is a multi-faceted process. Until the middle of the 20th century, local taxes provided the bulk of school funding. In 1930, 83% came from that source.\textsuperscript{38} Between 1960 and 1979, 33 states used all three levels of revenue sources, including individual income tax, an operation tax, and a general tax.\textsuperscript{39} The modern infusion of federal funds, however, has been breathtaking. Between 1970 and 2002, federal aid to programs in elementary and secondary schools increased from 36% to 63%. The school lunch program alone increased from $299 million to $10.3 billion and expenditures for the Head Start Program rose from $26 million to $6.5 billion. Federal revenue accounted for approximately 8.5% of the revenues for public elementary and secondary education for the 2002-03 school year; up from 6.6% in the 1995-96 school year. During the same period, spending per pupil rose from $7,600 to $9,000. 95% of federal funds are paid directly to states, who allocate their education funds to their districts, based on a variety of approaches.\textsuperscript{40}

Budgeting the costs against the available resources is the main job of school boards and school district administrators.\textsuperscript{41} Most individual schools, and the educators

\textsuperscript{38} Kirst, “Who’s in Charge?” 29.

\textsuperscript{39} Ibid., 45.

\textsuperscript{40} Kenneth K. Wong, “Federalism, Equity, and Accountability in Education,” in Cooper and Fusarelli, Promises and Perils, 21.

within their walls, have little if any control over the many and varied approaches to the
distribution of funds for their operations. As decision-making has been moved away
from the educators and their local educational institutions to more centralized
bureaucracies, so has control over their school’s finances. One of the justifications for
more centralized school management was that it would introduce a level of
“professionalism” that was badly needed. The belief was that schools could, and should,
be managed like large, fiscally efficient corporations, indeed like monopolies. In
today’s public education paradigm, the principals of schools are their CEOs. However,
unlike corporate CEOs, they have little or no control over budgetary decisions that
directly impact the success of their enterprise, i.e., successfully educating their students.
Having been a CEO in the private sector for over 15 years, I can say with certainty that
no successful corporate CEO would cede control over her budget to an outside entity.
Indeed, the best, most innovative and profitable corporations are those that empower their
employees by giving them high degrees of control over how they spend their company
time and departmental budgets. In this way, the irony of the comparison between
managing schools and corporations is complete. How education is funded bears no

42. For a contrast the philosophies behind Marc Leroy, *Taxation, The State, And Society: The
Fiscal Sociology of Interventionist Democracy* (Bruxelles, NY: Peter Lang, 2011); and Myron Lieberman,

43. See Joe and Carol Reich, *Getting to Bartlett Street: Our 25 Year Quest to Level the Playing

27-44; see also Jim Collins and Jerry Porras, *Built to Last: Successful Habits of Visionary Companies* (New
resemblance to the private sector, and presents yet another challenge to creating small, innovative schools that can provide a great education experience to each individual student.

Class Size – School Size

As school control and funding have become more centralized, so have schools and classrooms gotten larger. Although there remains some debate about the efficacy of the reduction in school and class size,\textsuperscript{45} there is solid evidence that smaller schools and classes enable teachers to develop a better relationship with and understanding of the needs of their students.\textsuperscript{46} Smaller schools and class size is the ultimate embodiment of the shibboleth “small is better; less is more.”\textsuperscript{47} The definition of and numbers ascribed to the optimal class size in secondary schools vary widely. In this context, class size is defined as the number of children learning in a classroom with a teacher. The advantages of small classes are (1) frequent

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individualized instruction is geared to the needs and interests of students; (2) teachers use a wider variety of educational materials to enrich teaching to individual styles; (3) increased interaction occurs among pupils and between teachers and students; (4) greater use of innovative materials and methods; (5) increased student self-confidence; (6) more small-group work; (7) improved human relations between teachers and students; (8) fewer disciplinary problems; and (9) higher teacher morale. Moreover, prominent studies show that the influences of education in smaller classes have long-term positive effects that lead into the college years.

For generations, the refrain “smaller class size” has been a mantra of educational reform. In announcing his Administration’s educational initiative in 1998, President Clinton urged that “we must make our public elementary and secondary schools the best in the world .... and every parent knows the key -- good teachers and small classes.” The President called for an average of 18 students per class in the first through third grades.

48. Ibid., 115.


50. Achilles, Let’s Put Kids First, 17.

51. Ibid., 4.

As we saw in Chapter 3, there is hope. Where school districts are creating educational choice for teachers, students and families, where they are creating schools and classrooms that are ideally sized, and where the responsibility for student success rests squarely on the shoulders of the teachers, principals and students within those schools, we are seeing real improvements. Students are staying in school and becoming life-long learners.\footnote{Jay Greene and Marcus Winters, “The Effect of Residential School Choice on Public High School Graduation Rates,” \textit{Peabody Journal of Education} 81 (2006): 203-216, http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=EJ773381&ERICExtSearch_SearchType_0=no&accno=EJ773381 (accessed February 7, 2013).}

The Impact of Teachers Unions

teachers unions were concerned with (1) worker rights; (2) professional standing; and (3) institutional improvement.\(^{56}\)

