August 2018 Theme: Healing Sick Schools

The rise, the problems and the rehabilitation of K-12 education

By

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Our theme in this Asora Update, about healing sick schools, considers:

- Gutenberg who not only invented printing but also self-pacing.
- Luther who not only sought to save souls but also to make them prosper.
- Sturm who invented graded schools some 481 years ago in 1537.
- The virtuous spiral of literacy and national wealth.
- That progressive education practices are often oxymoronic.
- How to include more self-pacing within graded schools?
- That summer vacation markedly "subtracts" math skills.
- Audio visual and related technologies used mostly as supplementary.
- Importance of measuring mastery with tests: SAT, ACT and NAEP.
- Technologies for distance learning and artificial (machine) intelligence.
- Novel instructional methods enabled by technology.
- K-12 education as an economic sector is dead last.
- The voucher proposal of Milton Friedman in 1955.
- Expanding educational choice within government schools and services.
- Research by Asora and others on choice enabled improvements.
- The K-12 marketplace needs reliable consumer information.
- Asora's efforts to publish reliable consumer information on school performance.
- Where K-12 co-exists and even thrives with for-profit enterprises.
- Asora's Stellar Schools franchising business plan frightened investors away.
- Where a Communist, Gorbachev, liked capitalistic schools with vouchers.
- Where the Republican Education Department, of G. W. Bush, was communistic.
- Political efforts to rehabilitate the K-12 economic marketplace.
- Strategies to get the reform camel's nose under the K-12 tent.

We are now in the process of authoring a book on these topics, entitled

Sick Schools - Diagnosis, Cure and Prevention of School Maladies

By David V. Anderson

We plan to publish the book in 2019.

Let's now elaborate on the previously listed points in our theme essay:

Healing Sick Schools

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To obtain this downloadable essay, **HealingSchools.pdf**, in full, please access ASORA's ***Reports on Reform*** page here: http://asoraeducation.com/page35/page35.html

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Preview

The long view of education of children within western civilization starts well before the printing presses of the 15th century. In those early times most children remained illiterate while a few learned in small groups or were tutored. These methods worked because the teacher or tutor was in direct contact with the students and could directly monitor or verify their mastery of the subject. Once printed books became available and affordable, well after the 1450's, many more students had access to these resources but the numbers of teachers did not increase as fast- for obvious economic reasons. The only economic format that could accommodate the mismatch in the numbers of students and teachers was what is now called group instruction. Early on in the 16th century graded schools with group instruction were established- not really so much different than those of our current era, well over 450 years later. In the context of American K-12 education a student's age was traditionally used for the initial classroom placement that could subsequently be adjusted through retention or double-promotion to align that pupil's placement with the his or her actual performance level. That has changed as a result of other social/political factors that have led to the practice of social promotion in which students rise through the "grade" levels of a school without actually achieving the mastery levels associated with their placements. This means that report cards, transcripts and diplomas generally misrepresent the skill levels of the students. Result: Sick schools in which significant percentages of students fail to meet expected grade level performance. We have quantitative measures for this within the United States from the Nation's Report Card that has been testing and reporting student achievement levels since 1970. For skills in reading and mathematics the results for the early 21st century are dire: In public schools well less than half are at grade level and by 12th grade only about one-fourth are proficient in both subjects. Ditto regarding knowledge about history and civics. And the average private school is not much better. What are the problems? And who are the ones responsible for this mess? It's tempting to blame the teachers, books and instructional methods and most education reform efforts address those causal factors in their efforts to improve schools. Sometimes forgotten by school reformers is the role that healthy economic incentives can play in fostering the specific improvements. Nobel Laureate economist Milton Friedman took up this challenge in the 1950's and proposed government funded vouchers that would give parents more control over their children's schooling. But are vouchers sufficient to reform the education marketplace? Not so far. Missing from that market is honest consumer information to replace the reality that schools lie to parents and others about their performance levels and other characteristics.

