Editorial

Christopher H. Tienken, Editor

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&

Yong Zhao

Common Core National Curriculum Standards: More Questions ... and Answers

In the Fall 2009 issue of the AASA Journal of Scholarship and Practice there were two articles that examined various aspects of the impending Common Core State Standards (CCSS). In the editorial, David Canton and I presented historical and empirical arguments against the CCSS and the reasons commonly expressed by proponents for the need for national curriculum standards (Tienken & Canton, 2009). Yong Zhao (2009) wrote Comments on the Common Core Standards Initiative and provided further evidence that national standards were an inappropriate and empirically unsound direction for American education. We asked readers to send us lingering or unanswered questions they had after reading those two articles. What follows are five questions that summarize what we received. Yong Zhao and I provide answers to those questions and hopefully bring added clarity to the issue of national curriculum standards and the next iteration of large-scale testing that is sure to follow this initiative.

1. Do you think the potential negative consequences of national standards are simply just really negative consequences of state assessments? State mandated assessments of academic skills and knowledge came before Common Core State Standards and it seems that state assessments are here to stay, with or without national standards. Wouldn't it be a better use of our time to work to improve the poorly designed state assessments?

Yes and no. As we explain below, we have seen many negative consequences of state assessments already, but the CCSS will exacerbate the current high stakes testing environment. While on the surface, the CCSS are marketed as something to provide greater instructional guidance, the fact is that the probability is likely that high stakes testing will be used to enforce implementation of the CCSS. The Council of Chief State School Officers (CCSSO, 2009), one of the organizations that pushed through the development of the standards, wrote, "States know that standards alone cannot propel the systems change we need. The common core state standards will enable participating states to ... develop and implement an assessment system to measure student performance against the common core state standards" (p.2).

These standards will form the core curriculum of every public school program, drive another stronger wave of high stakes testing, and thus become student selection criteria for K-12 school programs such as Title I services, gifted and talented programs, high school course placement, and other academic programs.

The subjects prescribed currently by the CCSS, language arts and mathematics, and eventually science, will become the most important subjects in terms of time and resources allotted to teachers and other subjects and educational activities will be further deemphasized, intensifying the current situation across the country. Furthermore, students who do not meet the arbitrary levels of achievement set in those subject areas will be considered "at risk" and forced to do more work in those areas, depriving them of the opportunities to participate in other educational activities. Teachers in schools whose students do well in those areas will be rewarded, while teachers in schools in which students do less well will be punished, leading to a nation of schools that focus only on two or three subject areas.

Theories, Goals, and Policies

We as a nation need to examine our stated goals for public education. If, for example, we accept that one overarching end goal of education in the U.S. should be to prepare people who can strategize, problem solve socially conscious issues, create, collaborate, and innovate, then we need to look at the existing theories and applied research on the best ways to achieve those goals.

We also need to compare the theories and research that support our collective goals for education as a nation to those theories and research that drive standardized curriculum and testing, the proposed means of achieving the goal, to determine if there is theoretical and empirical congruency between ends and means. If the theories and research are not congruent, then we will not achieve our intended goals. We might even retard progress.

When we looked at the underlying theories of mandated statewide testing from the No Child Left Behind Act of 2002 (No Child Left Behind [NCLB PL 107-110], 2002), Common Core State Standards, and the proposals put forth in the Race To The Top program, we found them driven by behaviorism and rational choice theories. Those types of theories produce policies based on power relationships focused on efficiency and monitorial control. The fundamental idea of policies based on behaviorism and rational choice is that some policy body (e.g., State Education Agency (SEA) or U.S. Department of Education) develops a set of expected education outcome measures, monitors the relationship between the measures and school processes through a monitoring device (e.g., high-stakes test), and then implements rewards or sanctions to attempt to change behavior through external force to maximize performance on the monitoring device.

Results on the monitoring device become the end target instead of authentic improvement to the system. The tests used as monitoring devices usually judge student achievement based on arbitrary proficiency bands with limited or no empirical evidence to support their use (see Orlich, 2010 in this issue, Orlich, 2007; Tienken and Achilles, 2005).

