Chapter 9

Narrowing Curriculum, Assessments, and Conceptions of What it Means to be Smart in the US Schools: Creaticide by Design

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Abstract

The No Child Left Behind Act of 2002 (NCLB) instituted federal testing requirements on a nation already moving toward high-stakes testing programs as determiners of educational effects on students. Teachers, schools and communities are now all judged by student test performance. The effects include narrowing of the curriculum (teaching to the test) and calcification of pedagogy (direct instruction of what will be tested). Creative and critical thinking, problem-based learning, cooperative learning, and learning through authentic experiences all are eroded from the curriculum. The effects of this dogmatic federal policy are harming children and the nation.

“Creaticide,” a neologism not yet in the dictionaries, is defined here as the national design to kill literary, scientific, and mathematical creativity in the school age population of the United States of America, particularly among impoverished youth. Perhaps it is accidental, only the by-product of good hearted people that want the best, overall, for our schools and our youth.
Perhaps it is a deliberate plot by our government, strongly influenced by business interests and families of wealth who desire a non-thinking, poorly educated, lower class population, while seeking simultaneously to have a well-educated and more thoughtful upper class population. It does not matter what the origins. The result of contemporary educational policies now, and into the foreseeable future, is a school system presenting evidence of curriculum narrowing, a narrowing of the assessments used with these curricula, and a narrowing of the schools’ conceptions of what it means to be smart in school. Dogmatic beliefs about how to improve schools have resulted in a diminution of classroom activities likely to give rise to building skills in higher levels of thought, problem solving, and creativity in the basic academic areas. Each of these issues will be addressed in turn.

**Rational Responses to High-Stakes Testing: Gaming the Test,**

**Cheating, and Narrowing the Curriculum**

If a school or teacher is to be rewarded well or judged harshly by their students’ reading and mathematics scores, then rational responses to that situation include developing ways to game the system, engagement in cheating, and/or devotion of more time to the subjects that are used in determining the value of the teachers’ work or the reputation of the schools in which they do their work. But it is clear that the majority of schools with higher test scores are in higher income neighborhoods, while the majority of schools with lower test scores are in lower socio-economic neighborhoods. And as yet, no one has designed replicable, scalable, and cost efficient solutions to the problem of achievement in schools serving low-income students. So teachers and schools serving low-income students in a high-stakes testing environment are the most likely to feel the pressure to have their test scores improve.
In both the USA and England, the performance of students on standardized tests has resulted in teachers and schools having their reputations enhanced or lowered; faculties being reassigned or let go; salaries being modified; and the promotion of privatization, vouchers, or charters to compete with schools associated with lower test scores. But through survey research and teachers’ attestations in both countries, each of which is wedded to high-stakes testing as the major mechanism to improve schools, we have learned that gaming, cheating, and curriculum narrowing has occurred. And improvements have been hard to document.

Even though political leaders in both nations have received evidence of the negative side effects of high-stakes assessment policies, in both nations such policies continue. In both countries, dogmatic beliefs about the power of tests to increase school achievement and reduce achievement gaps between poorer and richer students have taken hold. Magical thinking about accountability systems seems to exist, leading too many leaders to believe that testing is a way to shape up lazy students and feckless teachers. What is being done is not working, and may, in fact, work against the national interest of both countries.

**Gaming the System and Cheating**

The gaming of the system as a rational response to high-stakes testing is a continuing problem, now well-documented in books such as *Collateral damage: How high-stakes testing corrupts American education* (Nichols and Berliner, 2007) and in newspapers throughout our nation. Nichols and Berliner, as well as Amrein-Beardsley, Berliner, and Rideau (2010), present data on the myriad ways that gaming and cheating (the less common but more deliberate and blatant form of test corruption) affects the validity of the tests we use to make judgments about the effectiveness of teachers and schools. For example, in Birmingham, Alabama, Nichols and Berliner (2007) discussed the dumping of hundreds of poorer performing students just before
tests were given. They discussed the outright lies about student attainment in Houston, Texas, particularly as found in the Wesley school. Newspapers noted the secret drop in the cut scores on the tests used in New York City, so that huge numbers of students appeared to be doing better under the leadership of Mayor Bloomberg and Chancellor Klein. Newspapers also discovered hundreds of anomalies on Texas tests, showing some districts to have unexplainable performance patterns, such as dozens of students in the same class having the same answer pattern. At least 50 schools in Georgia made the newspapers when they also showed anomalous performances—patterns of answers that defy the probabilities that are commonly expected for test answers. One district was found to purposely fatten up its children on tests days, providing extra nourishment that increased student test scores, when compared to students who had not received supplemental calories. The creativity of gaming and cheating to raise test scores, and the desperation implied by such behavior, is a common response to high-stakes testing. Though often met with approbation, such rational but loathsome behavior is also understandable. Peoples’ jobs and reputations are on the line. When faced with such important consequences for outcomes over which one doesn’t feel completely responsible, compromises to one’s moral code are often made.