Parents are also somewhat complicit in this because they like hearing false good news better than the truthful bad news pertaining to their children. Looking deeper there are a number of practices within schools that seem traditional but are also corrupt and dishonest. This book discusses some promising instructional improvements but makes the larger argument that a healthy economic marketplace for K-12 education is a fundamental prerequisite that will provide the incentives to develop the new methods, technologies, curricula and institutions that will, in turn, give its customers what they need and want. Given that vouchers alone seem insufficient when parents have little accurate information about school quality, we must generate that information and get it into the right hands. We identify the culpable parties to this epidemic of sick schools and no one escapes some responsibility: Parents, teacher unions (but not all teachers individually), school administrators, politicians and even the private sector of our economy. Finally, technological developments allow schools to be structured in more efficient styles. Education of our children can be less expensive and much better. To find out how, keep reading this essay.

We reach back to a time more than 500 years ago to take notice of an event that revolutionized education in its own time. That event was the invention of the printing press circa 1455 by Johann Gutenberg in the German town of Mainz.

Gutenberg invented printing and in so doing also ushered in self-pacing.

Before the printing press and printed books, students learned from teachers and only rarely had books to read. We estimate that in 21st century dollars the most common book of the years preceding Gutenberg, the Christian Bible, would have cost about $140,000. Within a few decades after Gutenberg's invention that cost rapidly decreased by about a factor of 100 to about $1,400 for one book.

At that cost some schools could afford books for their students' use. Students could read ahead of their lessons given by the teachers. That means that these pupils could control the pace of their learning- if not in practice- at least in principle. It was the birth of self-pacing. It gave meaning to the institution of the university. Without too much exaggeration the historian Will Durant said that printing had become

> …the greatest and cheapest of all universities, open to all.

As more books became available who would read them when almost every European was illiterate?

Luther not only sought to save souls but also wanted to have them prosper.

Some 60 years later a German Roman Catholic priest, Martin Luther, took advantage of the advent of printing to circulate materials among colleagues, and others, to address problems he saw in the Church. He appreciated the fact that literate congregations could more rapidly assimilate Church teachings if they could read. And he appreciated the fact that literate citizens could be more productive in making things and providing services to their neighbors and town folk.

On this second point Luther said,

> Were there neither soul, heaven, nor hell – it would still be necessary to have schools for the sake of affairs here below…

He also understood that the decentralized structure of his Reformed churches would be keeping tithes and other collections in local hands instead of sending most of them up through the church hierarchy towards Rome. With those revenues, Protestant towns had money to establish and operate schools.

Sturm invented graded schools almost 500 years ago.

Johannes Sturm was a German born scholar of the Latin and Greek classics who was a follower of Luther. In 1537 he established a Protestant school in the then German city of Strasbourg (now part of France). He devised a curriculum that was taught in nine phases or grades. The grades were based on students' skill levels, which even then roughly corresponded to their ages.

In terms of contemporary grade levels his school was effectively a combined upper primary, middle and high school. Entering students were minimally literate having already had some preparation- presumably learned from tutors or parents.

Now, some 481 years later, schools around the world and particularly American schools are graded and not so much different than the one set up by Sturm.

The virtuous spiral of literacy and national wealth.

If as suggested by Luther, schooling and literacy would help with "affairs here below," he must have meant that these citizens would be more productive in making things and doing things beneficial to themselves and their neighbors. That would suggest that literacy would encourage growing wealth.

And indeed that is just what economic historians found in post-Reformation Europe. Literacy grew faster in Protestant lands than in those Catholic. Corresponding to that these scholars found that economic output in terms of Gross Domestic Product (GDP) similarly grew faster in the Protestant areas.

That progressive education practices are often oxymoronic.

Early 19th century Swiss educator Johann Pestalozzi was an adherent of European Romanticism. Or in modern phraseology he was a dreamer. He thought and concluded that children should direct their own schooling in as many ways as possible. His brand of educational practice was popular but also demonstrably inferior to more scientific approaches to learning. No school could actually turn its management over to its pupils but many schools yielded to children's preferences even when the pupil's development of skills and knowledge would work out better with the educators making those decisions.

This suggests that progressive education practices might not foster progress as much as a more traditional approach. When the "progressive" approach hinders "progress" that's where the label "oxymoronic" fits best.

It should not be surprising to learn that kindergarten was and is based on a progressivist approach. With its emphasis on playing more than learning it seems that kindergartens are operated to please the children rather than to focus primarily on their academic skill development.

