

1. THE EXISTING SYSTEM

In Figure 1 below, we observe that during the last 47 years, there has been an enormous increase in spending for the education of our children. However, during that period there has been no meaningful increase in the number of students in our schools. Spending has grown at ten times the rate of enrollment. Thus, we are now spending almost three times more per child, in inflation-adjusted dollars, to educate our children than in 1970. Most the money has gone to either increase the pay of educators or for an increase in the number of adults working in our public education system. We now have almost twice as many adults per student as in 1970. Growth in adult employment has grown four times faster than student enrollment.

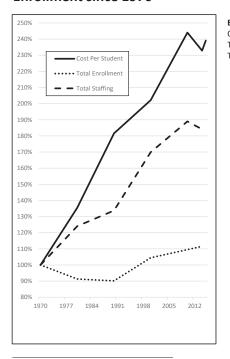
In spite of these major increases in both money and staffing, there has been no appreciable improvement in the academic achievement of our children. This is shown in Figures 2 and 3 below.

One is forced, therefore, to conclude that improved academic achievement is not going to happen if we just continue to put more money into the system or hire more people to work on the issue. We've tried that and it hasn't worked!

As a student of our public education system, I have had the privilege of visiting schools in states all across the country. Some of these were America's finest schools. Students in those schools were receiving an excellent public education regardless of their race, ethnic origin, or socioeconomic status.

Visiting and observing these schools, I came to realize that public education can work. In our country, we have hundreds of wonderful public schools. In fact, almost every city has at least one, if not several, outstanding schools. Sadly, however, these schools are the exception, not

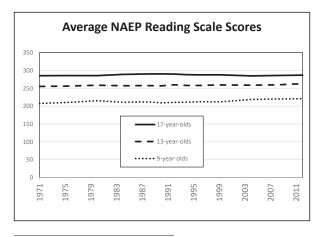
Figure 1 Trends in Spending, Staffing, and **Enrollment since 1970**



Baseline 1970: Cost = \$5,242 (2017 dollars) Total Enrollment = 41,934,376 Total Staffing = 3,360,763

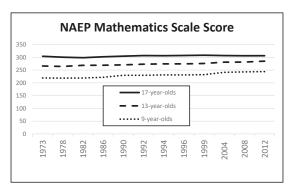
Source: National Center for Education Statistics Digest of Education Statistics 2017 Expeditures: Table 236.70 Enrollment: Table 203.80 Staffing: Table 236.10

Figure 2 **Average National Assessment of Educational Progress (NAEP) Reading Scale Score**



Source: National Center for Education Statistics Digest of Education Statistics 2017 Table 221.85

Figure 3 **Average National Assessment of Educational Progress (NAEP) Mathematics Scale Score**



Source: National Center for Education Statistics Digest of Education Statistics 2017

Table 222.85

the norm. The best of these schools have been thoroughly examined in various books, most of which now occupy space in my home library.

Seeing that the United States has wonderful schools, as part of the public system, I sought to find an entire school district that operated as effectively. I wanted to find a district in which all the schools, not just one or two, possessed the characteristics I had observed in high-performing schools.

After devoting nearly a year to the search, I found only one district that had endeavored to create an entire system that operated as effectively as the individual high-performing schools I had visited. That district was in Vance County, North Carolina, located about 60 miles north of Durham. The year was 1993. Then-Superintendent, Betty Wallace (she was subsequently fired), had transformed an entire district school system in three years, and the results were astounding. When Betty assumed leadership of the district, Vance County Schools were rated in the bottom 10 percent of all schools in North Carolina and were at risk of being taken over by the state. Betty came in, with a plan, and in three years Vance County Schools had improved so much the district was rated in the middle of all North Carolina school districts.

Vance County is a small rural area. At the time I visited this 7000-student district, about 60 percent of the students served were African-American, and about the same percentage of students lived in poverty. The area had two high schools, two middle schools, and ten elementary schools. Betty wrote about her experiences in Vance County and described her strategy for transforming public schools. Her book is called *The Poisoned Apple*, and I highly recommend it.