Once the shock of the concept wore off, however, it seemed reasonable to conclude that “to the extent that teachers or the education community have no effective voice in matters that affect the educational expertise, we should not be surprised if they do not accept responsibility for disappointing consequences.”\(^{57}\) However, once in place, the unions went on to become “key players in education politics, in some cases determining who gets elected to local school boards.”\(^{58}\)

A study by Professor Frederick M. Hess, of the University of Virginia, found that in the early 1990s unions “were generally supportive of proposed reforms” and that they were “among the most influential actors in the making of local school policy” at that time, ranking third behind school boards and superintendents, but ahead of teachers, civic business leaders, community/PTA/parents, local politicians, and even the state.\(^{59}\) The unions were reported to be “highly supportive of reform proposals” and were regarded as

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supportive of evaluation reforms, site-based management plans, professional
development steps, and curriculum improvements.\textsuperscript{60}

Teachers’ unions have done a good job of ensuring that educators keep their jobs,
and defending teachers’ rights. In the process however, they have created contracts that
define a teacher’s job so specifically as to limit the ability of the teacher, and his principal
to educate individuals, and to innovate in any way that changes the nature of their union
contract.\textsuperscript{61} Unfortunately, local or individual innovations are often seen as being anti-
union. Unions alone are not the problem, however. Like schools and school districts,
when they are too large, making the innovative changes that will help more individual
students access a good education is hampered.\textsuperscript{62}

As with the phenomena of change and reform – discussed in the next section –
there is an irony with regard to the consequences of union involvement therein. It is that
in order “to challenge teachers unions, it is not now necessary to attack them directly; one
need only to challenge the institution of public education as currently organized” because

\textsuperscript{60} Ibid., 20-21. 79; and Jo Bennett and Janice Hansel, “Institutional Agility: Using the New
Institutionalism to Guide School Reform,” in Cooper and Fusarelli, Promises and Perils, 219; see also
Ronald D. Henderson, et al., eds., Teacher Unions and Education Policy: Retrenchment or Reform?
(Boston: Elsevier, 2004); Lorraine M. McDonnell and Anthony Pascal, Teacher Unions and Educational
Reform (Santa Monica, CA: Center for Policy Research in Education, 1988); and Susan Moore Johnson, et

\textsuperscript{61} Karl Weber, ed., Waiting for Superman: How We Can Save America’s Failing Public Schools,
(New York: Perseus Books Group, 2010), 198.

\textsuperscript{62} Ibid.; see also Deborah Meier, The Power of Their Ideas – Lessons for America from a Small
School in Harlem (Boston: Beacon Press, 1995).
teachers’ unions, once a critical voice for teachers in their struggle for dignity, respect, and a little money, now find themselves the prime defenders of the institution they sought to criticize.\textsuperscript{63} In short, after successfully challenging the status quo, teachers unions have come to represent the \textit{status quo}.

\textbf{National Reform Efforts}

In his classic study of the nascent United States in the first quarter of the 19th century, the great French writer Alexis de Tocqueville wrote, “America is a land of wonders in which everything is in constant motion and every change seems an improvement.”\textsuperscript{64} But “change” is not necessarily the same thing as “reform” – and the latter is not necessarily the same thing as “progress.”

Professor Tyack picked up on this thread, making the following observation about educational change:

In a society so prone to equating change with progress, it is not surprising that people who promise to reinvent schooling should attract followers. Innovators can appeal to the faith that Americans have invested in education as an engine of social betterment. Legislators, foundation officials, business leaders, social critics, and others may feel compelled to do something big and new about education when schools are considered to be in crisis. Indeed, the dream of a


\textsuperscript{64} Alexis de Tocqueville, George Lawrence, ed., \textit{Democracy in America} (Garden City, NY: Doubleday Anchor Books, 1969), 404.
golden age -- either in the past or future -- has often been a vital part of campaigns to reinvent education in the present."\textsuperscript{65}

Accordingly, the history of modern education reveals a propensity for what Professor Hess called “fetish innovations” and “a frenetic search for quick solutions is precisely the kind of leadership unlikely to produce long-term improvement.”\textsuperscript{66} This phenomenon occurs because much of the “educational change” is being dictated from a central bureaucracy as though there were one American educational system, when in reality there are thousands of schools, teachers and students, each having different needs and orientations.\textsuperscript{67}

Consequently, “implementing change is an onerous and time-consuming task, one for which a politically-charged bureaucracy is ill equipped.”\textsuperscript{68} Rather, school improvement requires the time, focus, and commitment that is best found within the schools themselves. And the improvement that is most needed today, to bring back the

\textsuperscript{65} David B. Tyack, “Reinventing Schooling,” in Ravitch & Vinovskis, \textit{Learning From the Past}, 209.

\textsuperscript{66} Hess, \textit{Spinning Wheels}, 7, 53.

\textsuperscript{67} Vinovskis, \textit{History}, 253; Hess, \textit{Spinning Wheels}, 124-25. Tyack’s “one best system” analysis suggests that all urban school districts have similar institutional arrangements that insulate them from the broader community thus will address form in similar ways.