How to include more self-pacing within graded schools?

As graded schools became much more common in the 19th century, educators and parents began to notice some rather fundamental flaws in their graded schools. One obvious problem concerned pupils who were unable to keep up with their classmates. A related problem was about the boredom of fast learners when they had to wait for their slower classmates to master new material.

The relatively crude but familiar solutions were, respectively, flunking and double promotion. Each had the problem of often imposing a step down too far or a step up too far. American educator William Shearer began developing a more consistent system of assigning student grade levels in the late 1890's when he managed the public schools of Elizabeth, New Jersey. His system, called "pliant grading" used

very short academic terms of just one or two months rather than the more familiar academic year or semester terms.

His pliant grading system worked well but was complicated to manage and required teachers to have multiple sub-groups in each classroom effectively transforming it into essentially an ungraded one-room schoolhouse with perhaps four or five subgroups.

That summer vacation markedly "subtracts" math skills.

It seems odd that educators have until recently done very little research on the effects of vacations on learning. A study published in 2000 discovered a remarkable fact concerning the effects of summer vacation on mathematics skills. It reported that students lose a significant amount of their mathematics knowledge and skills over the three summer months: In fact, they typically regress three months. In reading there is a relatively smaller degradation of skills but the situation for math is worrisome.

If this research is credible, and we think it probably is, it would suggest that all students take some summer instruction in mathematics. It might be just one hour per day. Over the course of eight years of elementary / middle school enrollment a student taking math in the summer would learn double the amount compared to those not enrolling in a summer math class. Or so the research says.

Audio visual and related technologies used mostly as supplementary.

The various technologies of the first half of the 20th century used to supplement K-12 education sometimes go under the label "audio visual." We have identified over a dozen sub-species within this category but motion pictures with sound have been perhaps the most educational of them.

It has been extremely rare to use audiovisual media as core instructional material. Rather they are most often used as supplements.

But there was a pilot project undertaken in the mid-1930's in Providence, Rhode Island that used movies to present academic content at the high school level. Over one hundred students sat in an auditorium to watch academic lectures in one or more subjects. This occurred on two or three days per week with the remaining days devoted to meeting with a teaching assistant for purposes of review, remediation and testing. While this format is similar to college level courses, the use of the movies was not. As we will observe later, this pilot project was a forerunner of what we now call distance learning.

Importance of measuring mastery with tests: SAT, ACT and NAEP.

Prior to 1950 there was very little standardized testing of student skill levels that could give a national summary of their educational progress. Early versions of the SAT have existed since 1926 but it didn't really have national coverage until later. The ACT was established in 1959. The NAEP, which only tests statistical sampling groups, started its testing in 1970.

Of these tests only the ACT is designed for each subject to measure and report percentages of students likely to succeed later in college courses related to that subject. The NAEP also measures and reports percentages of students deemed proficient in certain K-12 subject areas but only tests at the 4th, 8th and 12th grade levels. At those grade levels the ACT percentages reported to be college ready or on track to be college ready are comparable to the NAEP proficiency numbers though generally somewhat higher with one exception: 12th grade math. There the NAEP reported proficiency percentages were only about one-half the percentages reported by the ACT.

The big picture as portrayed by these assessment systems is this: Less than half of American K-12 students are really performing at grade level. This is true for both public and private schools. Private schools are better when the entire student enrollments are tested. But when the economically disadvantaged demographic is tested, public schools are tied with private schools in math. And over recent years the reading proficiency gap between public and private schools has been closing with private schools still ahead. This suggests that vouchers will not work that well unless a significantly better private school is found in which the voucher-bearing pupil will enroll.

Technologies for distance learning and artificial (machine) intelligence.

The earliest type of distance learning, using a synchronous format, was usually delivered by some type of broadcast television and was used occasionally in K-12 schools. A later version, using an asynchronous format, is often delivered over the Internet and is more frequently used in schools but still comprises only a small fraction of actual instruction.

Teachers unions generally oppose the wide spread use of these types of instructional services but have not made a big issue of the implied reductions in teaching personnel. We believe that these kinds of services are seen as mostly supplemental and not threatening any teacher's job security. For now.