Visiting Vance County Schools, and talking at length with Betty Wallace, firmly convinced me that it is possible to transform an entire school district for the better. She did it, albeit on a small scale, and in doing so, she created a practical template that others could use.

Betty was fired a couple of years later, following her decision to terminate a school administrator. The administrator had been accused of sexual harassment. Betty's investigation of the charges gave her reason to believe they were valid, and she terminated the individual. Subsequently, the school board decided to side with the administrator and fired Betty for wrongful dismissal. Sadly, Vance County Schools were never the same.

Betty's ideas are as applicable today as they were when she implemented them back in the early 1990s. She knew that the problem of low-performing schools is not that the children can't learn; rather it is a function of the competency of the adults and the constraints of an obsolete system that hinders learning. She also knew that unless the system is dramatically modified, the effective education of all children is impossible. Betty worked on turning around a district, and she succeeded. After she left, however, the district soon went back to its old low-performance levels and, once again, began to fail the very children it was set up to serve. I experienced the same phenomenon in Seattle. Others have also seen the same thing occur—temporary success that is subsequently reversed. Sustainable change is virtually impossible to achieve in a school or a district.

Despite these setbacks, we must change the system because it is failing our children and our nation. Here is a review of the extent of the problem:

- Only 26 percent of high school graduates meet the college readiness benchmarks in all four subjects of the ACT Test (English, reading, mathematics and science).¹
- Only 27 percent of fourth-graders and 32 percent of eighthgraders are proficient in reading, and fully 32 percent of fourthgraders and 22 percent of eighth-graders score "below basic."²
- Over 3 million students drop out of high school annually.³

- The U.S., which once had some of the highest graduation rates of any developed country, now ranks 22nd out of 27 developed countries.⁴
- The U.S. now ranks 27th of all developed nations in overall education proficiency of our students—just behind the Slovak Republic.⁵
- The U.S. spends 39 percent more per pupil than Germany, 33 percent more than France, and 39 percent more than Japan.⁶
- The United States has the largest per-capita prison population in the world, followed by Russia. The highest-scoring European countries in international education comparisons tend to be those with the lowest prison populations.⁷

Let's take a look at this system that is so badly in need of transformation.

Today's school system operates very much like a production line in an early twentieth-century factory. Every student, regardless of ability or preparation, attends school for the same length of time each day, each week and each year. Every student is taught the same curriculum, delivered in much the same way, and we expect the same outcome for nearly every child.

However, any person knowledgeable about production knows the only way a production line works well is if the incoming raw material is uniform in all respects. In education, we have anything but uniform raw material. Our students come from all backgrounds. They have different interests, different learning styles, different motivations, different levels of learning readiness, different home environments, different amounts of sleep the night before, etc. No two students are really alike, yet our present system treats them as virtually the same. Our present system has never effectively educated every child, and it never will. In fact, as mentioned earlier, the system was not designed to effectively educate every child, and it has successfully not done so for almost 120 years.

In repeated efforts to remedy this situation, Congress, state legislatures, and local school boards have all put in place thousands of regulations. Each of these regulations was designed to correct a perceived deficiency in the system. These regulations have been piled one upon the other to the extent that the system is now tightly handcuffed. Even the best principals and superintendents find it virtually impossible to operate an effective school or district under the current burden of rules, procedures and paperwork.

In fact, all of the effective schools in this country are excellent in spite of the larger system, not because of it. The leaders of these schools regularly break the rules or get waivers in order to educate their children. Frankly, it is the only way excellence can be achieved.

To substantiate the above points, let's look at the core structure of the current system.

Teaching

To BECOME a teacher in any state, one needs to graduate from an approved college of education and gain *certification*. In most states, this is the only way to become an approved public school teacher. There are a few states with *alternative certification laws*, but these are narrow exceptions and only a small percentage of teachers gain entry into the education system through these alternative means.

The major exception is Teach For America (TFA). This organization hires young people who are some of the top graduates of their respective universities and provides an alternative certification process via training over a summer and then ongoing training during the first year of teaching. Teach For America currently has over 20,000 cohorts actively teaching in 38 states and the District of Columbia. In addition, there has been some recent collaboration with other alternative certification programs and universities. One example is the Teacher Residency program now operating in several cities. This program, which primarily focuses on bringing in students of color, has provided an excellent pro-

gram for enhancing the diversity of our teaching corps. Both of these programs still involve a very small number of teachers.