Narrowing the Curriculum

The second rational response to high-stakes testing environments is not as clearly a moral issue as is the gaming and cheating that goes on in our schools. Yet curriculum narrowing may be the bigger problem that our nation faces. Increases in time for the teaching of reading and mathematics in elementary schools were quite dramatic between 2002 and 2007, the first five years of the federal Elementary and Secondary Education Act, better known as No Child Left Behind (NCLB) law. The time allocated to reading has been increased, on average, over two and
a third hours a week, while mathematics time has been increased, on average, about an hour and a half a week (Center for Education Policy, 2008). Time in these subjects has actually increased much more than this in school districts that serve poorer children. Those districts are likely to suffer the most severe consequences in high-stakes testing environments and thus they try to change their curriculum the most.

Because it is highly desirable that students read and do mathematics well, such changes may not be bad. But there is reason to believe that the increased time is being used poorly and it is having minimal, no effect, or detrimental effects on students. For example, if reading or English language arts consists of too much phonics practice, too much drill and test preparation, too many worksheets for practicing reading skills, not enough writing to express thoughts, not enough reading for enjoyment, and not enough reading of academic material to increase vocabulary for aiding comprehension, then the increased time fosters the goal of basic literacy and not literacy for its pleasure, or for its value in exploring science or the arts and humanities. Reading that is more critical and emancipatory is not stressed as frequently when tests are highly consequential for schools. Instead, drill on test formats and items suspiciously like those on the test constitute too much of the reading curriculum (Nichols & Berliner, 2007). As author Jacquelyn Gross has commented about many contemporary programs used to teach reading, particularly those used with the poorest students:

Learning to read has been reduced to a process of mastering a series of narrow, specific, hierarchical skills. Where armed-forces recruits learn the components of a rifle or the intricacies of close order drill ‘by the numbers,’ recruits to reading learn its mechanics sound by sound and word by word.
If this trend leads to less love of reading and thus less inclination to read, that would be tragic. In fact, because of the narrow goals of many of the reading programs used, and the time needed for test preparation, in too many schools there is too little modeling of reflection, too little “talk” about what was read by our youth. Yet most educators would agree with Edmond Burke that “reading without reflecting is very much like eating without digesting.”

Of course it does not have to be this way. In a study of reading instruction designed to break this pattern, teachers’ skill was measured on a scale that ranged from “teaching literacy as a set of instructional routines” to “teaching by facilitating student talk to deepen thinking and understanding” (Biancarosa, Bryk, & Dexter, 2010). Through intensive coaching in how to move from the “routine” end of the scale to the more open end of the scale, average teacher growth did increase substantially. More creative classroom instruction was seen. In those classes the average rate of student literacy learning increased by 16% in the first year of the program, 28% in the second year, and 32% in the third year when compared each year to a baseline of one-year’s growth in reading achievement. But use of instructional programs such as these appears limited.

Mathematics is almost never taught as well as the experts would like it to be taught (Ball, Lubienski, & Mewborn, 2001; Lampert, 2001). But it can be even more boring and inadequately taught than ever before in high-stakes testing environments. Mathematics, then, like reading, can be turned from a subject that is a rich source of discourse and debate, of conjecture and the testing of ideas, and even an important contributor to democratic practices (Ball & Bass, 2008) when taught correctly. But too often mathematics is a drill-oriented, teacher-dominated subject in which the increased time spent results in increased boredom and dislike of the subject. Under the threat of sanctions, Mathematics is almost never taught as a world of rigorous fantasy.