\textsuperscript{68} Hess, \textit{Spinning Wheels}, 152.
education of individuals, is to undo much of the “reforms” that have been put into place in the recent decades.\textsuperscript{69}

As more federal money is poured into our modern era system of education, so comes the need for “accountability and cost effective management” in public schools.\textsuperscript{70} However, after years of efforts to develop a system of accountability, taking a top-down approach, it was realized that its principles were misdirected only to the “end product,” which was measured by “standardized” test scores of the students. Professor Irving Buchan, of Johns Hopkins University, agrees, contending that accountability principles “must take place at every stage throughout the system, not simply at the end.”\textsuperscript{71} This must be accomplished, he urges, by “moving from vertical to horizontal decision-making, and by collaboration rather than mandates.”\textsuperscript{72} Any serious study of the history of American education and the incessant attempts at “reform” inevitably brings to mind the classic last line of F. Scott Fitzgerald’s The Great Gatsby, which sums up life as an exercise “…beating on, boats against the current, borne back ceaselessly into the past.”\textsuperscript{73}

\footnotesize{\textsuperscript{69} Ibid., 7, 48-50; see also D.T. Conley, \textit{Who Governs Our Schools: Changing Roles and Responsibilities} (New York: Teachers College Press, 2003); and David L. Kirp, “Changing Conceptions of Educational Equity” in Ravitch & Vinovskis, \textit{Learning From the Past}, 97-112.}


\footnotesize{\textsuperscript{71} Buchen, \textit{The Future}, 62-63, 190 (emphasis added).}

\footnotesize{\textsuperscript{72} Ibid., 192.}

\footnotesize{\textsuperscript{73} W. Ranson, ed., \textit{Collected Works of F. Scott Fitzgerald} (Hertfordshire, England: Wordsworth Editions, Ltd., 2011), 684.}
Given the tenor and reach of national reform efforts such as the No Child Left Behind Act of 2001 (NCLB), it is no wonder that these are frowned upon by educators who are concerned with ensuring an individualized approach to education. This attitude towards these reforms was expressed recently by the group “Opt Out,” a group of thousands of educators, including Diane Ravitch and Deborah Meier, both respected educators whose works are cited in this Chapter:

…we are committed to our belief that the narrative must change – we must reclaim public education and preserve and improve real teaching, real learning and acknowledge the importance of social and civic education as a right and a necessary component to caring communities within public schools. The business model of education is cold and defined by numbers. Education is messy. Teaching and learning are messy and involve human beings who must be nurtured and supported as individuals who will be the future citizens of our country. We cannot minimize human beings to “numbers” or “data” and we cannot attach high stakes to these numbers; this is harmful to our children, our educators, our schools, our community and our democracy.74

So often it is that principles of physics can also be applied to those of philosophy. In education, as with everything else on earth, nothing can be built from the top down; rather, a strong foundation is a prerequisite. Likewise, as Herman Hesse said, “wisdom will not come from repeating errors again and again.” Unless these patterns of top-down “reform” are dramatically changed, therefore, education will remain “the only profession that devours its young.”75


Aristotle. *Poetics* Chapter IX, line 1. 334 BC.


Bell, Terrel H., and Donna L. Elmquist. “An Appraisal of Secretary of Education Lamar Alexander’s First Year in Office.” *73 The Phi Delta Kappan*, No. 10 (June 1992), 4-6.


Garber, Mary Ann and Stephen W. Garber. Beyond Ritalin: Facts About Medication and
Other Strategies for Helping Children and Adults with Attention Deficit

Gardner, David Pierpoint. (Chairman). A Nation at Risk: The Imperative for Educational
Reform . Washington DC: The President’s National Commission on Educational
Excellence, 1983.

Garner, James W. Reconstruction in Mississippi. Baton Rouge: Louisiana State

1968.

Gay, G. Culturally Responsive Teaching Theory, Research, and Practices. New York:


Genovese, Eugene D. Roll, Jordan Roll: The World the Slaves Made. New York:

Giordano, Gerard. Capping Costs: Putting a Price Tag on School Reform. Lanham, MD:

Giroux, Henry A. Living Dangerously: Multiculturalism and the Politics of Difference.
New York: Peter Lang, 1996.

Glanz, Jeffrey. Bureaucracy and Professionalism: The Evolution of Public School

the Superintendent of Education in the New Millennium. Arlington, VA:


Kauffman, Ewing Marion Foundation.


McCaulley, Mary H. Psychological (Myers-Briggs) Type Differences in Education. Gainesville, FL: Center for Applications of Psychological Type, Inc., 1980.


Plessey v. Ferguson, 163 U.S. 537 (1896).


Rief, Sandra F. *How to reach and teach ADD/ADHD children: Practical techniques, strategies, and interventions for helping children with attention problems and


Swanson, Christopher B. “Progress Postponed.” *Education Week* 29, no. 34 (June 10, 2010): 22-23, 30.


U.S. Constitution, Amend. XIV, § 1.


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