We can’t all learn the same, and we shouldn’t beat ourselves up about it. Variance happens, after all. So says Gerald Bracey in his new book from AIT’s TECHNOS Press, Final Exam: A Study of the Perpetual Scrutiny of American Education. The following essay is adapted from the Prologue to the book, which provides historical perspectives on assessment, outcomes, standards, and criticism of U.S. Public schools.

“Those who do not remember the past are condemned to relive it.”
-George Santayana

“It is likely that only an American philosopher could have fashioned Santayana’s comment, for in no other country as this one do the citizens so often take Henry Ford’s statement as gospel. It has been observed that our short national memory is sometimes a great asset. Only a nation with such amnesia could wage all-out war against two nations guilty of the worst kinds of mass atrocities, and then, only a few years later, make them among its strongest allies. This is in stark contrast to the mentality of, say, the former Yugoslavia, where the battle of Kosovo is discussed as if it occurred yesterday (it took place in 1389), a condition of memory producing new catastrophes today and, in all likelihood, tomorrow. On the other hand, our tendency to forget leads us constantly to reinventing wheels, or Sisyphus-like, constantly pushing the stone up the mountain one more time.

In researching my book for AIT, I found that in the history of American public education, we have gradually evolved from a focus on the “disciplined mind,” attainable only by a few, to a focus on observable outcomes, purportedly attainable by all.

In this evolution, there has been a pendular swing between two views of schools. One sees them as a great sorting machine, albeit one that contributes to social mobility. It is a more open, flexible sorting machine than that found historically in other nations. At other times, we have thought that all children can learn whatever we have to teach them, although this position has never been as explicitly stated in the past as it has in recent years.

We are currently in a period that adheres rabidly to an all-children-can-learn philosophy. The embrace of this position is understandable given the savage inequalities in education in this country, but, like so many fads in education, the stance does not stand on any research base. The supposed pillar of support, mastery learning, cannot bear the weight. Few data, and none from well-designed research, have arrived from programs involving mastery learning’s offspring, outcomes-based education. The stance is a philosophical, moral/religious/posture taken by a wide spectrum of educators and psychologists who ought to know better. I do not hold such a position and do not believe it has any meaning in terms of the “challenging curriculum” or “high-but-achievable standards” being bandied about in many quarters these days.

There are several strands of information that lead me to this conclusion. First, in the 1970s, we experienced a minor madness known as the minimum competency testing movement, a fad that invaded 35 of the 50 states. The competencies established by the various states were usually low, sometimes quite low. No one ever referred to them as “challenging.” And, yet, some students never attained a passing score, itself often set low, sometimes after four, six, even 10 attempts.
Related to this outcome is my second reason: to paraphrase the popular bumper sticker, variance happens. It happens even in Japan, a nation that worships homogeneity and makes every attempt to reduce the variance of many variables, including test scores, to zero. I have heard many times that by high school age, 80 percent of the students cannot understand the difficult mathematics they are taught. A recent article, “Japanese Education: The Myths and Realities,” suggests that these stories have some substance. The article is by Kazuo Ishizaka, a member of the Japanese National Institute of Educational Research, and a former principal and mathematics teacher. Ishizaka declares that in some Japanese high schools, the average on a national mathematics test where the highest score is 100, will be about 96 or 98. In his school it was 5. He wonders why his school was never asked to participate in international studies. (The same paper contains a scandalous revelation that for the 1987 Second International Mathematics Study, in which Japan finished first, only schools that scored well above average on a Japanese-made test were selected [Ishizaka, 1994].)

The schools of our “competitor nations” are sometimes described as if they are monolithically good, but variance—enormous variance—happens in them. For instance, consider Taiwan, whose eighth graders finished first in math in the Second International Assessment of Educational Progress released in 1992. While the average score in Taiwan bested everyone else, the 95th percentile was even higher, relatively speaking, than other high-scoring nations. The 5th percentile, on the other hand, was much lower than the 5th percentile of numerous countries with only slightly lower averages. Does it even make sense, then, to speak of “Taiwanese schools” or “American schools” on the basis of average scores? I think not. Does it make sense, then, to say that in all countries some children will not learn? I think so.