Evidence for the failure for these huge increases in instructional time in reading and
mathematics to be used effectively comes from many sources. Since high-stakes testing spread to every state in 2003, the gains in mathematics on the National Assessment of Educational Progress (NAEP) have been quite small, more with fourth than with eighth graders, and virtually non-existent for twelfth graders. (National Center for Education Statistics, 2009; National Center for Education Statistics, 2010). In fact, gains in reading have been virtually non-existent on the NAEP tests at any grade levels, although this interpretation is challenged somewhat by Chudowsky and Chudowsky (2010). Nevertheless, most scholars would agree that the gains noted in NAEP scores from 2003-2010 are relatively small and do not appear to be very different from the gains made on NAEP before high-stakes testing was instituted in every state. Furthermore, the achievement gap between poor and rich students, between African-American and white students, and between Hispanics and Anglo students has not changed substantially, though some small reduction in the mathematics score gap between African-American and white students may be developing (Braun, Chapman, & Vezzu, 2010). A slightly more positive interpretation about the reduction in the achievement gap is found when NAEP is not used and only a state’s own test scores are examined (Chudowsky, Chudowsky, & Kober, 2009). But even then the gaps were still found to be quite large.

The bigger issue is this: When there are large increases in time allocated to instruction, and little or no gains are noted, something is quite wrong. This set of circumstances only makes sense if the increased time for learning reading and mathematics results in a less interesting curriculum for teachers to teach and for students to learn. Under those conditions, results on the “trained-for tests” (a state’s own tests) will show substantial gains and the tests that have not been trained for (say the NAEP tests, serving as an audit test) will show minimum gains. That appears to be what is happening.
The United Kingdom has also become a test-oriented culture and this has apparently stunted the intellectual growth of its students, as well. Following up his own research of the 1970s, the British classroom researcher Maurice Galton found that teacher-centered pedagogy, characterized by interactions of a very low cognitive level, managerial in their intent, had increased dramatically between 1976 and 1996. Pupils had fewer opportunities to question or to explore new ideas after the tests became the primary instrument that the government used to change the schools (Galton, 2007). Assessment pressures have resulted in 42% of teachers’ time being taken up with whole-class teaching, compared to 18% in 1976. In primary schools in England, there are now few opportunities for expressing anything that resembles creative reasoning (Galton, 2007).

Galton and McBeath (2002) surveyed primary teachers in England. Teachers in their study regret that time pressures no longer allow them to engage in informal conversations with individual children during lessons, or to allow pupils, at certain times, to pursue their own ideas and interests as part of topic and project work. The British data tell us that, since the seventies, this time has decreased by nearly 50%. Yet, teachers regarded exchanges of that kind as highly rewarding and motivating because they greatly enhanced the teacher-child relationship and provided what some classroom practitioners described as *magic moments*.

Many of the teachers noted the creative subjects were being squeezed out, with the consequence that there were fewer opportunities for children to be good at something, to feel successful, to excel. These teachers understood that not only was this bad for the children, it made classroom management all that more difficult. The emphasis on the core subjects, with increased focus on a narrow range of content, simply meant that there was less space in the school day for less structured activities, though it was in those kinds of activities that some non-
academic children excelled. It was both a narrowing of the curriculum and a narrowing of the conceptions of what it means to be “smart” to which these teachers were reacting so negatively.

The British and US experience is exactly the same as Hong and Youngs (2008) report based on their analysis of the curriculum used in Chicago and Texas, as that district and that state responded to high-stakes testing. In Chicago, the researchers found that high-stakes testing seemed to narrow the curriculum and make it harder for students to acquire higher-order thinking, writing, and problem-solving skills. In Texas, it was found that schooling changed in ways that emphasized rote learning, not broad intellectual skills (Hong & Youngs, 2008; McNeil, 2000). Lipman (2004) also studied the Chicago schools and reports that the accountability program insured that the more affluent students in Chicago received a much richer and more intellectually challenging curriculum than did the poor children in Chicago. Poor minority children, in particular, were required to memorize fragmented facts and information, and they were constantly taught simple test-taking techniques. It seemed as if a curriculum designed for apartheid was in effect (Kozol, 2005).