In most states, there are numerous institutions licensed to grant teaching certificates. In Virginia there are 50, and in my state, Washington, we have 25. Pennsylvania has over 90. As a nation, we have over 1400 such schools. The spectrum of quality between the best and the worst teaching institutions in each state is substantial. Moreover, there is no established standard to measure the effectiveness of any given educational training program. Again, there have been some recent moves to change this situation. Both North Carolina and Tennessee have moved to a value-added measurement of their education schools. That effort is gaining traction in other states as well.

Teachers gain their certification from their university upon graduation. Certification is a state-mandated requirement and must be met before a graduate can be hired by a public school district. Gaining certification, however, simply means one has completed the necessary course of study dictated by the state. It does not mean that a person has a proven ability to teach children. This is because most education schools do not have a required "proof of competency" in order to gain certification. As a consequence, being "certified" is no guarantee of being "qualified."

I do not mean to imply that we do not have competent teachers in our system. We most certainly do, and they are a gift to the students they serve. However, high-quality teaching is not the norm; it is the exception. This reality is caused by education colleges having very low standards of admission, mediocre course work and limited field training. Recently, a few states have recognized this issue and have installed what is called the *Teacher Performance Assessment* (TPA) or similar names. This is a relatively new effort and is being met by resistance from many education schools.

To graduate from a typical education school, the student must spend time teaching in a real classroom. It is called *student teaching*. These programs vary in length, but six weeks is not uncommon. A student may student-teach in a second-grade class, but upon graduation, that same student, who will now be certified in elementary education, may be hired to teach a fourth-grade class. This experience disconnect often happens and the effect is to put a new teacher into a classroom to work with students of an age she has never taught before, with a curriculum she has never seen before, in a school she has never visited.

Moreover, when a new teacher comes into a school, her students' previous teacher seldom provides any information about the class. To make matters worse, most districts do not supply the new teacher with meaningful lesson plans or details on how to teach the curriculum. That same new teacher will likely not be given a mentor, and more than likely will be assigned to the toughest classes in the lowest-performing schools. This is a recipe for failure.

In fact, thirty percent of teachers leave the profession within five years. In urban school systems, fifty percent leave within three years. It is not hard to understand why.

Finally, data also tells us that the graduates who performed best in their college of education programs are the first students to leave the profession.¹⁰

As long as the most gifted education students leave the teaching profession early and as long as our brightest and most talented citizens are not entering the profession of teaching at all, we will not dramatically improve the quality of classroom instruction in our public schools. We will discuss this issue in more detail in Chapter 5.

Leadership

EVERY ORGANIZATION needs effective leadership and in our school system, that leadership is provided by principals and superintendents.

Principal

To become a principal also requires certification from an approved school of education. However, to gain admission for principal training, one must first have been a teacher for two or three years. In other words, one must have attended an education school, become certified to teach, and survived the first two to three years of teaching.

At most schools of education, there are no other qualifications needed to become a principal. One does not need to present recommendations from a principal or superintendent, nor have demonstrated leadership skills, nor have been an outstanding teacher. (In fact, some of our very worst teachers are the first ones to apply to become principals. If you can't make it in the classroom, become an administrator.) One merely needs to have taught for 2–3 years and have enough money to pay the tuition. Because many schools of education need students' tuition dollars, to apply is to be accepted; to be accepted is to graduate and to graduate, because of the demand for principals, is to get hired. In most states, a principal receives tenure in just three years, meaning public school students and teachers will have that person in a leadership position for 20 to 30 years. A few principal programs do have some selectivity, but they are rare and the selectivity is not extensive.

Principal certification is usually a one-year program and graduates receive either a master's degree in School Administration or simply a principal's certificate. Again, the only place you can get such a certificate is at an education school. As was the case with teacher training programs, the spectrum of quality between the best and worst principal training programs is substantial.