For example, advocates of high school exit exam policies postulate that high-stakes exit exams cause students and teachers to work harder and achieve more because the tests create teaching and learning targets that have perceived meanings to both groups. The powerful (policy makers) exert force and control over the powerless (children and educators). Bryk and Hermanson (1993) termed this an instrumental use model. Examples of instrumental use models include state testing policies that use threats from SEAs to withhold funding for poor performance to compel school personnel to work harder so as not to lose funding or when SEA personnel use public castigation via the press and school ratings and/or rankings to spur educators to work harder to achieve outcome measures. The underlying assumption of people who espouse instrumental use models and behaviorist or rational choice policies

is that students, teachers, and school administrators do not work hard enough and are not motivated. This is similar to McGregor's Theory X (McGregor, 1960). SEA personnel and other policy makers that implement systems based on behaviorism and rational choice theory neglect to understand one important fact—thankfully, humans do not always act "rationally" or as policy-makers desire.

Collective Punishment Policy

An interesting characteristic about the current education policies at the state and national levels, and the one that is foreshadowed in the CCSS and the *Race To The Top* program, is that they mirror closely something known as collective punishment. Collective punishment is a policy of punishing a large group for the actions of a small group.

For example, in New Jersey, school districts must meet 289 separate criteria to be considered a proficient school district. In 2007, a school district in Middlesex County achieved 288 of 289 criteria. One student sub-group, in one grade level, in one of the district's seven schools did not achieve the annual yearly progress testing requirement two years in a row. The entire district was punished by having the school labeled as "needs improvement" and thereby forced to offer supplementary education services. The district had to pay for those services, reducing the amount of money available to help all students improve.

It should be known that the Soviets utilized collective punishment on a regular basis to control populations. The British used the strategy during the years leading up to the American Revolution through the implementation of the Intolerable Acts. There are countless other examples throughout history of authoritarian nations using collective punishment to force their political wills on the population. An education system that models policies based in part on collective punishment seems unconstitutional because such policies appear to violate due process rights. Are not those who are punished supposed to receive a due process hearing? As taxpayers, we are requesting ours.

Reactance Theory and Broken Tests

A cursory review of reactance theory should also raise questions about the notion of relying on standardized tests as primary outcome measures for school quality. Reactance theory states that when humans are placed in situations that they feel they cannot succeed (e.g., 100% proficiency mandate under NCLB), feel coerced, or believe the mandates are counterproductive or harmful, they will react by doing less than their best. They will withdraw, engage in practices that are contrary to research or recommendations, sabotage the mandate, feign minimal compliance, or openly dissent and resist (Brehm & Brehm, 1981; Silvia, 2005). In essence, the carrots and sticks used in instrumental use policies have little effect, and might have negative effects, if the people believe that they are in a nowin situation.

Based on a review of every Grade 8 and High School statewide standardized exit exam used to satisfy the NCLB Act testing mandates, educators should be reacting. Not one of the Grade 8 or High School exit exam tests in use assesses authentic strategizing, innovation, creativity, or socially conscious problem solving (Tienken, 2008; 2009). They all test basic computation, something teachers do on a regular basis. They all test literal comprehension and memory, something teachers do on a regular basis, and they all test imitation (e.g., being able to follow the steps to solve disconnected mathematics problems) another thing teachers do on a regular basis. Not one of the statewide tests

reviewed assesses anything that is not already assessed on a consistent and frequent basis by classroom teachers. In essence, these tests tell us nothing new.

Another issue with using standardized tests is that the results from all statewide tests of academic skills and knowledge are imprecise. In fact, the reported scale scores for individual students that parents, teachers, and administrators receive from the state SEA can be inaccurate by as many as 50 scale score points (Tienken, 2008; 2009). That is because all test results from standardized tests have error. They are not precise.

For example, the Florida Grade 8 mathematics test results can be off by as much as 9 scale score points, New Jersey's Grade 8 mathematics results have approximately 12 points of error and California's mathematics test results have approximately 17 scale score points of error. Ohio's Grade 8 mathematics test results have approximately 10 points of error for individual student results. One reason for this is that there are simply too few questions on the tests to get an accurate measurement of student achievement in any one skill. It takes at least 25 questions per skill to get a statistically reliable measurement of an individual student's achievement of a specific skill. Now consider the hundreds of standards in each content domain and multiply that by 25. You can imagine the immediate issue with the continued reliance on statewide testing to monitor standards—regardless of how well the test quality improves.