Machine intelligence, our preferred terminology, is generally called artificial intelligence. But there is nothing artificial or fake about it. Rather you have computers, based on neural networks of circuits that can program themselves without much human input. There are at least two problems we see with using machine intelligent instructional robots:

1. The less ominous hazard is that this extreme form of automation has the potential to put almost all teachers out of work. There could be a Luddite uprising of teachers using sabotage to disable the robots?

2. The more frightening hazard also involves sabotage but in this case an out of control robot could engage in harmful behaviors that would interfere with proper student learning. Its violations might be subtle and not detectable in some cases.

Industrial titan Elon Musk is worried about machine intelligence. And the late and eminent physicist Stephen Hawking saw the use of machine intelligence as

> …potentially the worst mistake in history.

Asora intends to avoid machine intelligent solutions as much as humanly possible.

Novel instructional methods enabled by technology.

Before discussing new methods we observe that some of the traditional instructional methods, such as direct instruction, have been shown to be quite effective compared to some of the more fashionable and progressive methodologies.

In the context of a brick & mortar school, new technologies enable new instructional strategies for educating the students.

The blended format combines traditional instructional methods with online learning. There are several possibilities here ranging from mostly online to only partly online. Teachers and/or teaching assistants would be involved. Students would still have homework assignments in this format.

Another possibility or form of blended instruction is called the flipped-blended instructional format. Here much of the instruction is received at home online while student assignments are completed during school hours with the assistance of the teaching staff.

Still another format envisages longer hours of attendance at the school site wherein all of the student's work and instruction is done and received at the brick & mortar school.

K-12 education as an economic sector is dead last.

Before making note of K-12 economic growth statistics let's get some growth numbers from other industries.

In consumer electronics we compared a 1948 television with a 2018 flat screen TV. Taking inflation into account we calculated the cost per square inch of TV screen to find that cost now down by a factor of almost 200. That's a growth factor of 200 over the 70-year period.

For desktop computers we calculated the installed cost of a GFLOP or of one billion arithmetical operations per second and then compared costs in 2018 with those in 1965. This cost dropped by a factor of roughly 1300 during that 53-year period. That is a growth factor of about 1300.

We looked at supercomputers in terms of their installed costs per GFLOP over the 54-year interval from 1964 to 2018. Here the growth factor has been an astounding 2,000,000,000. That's two billion.

Most industries grew at slower rates than those above. For the entire for-profit private sector the Bureau of Labor Statistics (BLS) reported a growth factor of about 5 over the 65-year interval from 1947 through 2012.

Finally, the BLS measured the labor productivity of K-12 workers in American schools, both private and public, over the 22-year interval from 1989 to 2011. The growth factor was 0.96 over that period. This indicates that the output per worker fell during those years.

In all of these examples, except the last one, industry leaders found new methods, new technologies and larger scales to increase productivity. One wonders why K-12 education could not have done some of that and seen some improvement?

The voucher proposal of Milton Friedman in 1955.

More than two decades before being awarded the Nobel Prize in economics, Milton Friedman in 1955 proposed what was really a compromise between schools being a government monopoly and schools being totally private and dependent on tuition revenues to maintain their solvency. His solution was to combine government funded scholarships- aka vouchers- with privately owned and operated schools. His proposal allowed for government

> …approved educational services

that the private schools would be required to provide.

Almost 40 years later, in 1993, Friedman would actively campaign for vouchers in the Prop 174 ballot initiative campaign in California. The proposal was defeated as were all other attempts to pass vouchers through ballot initiatives.

But voucher programs have been established at the state level through legislation starting in Wisconsin in 1990.

Expanding educational choice within government schools and services.

Some public schools are more attractive to parents than others. Depending on the locale there may be more than one public school available and that would provide parents with some choices. We have a list of various kinds of public school choice options:

- Illegal persuasion to gain admission of a student not eligible for the desired school. ♣
- Choice of residential location dictates the public schools available for enrollment.
- Public magnet schools can be chosen subject to possible admission requirements.
- Public charter schools are sometimes available but subject to enrollment caps and lotteries.
- Intradistrict choice allows choosing a public school in a different attendance area in the district.
- Interdistrict choice allows choosing any public school within the state.
- Alternative enrollments required by laws. The *No Child Left Behind* law had such imposed "transfers."
- Public school options for homeschooling are available in some states.
- Supplementary education services, such as tutoring, test prep and remediation, are sometimes "public."