In addition to curriculum narrowing, the non-partisan Center for Educational Policy (2008b), concluded from case studies of classroom responses to NCLB that:

- Many administrators and teachers used various forms of test preparation to familiarize students with the content and format of the tests used for NCLB accountability. This does, of course, seriously weaken any of the inferences that can be made about the validity of the tests.

- In most of the classrooms observed, teachers spent a considerable portion of class time asking “closed questions,” those with just one or a few correct answers. Other types of more independent learning activities, such as students working in learning centers, were
used less frequently. This is sure to negatively affect the acquisition of ways of thinking that are more conducive to creativity and problem solving.

In assessment-oriented cultures like the USA and the UK, it is convergent thought and mimetic processes that are valued, particularly among the lower classes. It is these styles of teaching and learning that we see a lot of in schools not scoring at the levels desired. Although never known to be overwhelmingly committed to classrooms where creativity and problem solving were paramount, even the best of American teachers now feel that they must extensively narrow what and how they teach; They seem forced by the policies in effect to engage in creaticide. A recently published teachers’ lament captures the feelings of many American and British teachers:

As a classroom teacher with 30+ years experience, I just completed the absolute worst year in the classroom I have ever endured (and it was NOT the fault of my students—they were great). This year I was told what to teach, when to teach, how to teach, how long to teach, who to teach, who not to teach, and how often to test. My students were assessed with easily more than 120 tests of one shape or another within the first 6 months of the school year.....

In addition, my class was visited at least twice a month by [a]consultant, two superintendents, [my] principal, assistant principal, reading coach, math coach, and [others]. If I was not teaching exactly what they wanted to see, I was in trouble.

My... academic freedom was completely taken away and my students were denied the best education I could provide for them.
I have tried to speak out against these many disgusting practices of testing, ...[but the] response has been, 'Get used to it. It is what is coming down the pike” (Groth, 2010).

**Where Does the Time for More Reading and Mathematics Come From?**

Time added for reading and math, in the typical 6.5 hour day, and the typical 180 day year, needs to come from somewhere else in the curriculum. The Center for Education Policy (2008a) has studied that theft. For example, the teaching of social studies, intended always to be part of youth development for responsible citizenship, is down, on average, over an hour a week. Yet Americans of all political persuasions ask that the schools help to develop citizenship (Rothstein, Jacobson & Wilder, 2008). So this trend in curriculum is in opposition to the aspiration that all Americans have for their school curriculum.

Science, a field that probably will be even more important in the 21st century than in the 19th and 20th centuries, is down, on average, over an hour a week as well. This curriculum area might help insure American economic competitiveness in the future, and surely will contribute to intelligent citizenship in our science- and technology-rich future. But it too has been cut because it is not tested.

Time for physical education is down, despite the fact that our youth are more sedentary than they should be, are quite overweight, and Type 2 diabetes is becoming more common. Not enough data were obtained in this study about the time allocation for lunch. But lunch is obviously wasted time for those who feel the pressure of testing under NCLB. Anecdotally, therefore, it was not surprising that a teacher at a Massachusetts district reported her concern that lunch at her elementary school was less than 15 minutes on many days “so that more time could be put in on the rigorous curriculum areas.” "Rigorous curriculum areas" is code, meaning the
areas that are tested. Anything else (social studies, history, government, art, music, physical education) has been defined in her school as inherently “non-rigorous.”

Recess was also found to be down, on average, about an hour a week. We even discovered, in Maryland, that naps for preschoolers and kindergartners were forbidden by one county school superintendent (Nichols & Berliner, 2007).