Error Defined

The technical term for the amount of error present in the individual student test scores reported by SEA personnel is the *standard error of measurement* (SEM). The SEM is an estimate of the amount of error one must consider when interpreting a test score (Harville, 1991). The SEM describes how far the reported result may differ from a student's true score (Harville, 1991). A more precise statistic is the *Conditional SEM* associated with proficiency level cut-scores (Harville, 1991). School and district leaders set internal cut-scores, linked to statewide test results, for entrance into specialized programs such as Title I basic skills, gifted education, and differentiated high school curricula (Booher-Jennings, 2005).

In some instances the cut-scores for remedial programs rest on the border of the statewide proficient and non-proficient categories. Even one point of error can make a difference whether a student is labeled proficient or something less. The technical limitations inherent in state assessment results call into question the use of the results as accurate decision-making tools and challenge the reliance on standardized state or national tests as the ultimate outcome measure of education quality (American Education Research Association [AERA], American Psychological Association [APA] National Council on Measurement in Education [NCME], 1999; Amrein & Berliner, 2002; Darling-Hammond, Rustique-Forrester, Pecheone & Andree, 2005; Joint Committee on Testing Practices [JCTP], 2004; Neill, 1997; Standard & Poors 2005).

You can begin to realize that this effort of statewide testing to monitor standards becomes a bit like Sisyphus pushing the rock up the hill. We should not ask for better tests—they will not come. We should reject the notion of using one test as the indicator of anything. The spring issue of the AASA Journal of Scholarship and Practice will provide an overview of a set of ideas that schools can use to replace statewide assessments, demonstrated over 60 years ago in one of education's landmark studies on student achievement

2. Most state standards are very similar already as we all seek to enable our students to gain basic skills in math and literacy. Do you think the real problem is more about how to standardize the instruction students receive and outcomes for the proposed standards to ensure quality?

No. The real problem is that people believe in the myth of standardization. Standardization of human beings is not desirable in a humane society, nor is it possible. Reactance theory gives us a clue on how people and systems will react. Furthermore, to remain the most creative and nimble economy in the world, the nation must remain non-standardized and develop student creativity and innovative thinking even more. We need to become as non-standardized as possible. Common standards do not do that. Standards in general attempt to reign in knowledge to what is already known, not expand it or develop the conditions necessary for creating new knowledge. The second author, Yong Zhao, brings in research evidence from a wide range of disciplines to show why diversity of talents is essential for economic growth and social coherence in his recent book (Zhao, 2009).

Standardization

As with the previous topic of standardized state testing, we need to examine the underlying theories and applied research that demonstrate standards can help us achieve our goals for education. The notion that a human being can be standardized rests upon theories of behaviorism and efficiency. Both have served education poorly, but for some reason retain their attractiveness with policy makers and some educators. As Callahan (1962) so thoroughly exposed, education leaders supported Frederick Taylor's Scientific Management (1947) and tried to make education more efficient like business. Whether business was more efficient was never really questioned.

Remember, efficiency is not the same as effectiveness and effectiveness is not always efficient. Efficiency is concerned with maximizing profit at all costs, as we have painfully witnessed and experienced as a result of the hyper profit-efficiency movement currently running Wall Street. Also remember that Taylor's ideas of efficiency and scientific management were created in the steel mills focused on the shoveling of coal, an inanimate object. School leaders work with children, human beings. There is no evidence that the efficiency movement of the late 1800's and early 1900's improved education, in fact evidence exists that the opposite was true. Consider that the public high school graduation rate in 1918, well into the efficiency movement, was about 4%.

Liberty and Standardization for All?

When we think of standardized instruction, the idea of programmed or scripted instruction comes to mind. We are not sure if that is what is best for students because not all students learn at the same speeds, develop cognitively, socially, or morally at the same rates, or react to instruction the same ways. Standardized instruction assumes all those variables are stable with all students at all times.

However, students bring various levels of prior experience, emotions, and attitudes to the classroom. Think about another applied profession—medicine. Doctors do not standardize their practices. They individualize to meet the needs of the patient. When you go to your doctor or hospital you expect to be treated as a unique individual. Although you expect a typical standard of care (e.g., do no harm), you do not expect to be standardized. Why would you allow your child to receive programmed, standardized, one-size-fits-all instruction? We would not allow that for our children and

we do not see any evidence that standardizing instruction will improve education for other peoples' children.