See How They Run

If we were to use an image other than educational, we might more readily see the folly of our position: “All children can run.” Obviously, this is not true. Some children have no useful legs nor can they propel a wheelchair in any way that might be considered a proxy for running. The great majority of students can “run,” of course, but the difference in running speeds will be enormous. Anyone who thinks back on participation in school athletics will recall that running times varied enormously even among those sufficiently proficient to play on a varsity team. If the “high-but-achievable standard” was to have all children be able to run a mile, but to wait for the slowest to finish before moving beyond this point, it would be necessary for the faster children to spend a lot of time not running.

This is one of the major objections voiced by some to outcomes-based education (OBE) programs, although the promoters of OBE deny that it is a necessary characteristic of the program. The alternative to holding the faster runners in check for some time is to allow them to keep on running. This, of course, increases their advantage over the slower runners in terms of distance traversed in a given amount of time. Despite the denials of OBE promoters, this happens in both mastery learning and in OBE programs, even in the programs described by OBE’s leading sponsor, William Spady, founder of the High Success Network, Inc.

Spady refers to “having the faster learners engage in challenging extension and enrichment activities” and “stimulating projects and exercises” while the slower students “master the initial material.” Such enrichment activities increase the initial advantage of the faster learners. Spady would prefer continuous progress programs, where each student moves as his progress permits, but in such programs the distance between fast learners and slow ones will be increased even more. Such programs would exacerbate the differences between the “cognitive elite” and the rest. In the 1970s, for example, most students passed a minimum competency test at first sitting and were free to move on. For some students, though, the material covered by the minimum competency tests became the curriculum.
One could object that our educational programs have never been designed to optimize the learning of all students and that maybe we now know enough to effect such optimization with the result that all children “learn.” But when we look at some programs that would appear to enhance, if not optimize, such learning, we find enormous variance still. These results can be seen in data from Reading Recovery and Success For All, two compensatory programs that are probably the most effective in the nation. The programs differ somewhat, but both would be called “intensive,” using as they do substantial amounts of one-on-one tutoring. They also seem based on sound theoretical principles and reflect the good sense of practitioners as well. Under the tutelage of these programs, many students do indeed improve - their reading scores substantially, a sufficient reason for both programs to enjoy expansion in the nation.

But some children do not improve much and some not at all. This is true even in Reading Recovery, where the criterion for treatment termination is often quite modest. Children are considered to have successfully completed the program when they attain the average reading score of their class. In some urban settings, this average itself is not very high, certainly nowhere near “grade level”. In both programs, some students remain hard-core non-readers.

A third reason is that society will not-cannot-permit all children to learn. I outlined some reasons why in a short Education Week essay, *What If Education Broke Out All Over?* (March 28, 1994). There I argued that if everyone learned, society would collapse, literally. I do not know if education so refines the senses or simply makes people allergic to sweat, but educated people will not collect garbage, unplug sewers, scour urinals, make up beds, bus tables, etc.

**Workplace Predictions and Other Modern Myths.**

A current myth holds that the new jobs being created are all high-skill, high-tech. This is not true. While the implication of the myth is that schools must do more for more people, the Bureau of Labor Statistics 1991 list of the 10 fastest-growing jobs between 1990 and 2005 shows them to require some skills, but not to be necessarily high-tech. Even the Hudson Institute’s 1988 report, Workforce 2000, considered by many to be the clarion call for a more highly skilled workforce, found that the to-be-created jobs only required eight more months of education than current jobs. Other estimates put the figure at four months. Either way, meeting these changing job demands poses no severe national challenge.

The educational differentials between those entering the workforce and those retiring are sufficiently great to more than overcome the needed extra schooling. People retiring from the workforce in 1995 at age 65 (assuming that their pensions haven’t disappeared), would have graduated from high school in 1948 when the chances were about 50-50 that they would have graduated at all. Currently, 83 percent of high school students receive an on-time diploma, another four percent return to obtain one, and another four percent attain a GED.