Art and music, nationally, are down an average of an hour a week. This is particularly troublesome because the nation never spent a lot of time in these subjects. One might think that California would be a place that countered this trend, because the arts provide a large source of employment for the state and a great deal of wealth for the nation through the huge overseas earnings derived from films, videos and music. The arts based industries greatly reduce our trade imbalance and have contributed to California’s riches over the years. Yet 89% of California K-12 schools fail to offer a standards-based course of study in all four disciplines—music, visual arts, theatre, and dance—and thus fall short of that state’s own goals for arts education. At the elementary level, arts instruction is often left to regular classroom teachers, who rarely have adequate training. In fact, 61% of California schools do not have even one full-time-equivalent arts specialist. Secondary schools are much more likely than elementary schools to employ such specialists, but even when they do, participation rates in secondary arts subjects are low (Woodworth, Gallagher & Guha, 2007).

The national picture was somewhat better than the cuts experienced in California. Nevertheless, the arts are still in crisis if one values the arts as a way to allow for or to increase creativity in our nation. For example, two thousand art teachers described how curriculum for their art program was affected by NCLB (Sabol, 2010):
• 35% said they experienced cuts in art curriculum content in order to insert language arts and mathematics content;

• 32% reported a loss of time to cover arts curriculum;

• 29% reported an increased emphasis on language arts, math, and science;

• 24% reported less time in curriculum for studio activities;

• 23% reported increased time on NCLB content;

• 22% reported a loss of time for students to be creative and explore alternative solutions to problems

• 21% reported less time for visual problem solving and visual arts thinking.

Large numbers of teachers reported that reading had become a part of their art classes; that students were pulled out for remediation, practice testing, or testing; that there was less funding for art classes; and that some of the budget for the art classes were used for test preparation and remediation. These data were collected just before the advent of the current recession and it is likely that the arts will suffer more in 2011 and 2012 because of increased budget cuts and a continuation of high-stakes testing programs.

The defense of the arts can be made on many grounds, but one stands out in terms of the needs of the 21st century, namely, that the arts are alternative ways to represent reality. Ideas expressed through the visual arts, dance, and music are not presented in the verbal or mathematical symbol systems that are in everyday use. So by cutting the arts we limit the ways our students can represent the world in which they live and about which they may choose to comment. A diminution in curriculum for learning the arts, therefore, restricts our students’ ways of thinking. It limits the possibility for creativity. This narrowing is a form of creaticide, since many pundits argue that it is creativity that will be the key to economic survival in the 21st
century. By providing ways to think differently about the world, the arts promote creativity. And so their defense in the curriculum can be based on economic and cognitive psychological reasons, which add to other reasons for defending the arts as both a natural expressions of our humanity, and for their occasional attainment of indescribable beauty.

Sir Ken Robinson (2010) has addressed this issue in his lectures on schooling and creativity. He argues that the brain does not operate as separate departments. When processing vocabulary and numeric representations, the brain interacts with our stores of music and art and dance. The brain is an interactive organ. If a person does not have well built up stores of music, art, and movement representations, says Robinson, that person has been reduced in the ways they can think about a problem and therefore restricted in all the ways they might be able to solve it. Robinson goes on to pose a thought experiment: What if along about the fifth grade we stop teaching literacy, numeracy, and science, and devote the entire fifth grade only to art, music, theater, and dance? All reading, math and science would be subsumed into the four arts so children would not lose ground. But instead they would learn to use their other representational systems to understand better art, music, theater, and dance: A creative suggestion from an expert in creativity!

The arts curriculum for the poor. The California study also makes clear that the arts are rationed. Close to twice as many students in schools that serve the wealthy (low poverty schools) receive instruction in the arts as do the students in schools that serve the poor (Woodworth, Gallagher, & Guha, 2007). This too is an example of our apartheid system of schooling (Kozol, 2005).

Wealthier students, if they are lucky, will be exposed to a wider range of the arts and humanities in their high schools because the breadth of the curriculum offerings in the high
achieving schools has not needed to be cut back. Students in these schools are usually passing their state tests, their schools usually make adequate yearly progress, and their parents have the political power and resources to maintain a broader curriculum. These wealthier students, even were they to miss some exposure to the arts and humanities in the public schools, have parents who can afford to provide them with extra curriculum activities (music lessons, drama club, sports), and they are much more likely to encounter the arts and humanities in their colleges. But poorer public school students may not be exposed to the ways of thinking embedded in the arts and humanities at all, and since their college attendance rates are low and getting lower at the most prestigious institutions of higher education (Gerald & Haycock, 2006), poorer students may never get adequate education in the arts and humanities, a situation that might inhibit their creativity in life.