Deskilled Instruction

Standardized instruction deskills teaching and reduces it to a recipe and a set of steps. The problem is that students do not always act or respond according to what the teacher's manual says. If we deskill the job of teaching even further than it has already become through the various whole school reform models and canned programs, then teachers will not know how to problem solve instructional issues that do not conform to what the teacher's manual prescribes. They will not be able individualize instruction or meet the needs of diverse learners. Those of you who spend time in classrooms know the difference between someone who can teach and someone who is simply following the teaching manual. Teachers solve instructional problems, automatons that read teacher's manuals and follow scripted programs cause instructional problems for others to solve. Teachers who are forced to follow programmed or scripted programs do not create learning, they imitate learning and they pass that penchant for imitation on to their students, thereby deskilling their students along with themselves.

3. Instead of states spending money to create their own standards, why is it not appropriate to combine our talents to develop one sound set of standards?

First, we did not combine our talents to create the CCSS. The standards were written by corporations and private consulting firms. It is fair to say that the entities involved in creating the CCSS stand to make money from national standards and testing. So from the start, profiteering is potentially at play and the threat exists that children were not the first interest in this process. We are not accusing any person or firm of less than honorable intentions. We simply observed that each corporation or firm on the list has a product or service that can be sold to schools to help school personnel implement national standards and testing. The missions and services of each corporation and firm can be found easily through an Internet search. Please remember that public schools use taxpayer money. There did not seem to be any taxpayer input in the process of developing the standards or at the state level when the state chief school officers volunteered their states for this social experiment.

Anti-Intellectualism and CCSS?

We found it interesting that the major curriculum research universities were not involved in the standards creation process. That strikes us as somewhat anti-intellectual, which is troubling considering this effort is supposed to improve an intellectual enterprise. The list below, taken directly from the Council of Chief State School Officers website, shows the corporations and consulting firms involved in the creation of the English-Language Arts standards. The names of other members of other content groups can be found on the site at www.corestandards.org. We encourage readers to examine the lists carefully, search the websites, and draw independent conclusions.

- Elementary and Secondary School Programs, Development, Education Division, ACT, Inc.
- Student Achievement Partners
- America's Choice
- Core Knowledge Foundation
- The College Board
- The Quarasan Group
- National Center on Education and the Economy

- Achieve.org
- University of California, Davis
- VockleyLang, LLC

Curricular Distance

Second, we should all ask what are the underlying theories and applied research that demonstrate one set of national standards will raise student achievement for a diverse group of students. One problem with standards developed at the national level is that the curriculum becomes further removed from the people who actually have to use it: teachers, students, and administrators. Curriculum organization and articulation is what some have called a proximal variable (Wang, Haertel, and Walberg, 1993). That means it becomes most influential when it is closer to the student. Curriculum must be designed and developed locally, by the teachers, administrators, and students who use and experience it, to have the greatest influence (Tanner & Tanner, 2007; Wang, Haertel, and Walberg, 1993). The influence of curriculum on student achievement lessens the more distal curriculum becomes from the end users.

We saw this phenomenon with the statewide curriculum enacted by the states during the NCLB era. (See the answer to Question 4 for more information.) This time, it will be worse because state level educators were not involved in the creation of the standards. The design and organization of the curriculum were two of the strongest administratively mutable variables identified by Wang, Haertel and Walberg (1993) that affected student achievement. State governance and policy setting was the weakest variable. We wonder about the influence of national governance in what used to be a locally controlled system.

We note for the reader the lack of evidence that mandating the same standards for all students improves achievement. The opposite is true. One set of curriculum standards will exacerbate learning problems for students whose cognitive developmental stage does not match the curriculum expectations (Orlich, 2007; Piaget, 1983; Sweller, 2006).

4. Under NCLB the states created their own tests using their own standards. Did states water down their tests and standards to make it look like their students were doing well? Could the lack of growth on the National Assessment of Education Progress (NAEP) be due to this watering down of the state testing systems or is it something else?

The lack of growth on NAEP can be attributed to "watered down" state tests and standards only if the reason for growth on the NAEP prior to the NCLB Act was because of high quality standards and tests. Unfortunately for proponents of national standards it was not, because many states did not have mandatory curriculum standards or testing in 2001. Records from the Council of Chief State School Officers indicated that only 21 states had standards in at least mathematics and language arts by 1999 and less had standards in science. So prior to NCLB less than 50% of the states had mandatory standards and tests in mathematics and language arts.