In addition, the fastest growing jobs account for very few, the new high-tech jobs for even fewer. On the other hand, the single top job in terms of numbers, retail sales, accounts for one-third more jobs than the top 10 fastest growing jobs combined. 4.5 million versus 3.2 million. Even Secretary of Labor Robert Reich, who has written glib pieces with glib titles such as “Workers of the World Get Smart,” has admitted that no nation has solved the problem of creating both more jobs and good jobs. There is also mounting evidence that the good jobs are declining in number. In 1992, for instance, manufacturing lost 255,000 jobs. The restaurant industry alone added 249,000 in that year. Not many of those jobs were for executive chefs.

Indeed, the call to “make work smart,” perhaps the economic equivalent of “all children can learn,” seems to have led us in a wrong direction. The arguments for making work smart were first described in the Center on Education and The Economy’s 1990 treatise, *America’s Choice: High Skills or Low Wages*. A 1992 follow-up book, *Thinking for a Living*, by the Center’s director, Marc Tucker, and former Secretary of
Labor Ray Marshall, expanded the notion of making work smart while it also expanded their claims for the wonders it would accomplish. They said making work smart was a recipe not only for high wages but also for full employment. Look at Europe, they said.

Yes, look at Europe and find 12 percent unemployment, 20 percent in some quarters.50 percent among some immigrant groups. Find Germany, already with the shortest work weeks and longest vacations in Europe, thinking about trimming the work week further. Find France tinkering with the notions of job sharing and cutting the minimum wage to get more people employed. An appropriate book to reflect the situation both here and abroad might be titled America’s Choice: High Skills and Low Wages.

In his 1992 book, *The Culture of Contentment*, Harvard economist John Kenneth Galbraith gave a name to the children who do not learn, to the low-paid, unskilled workers: “the functional underclass.” According to Galbraith, we gloss over the dreary duties of the underclass by lumping all activities under the word “work” and then glorifying the word. But much work is intrinsically meaningless, repetitive, boring, even dangerous. Galbraith declares that the word “work” is used to cloak the fact that some people’s jobs require activity that is “dreary, painful or socially demeaning and for others is enjoyable, socially reputable and economically rewarding.”

The “working poor” will always be with us. They are not a social problem to eliminate, says Galbraith. “The poor in our economy are needed to do the work that the more fortunate do not do and would find distasteful, even distressing. And a continuing supply and re-supply of such workers is always needed,” because the children of such workers and the workers themselves seek to escape such demeaning conditions.

In theory, such as that promulgated by behaviorist B.F. Skinner, you could entice the cognitive elite to sweep streets by paying them more. In practice, it has never worked out that way. When a few countries have actually gotten to a point where almost everyone has learned, the solution to the shortage of dirty-work workers has been to import undereducated workers or workers from underdeveloped nations. Whether or not some groups of Americans have come to form a permanent underclass is a matter of some debate, but as a nation of immigrants, we are relieved of the solutions forced on other nations. Although our solution is functionally equivalent, the imported workers here do have the option of becoming citizens, something not afforded those or their children in most other countries.

But we refuse to see the sight that Galbraith insists we look on. What is not accepted, and indeed is little mentioned [by the comfortable classes], is that the underclass is integrally a part of a larger economic process and, more importantly, that it serves the living standard and the comfort of the more favored community. The economically fortunate, not excluding those who speak with greatest regret of the existence of this class, are heavily dependent on its presence.

**They Set Us Up**

So it is that, while we say everyone can learn and we want to educate everyone, the unyielding facts are that they cannot and we do not. This is not merely an unkind blow to our egalitarian impulse. It also sets up educators for a great fall. By telling everyone that all children can learn, we set the stage for the next great round of educational failure when it is revealed that not everyone has learned, in spite of our sincere beliefs and improved practices.