All of these options are free as they are fully funded by the government- usually at the state or local levels. Sometimes parents are required to provide transportation if the school is not near their residence.

Research by Asora and others on choice enabled improvements.

The Potomac Region schools and the need to measure the disadvantaged demographic

A fundamental issue in school choice has nothing to do with vouchers or charter schools. It is the question about using student performance to rate a school and how that can be done fairly. Just using student test results to rank schools is not fair because in more affluent schools the students also learn much at home in addition to what is learned at schools. A more intrinsic measure of school quality is needed that removes the affluence effects is needed. That better measure comes from the test results of a demographic subset of students who have not learned much at home and most of what they know they learned at school. One such demographic are economically disadvantaged students judged by their eligibility for the Department of Agriculture's Free and Reduced Price Lunch program (FRL).

When we at Asora used that measure on estimates made of NAEP school performance in the three state Potomac region of Maryland, Virginia and Washington DC (OK it's not really a state!) we found that the schools were performing, on average, at about the same levels in the three jurisdictions. That is significantly at odds with the popular perspective that the Washington DC schools are horrible. A more honest evaluation of the public schools in these three jurisdictions finds them mostly comparable and at the mediocre level.

So what are the numbers of proficient students? Among the disadvantaged students school proficiencies are mostly in the 1% to 30% range while for the entire student populations they range more from 5% to 60%.

In those studies we also looked at charter schools. For this Potomac three state region students in charter schools performed somewhat better than their peers in regular public schools. That's different than the national picture in which charter schools and regular public schools perform similarly.

♣ We are aware of situations in which a parent pressured authorities to allow attendance at a different school. Sometimes they were trying to avoid unsafe crime ridden schools or ones lacking good role models.

Since 1990 public schools have been catching up to private schools and caught up in math
Based on national NAEP testing of the economically disadvantaged (FRL) demographic since 1970 we know that public and private school performance levels were stagnant up to about 1990. In 1990 and 1992, respectively, two new kinds of choice came on the scene: Vouchers and charter schools. Alarm and fear were arguably triggered in the public schools and less so in the private schools.

By 2013 the 8th grade NAEP mathematics performance of public schools caught up to the private school levels: In both kinds of schools the disadvantaged children had proficiency percentages of 19% in math. In reading the gap narrowed but private schools remained ahead with 30% proficient compared to 20% for public schools. This suggests that vouchers may not, on average, improve student performance very much. Consistent with this most research shows only minor improvements. More on this below.

Has Common Core instigated more recent performance declines?
NAEP testing in more recent years since 2013 has shown the end of rising proficiencies in mathematics and reading and significant declines since. This is not surprising to those who have observed the dumbed down curricula imposed by Common Core in both mathematics and reading. Laxity in the teaching leads to lax performance on tests. Shame on those who devised and then imposed these regimes!

More on voucher effectiveness: The influences of teacher union contracts and seniority clauses
Nearly all carefully managed studies into the effectiveness of school vouchers have found that only black students seem to benefit from them. This may not be an accident. Union negotiated seniority policies in many urban school districts allow the more senior and experienced teachers to escape troubled schools. Though not intentionally racist, this kind of policy has the effect that black children who are most numerous in these troubled schools end up with the worst teachers. When some of them transfer to a private school with a voucher, that private school is probably significantly better than the public school they are leaving. As a result it should not be surprising that these black children perform better after their enrollment in the private schools.

The K-12 marketplace needs reliable consumer information.

Would reliable consumer information make vouchers more effective?
Research on the effectiveness of vouchers has product seemingly contradictory results. On the one hand, as we alluded above, there seems to be little performance benefit to the voucher students that is statistically significant except for the black demographic where the gains have been quite evident. But on the other hand it seems that in whatever geographic areas have voucher redeeming private schools there is an unexpected rise in nearby public school performance?