The report released by the National Center for Educational Statistics on April 28, 2009 of the recent NAEP reading results provided some examples of what a focus on standards can produce. A review of the age 9 reading scores shows a slowdown in academic achievement as measured by NAEP. We chose age 9 because those are the students most likely to show achievement influences from NCLB because they were in school since the inception of the law in 2002. To be fair, we will not look

at the scores from 2002 until now. We present the scores from 2004 to 2008 because that provides schools two years to implement the law (2002-2004) and then four years until the NAEP testing date in 2008

Theoretically, the reading scores from the 9-year-olds should be the strongest of any age group. They entered school two years after the law was enacted and experienced it at its height. We will compare those scores to the 1999-2004 scores, the time when fewer states had mandatory standards and tests in reading. During the 1999-2004 time period, reading scores for all students rose seven points but rose only four points for the 2004-2008 time period. That statistic could be misleading because of Simpson's Paradox. A more honest comparison is that of specific ethnic groups. The gap between students identified as black and those identified as white narrowed by three points during the NCLB era, but it narrowed nine points during the previous period. The gap closed three times as much prior to NCLB. The gap between students indentified as Hispanic and whites closed almost twice as much prior to NCLB than after; seven points closure prior and four points after.

Some might point to that and say, "yes," that proves that the states lowered their standards during NCLB. However, remember that less than 50% of the states had mandatory standards prior to the NCLB era. Some might still say that is why we need new national standards to keep states honest. Once again, the NAEP scores were better before all states had standards and even now, many states standards are strikingly similar in mathematics and language arts. You can go to http://nationsreportcard.gov/ltt_2008/ to review the NAEP results and trends.

5. The countries that outrank us on international tests have national curricula standards. If it works so well in other countries, why is it a negative thing for the U.S.?

Not true. There is no solid correlation and certainly not a cause and effect relationship between national standards and national performance. First of all, there are more countries in the world that have national standards, so as a matter of probability, there can be more countries with national standards that scored well. Second, looking at the test results, we can see that some countries that outrank us on international tests have national standards and some do not. For example, in the 2006 PIRLS study of reading achievement Canada did very well, but it does not have national standards (see: http://timss.bc.edu/PDF/P06_IR_Ch1.pdf). The same can be said of the PISA (2003; 2007) test results.

For example, the 2006 science PISA results show both Canada and Australia perform well above the OECD average, ranking #2 and #4 among OECD countries respectively (PISA, 2007). Canada and Australia do not have national standards. They had similar rankings on the 2003 PISA results, with Canada ranking #4 and Australia #7 in math, both #4 in problem solving, and Canada #2 and Australia #3 in reading. There are plenty of countries with national curriculum and standards that perform much worse than these two countries and the U.S. (PISA, 2003). Countries that perennially outscore the U.S., such as Singapore and Japan, are trying to reform their systems to be more like the U.S. because they recognized the immense damage done by nationalizing their education systems around one set of standards (see the article by Sophia Tan (2010) in this issue for more information on Singapore).

There are many issues that affect test scores at the international level: selective sampling by countries, poverty levels of the students in the samples, opportunity to learn the material on the test, negotiations of actual test questions by the countries involved, culture, and other factors out of the control of schools. For a comprehensive review of the international tests given since 1964 and the issues associated with student achievement we recommend as a starting point reading Baker (2007) Are International Test Scores Worth Anything and Tienken (2008a) Rankings of International Achievement Test Performance and Economic Strength: Correlation of Conjecture?

Author Biographies

Christopher Tienken is a former assistant superintendent for curriculum and instruction. He is now a full-time faculty member at Seton Hall University in the College of Education and Human Services, Department of Education Leadership, Management, and Policy. E-mail: christopher.tienken@shu.edu

Yong Zhao is a University Distinguished Professor at Michigan State University. Recently he has focused his research on the impact of globalization on education, particularly on the knowledge and skills needed in a globalized world. He summarizes his findings in his new book Catching Up or Leading the Way: American Education in the Age of Globalization published by ASCD. E-mail: zhaoyo@msu.edu