At this moment, articles being written about the schools include comments like the following from the April 17, 1995, issue of Business Week, whose cover asks “Will Schools Ever Get Better?” The opening paragraph recounts in brief the usual litany of complaints, but in stronger terms than usual.
Americans are fed up with their public schools. Businesses complain that too many job applicants can’t read, write, or do simple arithmetic. Parents fear that the schools have become violent cesspools where gangs run amok and that teachers are more concerned with their pensions than their classrooms.

Economists fret that a weak school system is hurting the ability of the [United States] to compete in the global economy. And despite modest improvements in test scores, U.S. students rank far behind most of their international peers in science and math.

None of these statements is true, but one can imagine what Business Week might write after another decade of “ineffectual” reform or even reform that showed improvement, but not enough. After all, in 10 years it will be almost a quarter century since the appearance of “A Nation At Risk.”

Of course, one response to the above is that we will have a decade of effectual reform. I doubt it. Or rather, in spite of what I view as a century of almost continuous progress, I doubt that we can effect the kinds of reforms that would satisfy critics. Indeed, I argue in Section 4 of my book that the well-intentioned standards movement itself will increase the disparities among the cognitive haves and have-nots.

Many other educational trends will produce, are producing, similar effects. For instance, the proportion of affluent students in preschool is much higher than the proportion of poor children in preschool. And the programs offered the rich tend to be developmental, even academic, while the poor often obtain only custodial care. This condition moves us farther from, not closer to, the first National Education Goal, that all children arrive at school ready to learn. At the same time, new technologies are increasingly being used for learning activities. And such machines are to be found much more commonly in the homes of the affluent.

Our notion that we constitute an egalitarian nation received a mighty shock in April 1995, when The New York Times reported on a new study showing that we are the most stratified nation in the western world. In England, a nation we often associate with a rigid class structure and centralized control of wealth, the top one percent of households control 19 percent of the wealth. In the United States, they control 40 percent, up from 20 percent in 1980. The top 20 percent of households control 80 percent of the wealth. The bottom 20 percent of households earn only 5 percent of the income in this nation.

“World Class” or Third World?

None of this is to say that many children could learn much more than they presently do; they could. But if we predicate reform on unrealistic assumptions, not only do we set the stage for inevitable failure, we are prevented from seeing the present conditions as they really are. The unremitting criticism of American public schools abundant since their inception, but overwhelming since the end of World War II has led to such misperceptions. For instance, in the Second International Assessment of Educational Progress (IAEP) of 1992, Taiwanese and Korean 13-year-olds had the highest scores in math. However, it was determined that Asian students in American schools outscored both countries. Hungary finished third among nations, and white students in U.S. schools tied Hungary. Thus a large majority of American students the two groups constitute about 70 percent of the current K-12 population do quite well compared to their Asian and European peers.

In this same study, however, while Mississippi and Jordan tied for last place, Black, Hispanic, and disadvantaged urban students all scored below them. (There is no IAEP reporting category for disadvantaged rural; were there, I would predict that that group would score lower still.) It is thus the case that many American students are “world class” even in math, where we are such putative dolts but some aren’t even Third World. We are in a better state than thought overall, but, given the concentration of wealth noted above, are we likely to find that it is distributed to assist school systems that need it? Only if still more
school finance systems are declared by state supreme courts to be unconstitutional, or if more states show the progressive tendency of Minnesota and Michigan and look to move voluntarily toward shifting school funding away from the inevitable inequitable property tax base.

Excellent and Equitable

My book paints a picture of a system that has painted itself into a corner. There is a potential way out, but it involves taking a path that we have not been good at following in the past. In his 1961 book by the same name, John Gardner asked, “Can we be excellent and equal, too?” The answer is clearly “no” if by equal is meant the same. Different students will emerge from school knowing different things as well as different amounts of the same things. But, we could ask, can we be equitable and excellent at the same time? If we look to another Gardner, Howard, we find a theory of multiple intelligences that demands that people be different (Frames of Mind, 1985). Historically, we have not been good at saying that people are different but not unequal. To say that two outcomes are different through our history has been to imply that one of them is inferior. About 60 percent of U.S. high school graduates go to college, although (historically) no more than 25 to 30 percent of them obtain college degrees. Thus, it would seem, almost half of our students need something other than a college preparatory curriculum. But when a proposal is made for, say, an apprenticeship system patterned after that found in Germany, many people recoil, knowing that such a system puts limits on the future (in fact, more and more German students are recoiling for the same reason).