As a consequence of this system, what we have in education is *leadership by accident, not by design*. It is the only system in our society that I know of where *promotion is done by self-selection*. Nearly every teacher who seeks to become a tenured principal will become one, regardless of their lack of leadership and management skills.

Superintendent

In most states, the principal self-selection process repeats itself at this level. Forty-five of the fifty states require that superintendents be certified and this is again obtained by attending an approved school of education. Most superintendent candidates receive a Ph.D. or a Doctorate in

Education, many with a major in curriculum studies. One can self-select into most of these programs just as easily as signing up for principal training.

Few schools of education have any meaningful leadership training programs and few recognize how different the job of superintendent is from other management positions, particularly in urban school systems. Superintendent candidates should receive training in organizational behavior, labor relations, finance and budgeting, technology, construction contracting, etc. Few, if any, such skills are taught in schools of education. Once again, public school districts end up with leadership by accident, not by design

Schools of education hold a monopoly on both the supply of teachers and of leaders for our schools. As will be detailed later, this single source of supply poses a major impediment to improving our schools.

We will talk more about education leadership in Chapter 6.

Governance

SCHOOL DISTRICTS are governed by elected school boards. School board members are elected by the citizens of the community and generally serve four-year terms. School boards are set up to be policy-making bodies, but they regularly delve into operations. Though some candidates for school board are qualified to oversee the operation of a large and complex organization, the vast majority are not. This lack of competence often creates a leadership vacuum resulting in chaotic district governance.

The membership of school boards often changes as election cycles occur. Quite often, a majority of a board is changed in one election. When that happens, the policy direction of the district often changes. Sometimes, a board's new majority decides to hire a new superintendent. This regularly occurs in urban systems where the average tenure of a superintendent is only 3.6 years.¹¹ This high turnover of school board membership and of superintendents makes long-term improvement very difficult, if not impossible. Poor governance combined with ineffective

leadership creates an impossible situation for the effective management of a school district. We discuss governance issues further in Chapter 7.

Centralization

School districts are set up as centralized bureaucratic institutions. Virtually all decisions are made at the central office. Principals seldom have much authority over people, money, or curriculum, but they are expected to be accountable for how their school performs. Even a rookie student of management would recognize immediately that this arrangement is simply not reasonable. To effectively lead and manage any organization, the leader should have authority over hiring and a major portion of the budget. Few principals are granted such autonomy. Realistically, in most districts, principals control the opening of the school each day and ensuring that the school operates smoothly. Though they are held accountable for much more, that really is the limit of their authority. They are managers, not leaders.

Supposedly, principals are also to act as education leaders of their school. Some perform this function very well, but many do not. In either case, however, it is ludicrous to hold a principal accountable for the performance of the school's teaching staff when he/she has no say in the composition of that staff. As stated, decisions on staffing, budgets, and curriculum are generally made at the district level. This top-down situation, combined with the myriad of regulations imposed upon schools by both state and federal regulations, creates a system that perpetuates mediocrity and discourages innovation.

Joseph Olchefske, former superintendent of the Seattle Public Schools, describes America's education system as a "Soviet Union model" system. The former Soviet Union ran a national economy based upon a centralized system. In that system, large numbers of people were employed, but little work got done and those tasks that were performed were not done well.

This analogy, applied to our public school system, has considerable validity. A classic example of what I am talking about can be seen in the New York City Public School system. There, the school system employs more administrators than the entire nation of France and, at the state level, the State of New York education department has more education administrators than all the nations in Western Europe combined. Moreover, the New York City Public School system, with 1,000,000 students, has a central office staff of 6,000. The Archdiocese of New York, which operates hundreds of Catholic schools and serves over 200,000 students, has 35.¹²

Time

Our public schools are a time-based system as opposed to an achievement-based system.