One inference to be drawn from this holds that the voucher redeeming private schools have been only marginally better than nearby public schools, which would explain the insignificant student performance gains. Another inference from this says that the public schools were alarmed having to compete with the voucher schools and in that process improved more than the more remote public schools.

Asora would add a new component to the vouchers that would be designed to elevate the competition between public and private schools: We would **provide reliable consumer information to parents** about the various characteristics of the private and public schools in their areas. That kind of information is almost totally absent in most parts of the United States. More on this farther along.

We are aware of only one private voucher program where school quality information may have informed the choices of private schools that received the vouchers. That was the *Student-Sponsor*

Partnership Program that was established in New York City in 1986 and as such was one of the very first pilot programs using vouchers. Volunteers in the program were legal and financial professionals from the city. They determined which private schools, mostly Catholic, would receive the voucher students. Instead of the parents directly choosing the schools, these volunteers made the choices-presumably based on reliable school statistics they had obtained.

This program was quite successful at least based on average SAT scores comparing partnership students with students who remained behind in the public schools. Those SAT scores of the voucher students averaged about 160 score points above the public school comparison group.

Asora's efforts to publish reliable consumer information on school performance.

A continuing effort at Asora has been the production and publication of guides to schools based on estimates we have generated of the schools NAEP proficiencies and of the schools disadvantaged students' proficiency levels. Our prototypical guides and their publication dates, that are available gratis from this website, include:

- 2011 Guidebook & Resources for Parents in Maryland, Virginia & Washington D.C.
- 2014 Are Bristol County, MA Private & Public Schools Really Like This?
- 2014 Are Orange County, CA Private & Public Schools Really Like This?
- 2014 Are Shelby County, TN Private & Public Schools Really Like This?
- 2017 Are The Private & Public Schools In Rhode Island And Massachusetts As Bad As These Numbers Say?

The first guide is limited to public schools only but the other four include nearly all private and public schools within their respective jurisdictions. Each of these books represents a new development in school guides: They use the same metric, estimates of NAEP proficiency percentages, for all types of schools. Doing that then allows facile comparisons.

Has there been any significant interest in this kind of information among the stakeholders in any of these jurisdictions? Only a handful of people have shown any interest. A former mayor of Washington D.C., Adrian Fenty, was one of them. Founder and CEO of the Center for Education Reform, Jeanne Allen, was another. We contacted many dozens of other community leaders in each of these domains. The response has been mostly silence.

Where K-12 co-exists and even thrives with for-profit enterprises.

It is mainly in the schoolroom that the K-12 establishment virulently opposes for-profit organizations. In other aspects of school operations, such as book purchasing, using for-profit suppliers is fine. For-profit service providers, such as Education Management Organizations (EMO's), have made some inroads in the operations of public schools but there is often significant opposition to their participation by teachers unions and other education establishment types.

Asora's Stellar Schools franchising business plan frightened investors away.

Our business plan and associated documents are available elsewhere on our website but let's characterize our proposal in two different perspectives:

From the instructor we have the acronym ASORA that takes the education plan as

A) Asynchronously delivered "on-demand" instruction.
S) Self-paced learning.

O) Online distance education.
R) Rigorous curriculum
A) Assessment is strictly tied to the curriculum

From the owners viewpoint the plan is that of a franchising network composed of:

- A for-profit central management organization or franchisor
- A network of schools that can have various kinds of ownership: public, non-profit or for-profit.

We are still puzzled regarding the negligible interest shown by investors.

- Are we dumb and don't deserve investment capital?
- Are many other school designers also dumb because investors don't like them either?
- Are the investors dumb because our plans would generate handsome profits from growing enterprises?
- Or are investors smart because they know that there are too many enemies of for-profit schools for them to have much chance of survival and growth?

So what is the best answer? We don't know. There are possible answers:

- The cynical answer: Investors are dumb.
- The sad answer: Investors are smart and would go broke if they put their money here.
- The optimistic answer: There are new kinds of investment opportunities.

Milton Friedman was puzzled by this. In 2003 he commented,

> … I have long been puzzled by the situation in cities like New York and San Francisco: there are strictly private elementary and secondary schools which charge very high tuitions and have long waiting lists, and I keep asking why it is that other private enterprises haven't taken advantage of that situation as a source of profit. Somehow there is a customer base there; there is a market opportunity.