At the same time as people recoil from differential outcomes, they recoil from any attempt at perceived standardization. One of the chief criticisms of outcomes based education is that it denies individuality and tries to mass-produce everyone the same. The confusion between standards and standardization is rife in American education, as it is in American life overall.

Getting out of the corner will not be easy, but I hold in my book that focusing on the outcomes of education requires us to try. As long as equal education is defined in terms of inputs and processes, inequalities of outcomes are tolerable. When the focus is on outcomes, inequalities become, at best, painful to see.

I hope that my book will provide a historical perspective from which policy and programs may be developed. It is my fervent belief that Santayana was right when he wrote, “Those who do not remember the past are condemned to relive it.” Thus, in bringing some sense of history to the current enterprises, I hope to provide useful context.

In addition, I hope the histories I write about will debunk once and for all the notion abroad in some quarters that there was once a Golden Age of American education from which state we have fallen and must strive to return. Truly, this, to cite Henry Ford, is “bunk.” In the first section of my book, I provide a selective history of education in this nation, focusing on the always abundant criticism of public schools and the attempts to reform them, especially at the attempts made after the Committee of Ten’s efforts a century ago. People interested in seeing the data that prove the critics wrong are referred to “The Bracey Report on the Condition of Public Education,” which has appeared each October since 1991 in Phi Delta Kappan magazine; to my earlier book, Transforming America’s Schools, published by the American Association of School Administrators (AASA) in 1994; to David Berliner’s The Manufactured Crisis, (Addison-Wesley, 1995); or to Joseph Schneider’s and Paul Houston’s Exploding the Myths (AASA).

We are currently embroiled in many discussions about “authentic assessment,” standards, and outcomes. These, too, are discussions lacking much in the way of historical setting. To understand what schools are and have been about, though, it seems to me that we should understand the history of outcomes and standards and of how those outcomes and standards would be assessed. These histories all show
Even Greater Expectations

Some who have read these histories have commented that “we have played this song before” and indeed we have. This leaves the history of education with a sense of being unplanned and, in many ways, it has been. On a more narrow scale, Robert Slavin of Johns Hopkins University has observed that educational innovations arrive amidst much hoopla and no supporting data. They then exit as the data, usually disappointing in comparison to the claims, arrive. One might hope that, by developing a sense of what has and has not been thought about schools throughout our history, we might embark on a more planned journey into the future.

In addition, there are many in education now who have not lived through the modern era of reform, which I date from the end of World War II. Since then, schools have been seen as chronic failures, albeit for very different reasons across the decades. One sees that society has placed every important social problem on the schoolhouse doorstep and then reacted in anger and horror when the school’s inhabitants have failed, by themselves, to solve the problem, whatever it might be. Again, for those who have not experienced the events of the last 50 years firsthand, it is hoped that the book will provide a useful context.

An examination of these histories might—but only might—provide a more realistic sense of both what schools have done and what schools can do. It is clear that one reason schools have failed is that they have not lived up to society’s expectations. But my search through the history of schooling in this nation convinces me both that those expectations have often been unrealistic and that schools have come closer to meeting them than has been realized. We now all mouth the importance of high expectations for learning, but as we do so, we should recall from clinical practice the terrible anxieties and neuroses that can be generated by the imposition of unrealistic, perfectionistic expectations.