Although teachers’ voices are often dismissed, surveys of teachers reveal how the NCLB high-stakes testing culture affects the content of their courses. In Colorado, a teacher says (Taylor, Shepard, Kinner & Rosenthal, 2003):

…We don’t take as many field trips. We don’t do community outreach like we used to like visiting the nursing home or cleaning up the park because we had adopted a part and that was our job was to keep it clean. Well, we don’t have time for that any more. (p. 30)

A Florida teacher echoes this lament (Jones & Egley, 2004):

Our total curriculum is focused on reading, writing, and math. There is no extra time for students to study the arts, have physical education, science, or social studies. Our curriculum is very unbalanced.

Sticking to an assessment and accountability system with so many difficulties seems foolish. Only magical thinking about the power of numbers (their purported “objectivity” vs.
other forms of assessment characterized by “subjectivity”), coupled with dogmatic beliefs about the power of accountability in and of itself to increase achievement and reduce achievement gaps, allows these damaging policies to continue. They are not working as planned, probably limiting creativity in the schools, and are likely to be doing so much more for our nations’ poorer students rather than our wealthier students.

The Narrowing of Assessments and the Cognition of Students

An additional problem limiting the development of creativity in our youth is that the assessments used to evaluate achievement are almost always multiple-choice items with a single correct answer. Public education budgets are always tight, and in the current recession tighter still. So it is deemed desirable to limit the expenses for large-scale, high-stakes testing. Thus multiple-choice, convergent, machine-scoreable items, the cheapest items to produce for mass testing, are almost always selected for state accountability systems (Shepard, 2010).

The result of this choice is that instruction in high-stakes environments is often drill-oriented because it is not very difficult to raise scores on assessments that emphasize the mimetic and algorithmic properties of a subject matter. Drill and practice work well when the test items are lower level and easily inferred from the specifications for the test. In such cases teachers often provide lessons that require memorization (spelling rules, punctuation, vocabulary) and mastery of rote procedures (invert and multiply, the product of two negative numbers is a positive number). What is sacrificed when instruction like this becomes too common is comprehension in reading, understanding in mathematics, and diversity in the outcomes of instruction.

To be sure memory and algorithmic learning still matters, constituting a piece of every skilled thinkers armamentarium.
[But the] skills that are becoming valued in the 21st-century are focused on a persons’ ability to participate in argumentation and discussion. Question- and-answer drills will have to be replaced by discursive processes that include productively challenging colleagues, paraphrasing, and interpreting presentations by others. And although individual performances still matter, much ‘knowledge work’ is ‘distributed, [and this] requires collaboration with others (Resnick, 2010).

Our thinking about 21st century skills and what we observe in the classrooms that exist in high-stakes testing environments are not compatible. Part of the reason for this is the tests that are used. If teachers were teaching to different kinds of tests we would witness instruction of a different kind.

What we need more of are constructed response items that require thoughtful, divergent, extended, and creative responses by students, whether such items are presented as formative or summative assessments. Unfortunately, as summative assessments, such items are considered too expensive to score. Such items often require human raters, well versed in a subject matter, and trained to use rubrics to judge the quality of student answers, sometimes to questions that have neither a “right” nor a “best” answer at all. Sternberg (2008) has provided us with examples of those kinds of items. We know how to design them. But when stakes are high and costs must be kept low we do not build the assessments we need.

The same concerns for scorability, reliability, cost, and a single score per student, result in “group projects” almost never being used in school accountability schemes, though they permeate modern business enterprises. Portfolios of work are also deemed too unreliable and expensive to score, though they have been used successfully in a number of public school settings (Koretz, Stecher, Klein, & McCaffrey, 1994), and are the basis of a good deal of student
evaluation in architecture and in other design sciences. Performance tests, rather than multiple-choice assessments, can improve instruction and the breadth of outcomes obtained, but they are avoided, even when they have proved to be workable. (Lane, Parke, & Stone, 2002). Curriculum narrowing and the narrowing of the assessments used to assess learning contribute to the development of another problem.