The School Day

In almost all schools, the school day is six hours. The starting and stopping times vary between districts and between elementary and secondary schools, but the net amount of time, regardless of when the day starts, is six hours. In secondary school, the day is divided into periods of one hour (actually 50–55 minutes). In most schools, a period ends with the ringing of a bell, and then the students move to another class to attend another period. One period will cover one subject. Students may take English in first period, math in second period, history in third period, etc. In elementary school, the rigidity of this schedule is reduced as students normally have only one teacher and attend class in only one classroom. This situation tends to give elementary teachers more flexibility in terms of the time spent on a given subject in any given day. (This is not always the case, as some districts even specify the number of minutes an elementary teacher must spend on specific subjects.)

However, in secondary school, the day is generally fixed to a prescribed schedule of six periods. This situation forces teachers to develop lesson plans that will only take one period to deliver. The driver here is time, not learning. Teachers are forced to use the period to convey the lesson of the day. Some students may learn the lesson in 10 minutes; others may not understand it after 55 minutes. It doesn't matter. The period ends and the students have to leave to go to their next class.

Learning takes a back seat to time. The clock drives what occurs and, as a consequence, students soon learn that their learning and understanding is secondary to the teacher's need to cover the material. The control of the lesson by time affects a student's ability to achieve. If a student is a fast learner in English, but a slow learner in math, the present system will fail the student's learning in both subjects. Slow learners in math will quickly get turned off to the subject because they can't keep up. Ultimately, they will come out of high school under-educated in a core subject. Conversely, fast learners in math may be equally turned off because they get bored waiting for the class to progress.

The School Year

The school year is 178–180 days in length, just slightly less than half a calendar year. The school year was originally set to comply with the student's need to help parents with farm labor and other tasks needed for the family to survive. In the early days of the twentieth century, this made sense. Young people didn't need a lot of education to survive, and there was always plenty of work to do at home. Today, however, that is no longer the case. Only three percent of America's families now work on the farm. Moreover, the educational needs of young people, including those who will become farmers, have grown exponentially during the twentieth century, but we still have the same school year. This school year means that our children are out of school 81 weekdays a year or about 16 school weeks: 365 – 104 (for weekends) – 180 (the school year) = 81.

Other industrialized nations have determined that a 180-day school year is insufficient. The education year for young people in other countries is quite different from what we provide to our children. From the longest to the shortest, the school year for other major nations is as follows:

Russia—210

Japan—200

Singapore—200

Germany—193

South Korea—190

England—190

Finland—187

Canada—183

USA-18013

The United States has one of the shortest school years in the developed world. Moreover, in many cases the school day is also longer in other countries. In Japan, for example, students go to school more hours per day, and more weeks per year than do American students. The net effect is that a Japanese child, upon graduation from high school, will have attended school for at least two American school years more than an American student in the same twelve-year period. In Singapore, they attend school one and a third years longer. It is little wonder that students in other countries are out-performing American students in international exams. In addition, some countries, like Finland, have extensive preschool programs designed to get all children well-prepared for learning prior to entering school.

Grades

The class in which students are placed is also based upon time—only in this case it is really age. If a child is eight years old, that child is placed in the third grade. Not because that is their level of learning readiness, but rather because the child is eight. The child could be reading at the fifth-grade level, doing math at the fourth-grade level, and science at the second-grade level. However, because the child is eight, that child will take all subjects at the third-grade level regardless of how quickly or

slowly they learn the material. All grades in our K–12 system are based upon age, not learning readiness or achievement levels.

Graduation

Graduation from school is also based on time. To graduate, after 12-13 years of school and receive a diploma, a student needs to collect a certain number of credits (called *Carnegie Units*). These units only apply to classes taken from the ninth grade through the twelfth grade. A credit is generally based on having received a passing grade for one year of class time or 9,900 minutes of instruction (55 minutes x 180 days). Half credits are sometimes given for a class lasting only a semester. A credit is not a measure of learning; it is a measure of time spent in class. Some refer to it as a "seat time" measure. In other words, to graduate from high school requires that a student spend a specific quantity of seat time in school attending specific classes.

Graduation occurs at the end of the twelfth grade, assuming the student has a sufficient number of credits. Up to 24 credits can be required for graduation. Normally, a student needs to earn four credits in English, three in math, three in science, etc. In fact, students not only need to acquire a certain number of credits to graduate, they need them in the proper subjects. I once witnessed a situation in which a student did not graduate because he lacked a half-credit in physical education (PE).