Why do we have such high expectations of schools? Because they have emerged as our most important social institution aside from those that defend the land. All the more so at present. At the same time that schools are the focal point for social problems, the church and the family are in decline. Many consider politics a cesspool of corruption and self-interest. Every day brings some astonishing new tale of fraud and malfeasance in business. Schools are refuges of integrity and fair play. Many critics tell schools to concentrate on academic matters and leave social problems to other institutions, but they fail to take into account the state of those other institutions and how that state affects the schools.

In addition to these reasons for assaults on schools, public schools are targets simply because they are public. They are public in ways that no other institution in this nation is public. Businesses might have to answer to stockholders according to the bottom line (although this is largely myth; stockholders exercise very little power), but the information of how business and industry conduct their affairs is proprietary. Michael Moore’s movie Roger and Me takes some liberties with historical accuracy but still vividly shows the protection from inconvenient encounters that CEOs of large corporations enjoy. For months, Moore attempts to get an audience with Roger Smith, then president of General Motors, to ask him to explain how GM could inflict so much economic devastation on Moore’s hometown of Flint, Michigan. He never succeeds. Some school principals can be forgiven for feeling pangs of envy at Smith’s fortress-like security, security that prevails in spite of, as others have shown elsewhere, Smith’s monumental incompetence.

I also hope that the histories in my book will provide convincing evidence that some of the reform efforts of the past were misguided, either because schools were not failing or because the reforms were based on unsound premises. We are currently in the throes of major reform activities aimed at certain goals and using certain standards. Are these also based on unsound premises? It is often said today in defense of goals and standards that if you don’t know where you want to go, any road will take you there. The
conclusion is that we need the goals and standards to show us the way. In the section on standards, I conclude that standards will take us away from where we want to be.

Finally, along with an acceptance of Santayana’s maxim, I agree with a generalization taken from Jean Piaget. In studying epistemology, the nature of knowledge, Piaget concluded that to understand how knowledge manifests itself in adults, he had to learn how it developed in children. I believe that while knowing where you want to go is important in knowing how to get there, it is also crucial in human endeavors to know how you got where you are. Wherever you are on a map, you can set out for any other point. That is not true of human and social development. Learning some things permits the learning of others, but forecloses the learning of still others. In the human trajectory, where you can go is to some extent constrained by where you’ve been and how you got where you are. I hope my book will help provide an account of the journey of public education in America.

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Final Exam: A Study of the Perpetual Scrutiny of American Education is available for $24.98 (plus $4.00 shipping) from AIT’s TECHNOS Press. To order, call 812/339-2203 or fill out and mail the business reply card stitched into this issue.
Stock A over the past 20 years had an average return of 10 percent, with a standard deviation of 20 percentage points (pp) and Stock B, over the same period, had average returns of 12 percent but a higher standard deviation of 30 pp. On the basis of risk and return, an investor may decide that Stock A is the safer choice, because Stock B’s additional two percentage points of return is not worth the additional 10 pp standard deviation (greater risk or uncertainty of the expected return). Calculating the average (or arithmetic mean) of the return of a security over a given period will generate the expected return of the asset. For each period, subtracting the expected return from the actual return results in the difference from the mean. "Getting Over It With Bennett Foddy" inspired bloggers and ardent fans to re-enact the game setting and main actions. Several attempts have been made to reproduce it, though none is as brilliant and successful as Mr. Foddy’s creative ideas. The game has got such a metaphorical name and quite a simple plotline purposefully. It looks like a trap, waiting for a mouse and it closes with a weird sound, when a prey crosses the line of no return. Practically the same situation happens when a random gamer encounters "Getting Over It", pondering: "It’s a piece of piss..." However, this seemingly simple Before we all get too depressed, it’s worth pointing out that corrections are an inevitable annual event even in bull markets. Investors shouldn’t confuse these with the beginning of the next global bear market. Indeed, we would view this latest burst of volatility in the context of our maturing bull thesis. Like Westley in the Princess Bride telling Buttercup that "life is pain, Highness--anyone who says different is selling something," Citigroup’s Robert Buckland and team tell investors who haven’t enjoyed the recent plunge in the market that "corrections happen, get over it. From. To."