**The Narrowing of Conceptions About What It Means to be Smart in School**

Sir Ken Robinson has commented that academic ability, narrowly defined, now dominates our view of what it means to be intelligent (2010). Because of that, he believes that many of today’s students think they are untalented. That negative self-concept arises from the fact that what many students are good at is not valued in their schools, an observation made by UK teachers, as well. For example, a female teacher with 23 years experience in the UK says:

Too often the subjects like art, and history and geography and the subjects that children really enjoy, and P.E., are squeezed out and those children that are not academic are not getting a chance to shine. We are actually turning them off education rather than actually encouraging them to want to improve the things that they are good at because we’re not actually finding out what they’re good at any more (McBeath & Galton, 2002).

Education for a Volatile, Uncertain, Complex, and Ambiguous future world, a VUCA world (Johanson, 2007), would seem to demand breadth of talent in a society so that at least some of the talents that exist in society would be appropriate to whatever the world brings our way. It is like evolution. If characteristics of the niche that one inhabits change, only organisms that are adaptive will survive. This means that in changeable times variations in talents, like variations in genes, are needed. Identical skills, like identical genes may prove of no value for
survival. The behaviors associated with high-stakes testing work against that goal. They define an intelligent or a successful student quite narrowly.

The ability for students to learn in areas that are of interest to them seems almost unlimited, as seen in their commitment to their hobbies and to acquiring skills in video games. But with high-stakes testing students are not allocated school time to follow their interests unless those interests are aligned to the English language arts curriculum and to mathematics. The common core of standards now adopted by almost all US states defines what students should know and be able to do at different grade levels. Standards and tests together determine what and how a teacher teaches. Deviations from the common core, the master plan, in order to tailor a curriculum that would be sensitive to a particular students’ interests is considered dangerous because it might result in a lower score on a state’s high-stakes accountability test. And if teacher effectiveness is judged by means of test scores, the politically popular value-added models of effectiveness, then greater adherence and less deviation from those standards can be expected. One size of the curriculum is now supposed to fit all students, and the tests associated with that curriculum will determine who is, and who is not, a successful student.

But success as a human being and as a productive member of society ought to be based on a broader conception of human abilities than just the skills required in language arts and mathematics. This is a point made regularly by Howard Gardner (1999) and the intuitively obvious belief in multiple intelligences--that human talents come in different forms. In a just world all kinds of skills would be valued. In a more nurturing world all kinds of skills would be developed. But in an accountability-driven system only a narrow conception of what it means to be talented is possible. That is why creaticide is taking place.

Conclusion
The problem of high-stakes testing policies to improve achievement and reduce the achievement gap between richer and poorer students is not only that they do not work. These policies and associated practices also narrow what teachers do—reducing their options and their creativity as teachers. High-stakes environments limit the possibilities for teachers to personalize instruction for their students. The policies result in assessments that limit both the curriculum taught and the students’ cognitions about the subject matter being assessed. This results in an impoverishment of the kind more like that described by Dickens’s Mr. Gradgrind in *Hard Times*, and far from what many seek from the citizens of the 21st century, especially after developing a richer understanding of cognitive science in the 20th century. Mr. Gradgrind quite clearly explained what he wanted from his students:

> Now, what I want is, Facts. Teach these boys and girls nothing but Facts. Facts alone are wanted in life. Plant nothing else, and root out everything else. You can only form the minds of reasoning animals upon Facts: nothing else will ever be of any service to them. This is the principle on which I bring up my own children, and this is the principle on which I bring up these children. Stick to Facts, sir!

Narrow conceptions of knowledge, limited teaching of sophisticated cognitive processes, and narrow definitions about what it means to be a talented school person are all characteristics of the current school system we have, particularly in the schools that serve the poor. This is not good. I am not sure there is any convincing evidence that creativity in America is declining, as some think (Bronson & Merryman, 2010). But that possibility is likely. And were that to be the case, one of the causes for that decline might well be America’s high-stakes testing policy and the practices associated with it.
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http://epaa.asu.edu/ojs/article/view/714


http://epaa.asu.edu/ojs/article/view/772