What all of this says is that seat time, rather than real learning, is the primary measurement used for meeting graduation requirements. Expressed another way, in public education, measuring input is more important than measuring output.

Group versus Individual

I HAVE described our system of education as a *factory model*. Every child in a class is taught to the same curriculum, delivered the same way for the same length of time each day. However, every child is different. Students arrive at school with widely differing levels of learning readiness. Some pick up reading quickly, others find it very difficult; some find

math interesting, others do not, etc. In our system, the student's particular interests and aptitudes are really irrelevant. The group receives the instruction and if some students understand the material and some do not, that is considered okay. I classify this as a system focused on teaching rather than on learning.

In the typical American classroom, students are told what to study and when to study it. They cover content, rather than develop anything essential. They're pushed to jump through hoops and outperform peers, hollowing out any sense of purpose. Even top academic achievers retain little from their coursework.

Today, the purpose of U.S. education is to rank human potential, not develop it.¹⁴

Again, not every school works this way and certainly not every classroom, but as a total system, this description is accurate.

School Funding

NOT ONLY do principals seldom have control over the money spent within their school building; most states fund their public schools in a one-size-fits-all manner. This funding is generally based on the number of students enrolled in the school system. Some states provide a slight increase in funding for a non-English speaking child and both the states and the federal government provide additional money for special education children. These funding variances tend to help, but tend not to cover the additional costs necessary to provide the needed services to these special needs children.

For example, a child who speaks no English and is entering kindergarten is a relatively easy problem to overcome. However, a student entering high school who does not speak English is another story altogether. In most state-funding patterns, those two children would be funded for the same amount. The same is true for special education children, although there are four levels of funding for these children. A child who has slight dyslexia is one issue; a child who is a paraplegic or a child who is deaf or developmentally disabled is entirely different. Though funding

patterns differentiate severely handicapped children from those who are modestly handicapped, the amount of money allocated for the former is nowhere near sufficient for the educational costs incurred. The law requires that these children receive as normal an education as possible, as well they should, but the amount of money provided is insufficient to comply with the law. The net effect is that money is diverted from regular students to help fund the needs of special education students.

In some states, local property taxes constitute the primary source of funding. In these states, there is also inequitable funding as property-rich communities can better fund their schools than property poor districts. Funding per student can vary by thousands of dollars per year in these states.

States also set compensation and benefit levels for teachers. Salaries for teachers tend to be based upon years of service and credits or advanced degrees attained. Virtually no compensation is tied to real class-room performance, or to the proven ability of a teacher to advance the learning of children under his or her care.

Conclusion

FROM THE description above, it is easy to understand why so many of our children do not receive the education they need and deserve. The system is the problem. Unless and until we change it, we will constantly be disappointed by our inability to improve the level of student achievement.

Over the past fifty years, policy-makers have initiated dozens of education reform programs that were supposed to improve student achievement. Many had some positive effect, although some were detrimental. Most did little more than tweak the system, rather than change it. Really good ideas employed in a flawed system will rarely have any meaningful impact. That certainly has been the case with public education. All of the reform ideas of the past four decades have had little, if any, positive impact on student achievement. Also, we have witnessed that investing

more money into a failed system will simply produce a more expensive failed system.

To summarize five core aspects of our public education system, what we have is:

- An adult-focused system, but we need a student-focused system.
- A teaching-focused system, but we need a learning-focused system.
- A group-based system, but we need an individual-based system.
- 4. An input-focused system, but we need an output-focused system.
- 5. A time-based system, but we need an achievement-based system.

In other words, our present system is wrong and no matter how much we attempt to improve it, it will never meet the needs of all our children or of our society. To make real progress we must fundamentally transform the public education system.

Changing the system to operate differently in the above five areas will, over time, result in enhanced learning for all of our children.

It is my belief that the most important institution in our free democratic society is our public school system. Fixing our schools, so they work for all students, is not only the right thing to do for our children, it is the right thing to do for our country.

If we are serious about educating all our children, we must first fundamentally change the existing system of public education. The change must start with state laws.