We infer from his comment that there are, indeed, new kinds of investment options here.

Where a Communist, Gorbachev, liked capitalistic schools with vouchers

As CEO of Asora, I once met Mikhail Gorbachev in 2006 and jokingly told him I was developing capitalistic schools. He angrily responded and asked, "How will you educate poor children?" I said, "With government supplied vouchers." Then his interpreter explained vouchers to him taking well over a minute to do so. Then Gorbachev smiled approvingly and wished me good luck with my project.

Where the Republican Education Department, of G. W. Bush, was Communistic

In that same year I tried to be listed in the Bush administration's Education Department list of reform proposals (EROD) and they denied me inclusion because my ideas were "commercial." Even after two appeals, including one to Ed. Secretary Margaret Spellings, they still denied me. It seems that they were more like the Communists than the actual Communist who wished me well on the capitalistic schools!

Political efforts to rehabilitate the K-12 economic marketplace.

We previously mentioned the failures at the ballot box when voucher advocates proposed establishing voucher programs through ballot initiatives. There have been, on the contrary, a number of legislative accomplishments at the state level where vouchers and voucher-like systems have been implemented. For example, education savings accounts, which can be used to pay tuition, homeschooling expenses, tutoring services have been established in Arizona and other states.

Strategies to get the reform camel's nose under the K-12 tent.

We have tried to look at K-12 education reform from two perspectives:

1. One is the development of new instructional methods based on a variety of technologies, including some that exploit efficiencies of scale.
2. The other is the establishment of new government policies that will help repair the K-12 education marketplace.

In our work at Asora we have formulated and proposed a number of new instructional formats that could be tested in pilots. But we have found no support for doing that work nor can we self fund it.

We have also developed a number of methods for estimating school performance statistics that could help provide reliable consumer information to the K-12 marketplace. Ditto: No one wants to support this either.

Nevertheless there are signs of future improvements. Consider these:

- The recent Supreme Court victory in Janus v AFSCME now allows government workers to avoid payment of agency fees to unions if they are not union members. This will weaken teachers unions and will provide more flexibility for school administrators to innovate.
- For-profit K-12 schools are growing in numbers albeit at a slow rate which is nevertheless higher than the growth rate of the U. S. population. This means that these for-profit schools will gain market share- but at a very slow pace.
- Some of the technologies used in K-12 education are less expensive and at the same time more effective in supporting instructional systems than so-called legacy systems. Such developments allow economies of scale in some circumstances while also allowing better targeting of students' instructional needs.
- We think that a number of government imposed restrictions on choice and other matters may violate laws and treaties that school authorities should respect. They should align their policies into compliance. The United Nations Declaration of Human Rights is one such treaty that arguably requires its signatories to implement school choice systems. Such illegal impositions may be remedied through lawsuits if legislation proves difficult to enact.
- Venture capitalists willing to take significantly higher risks in their investments are often called adventure capitalists. Many capitalists also engage in philanthropy as an "after hours" effort to support societal improvement. Many investors also choose their investments based on their perceived social benefits as well as on expected financial profits. In some cases such investors may be willing to take reduced profits just to maintain their pride in being charitable. **Adventure capitalists**, of this stripe, might consider for-profit schools as a worthy investment and in doing so factor in Milton Friedman's "market opportunity" just noted above.

We close with this thought:

Many of the new technologies and new instructional methods are enabling higher and higher percentages of American families to educate their children at home. Such homeschooling is not necessarily comprised of just one parent teaching one or more children of the family. Given the inherent flexibility available to a homeschooling family, the parent can be the manager of the children's schooling in which various other players, products and services combine to provide the children's instruction. The parent may be a part-time instructor in some of the subjects while other people cover other areas. Some instruction, assessment and assignments can be done online.

If the brick & mortar schools can't compete with homeschooling they will continue to lose market share. But in that loss incentives will arise motivating school leaders to improve their offerings. It could be that home schooling will provide the dynamics to finally bring health to the K-12 marketplace. Santé!