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"The federal intrusion into Common Core, however unwelcome and unhelpful, does not change a basic truth: Common, voluntary standards are a good, conservative policy."

"The principles behind the Common Core affirm a great intellectual tradition and inheritance."

William J. Bennett
Former Reagan Administration Secretary of Education
September 10, 2014

Some of my constituents have asked why I voted last week not to hold Special OCBE meetings on October 20^{th} and November 17^{th} . Since there are many others who may have the same question, I believe that a written explanation is in order.

When I reluctantly voted in favor of these meetings two months ago, it was on the promise that this would be joint effort of all board members to provide a forum for members of the public with thoughtful and scholarly perspectives of the Common Core that assist our community in understanding the standards at a deeper level.

That promise was not kept. What I feared came to pass. At our Board meeting last week the local Tea Party leader stated he was satisfied with the organization of the meeting and the panelists. This was an hour before the elected members of the Board were notified what panelists Trustee Williams had selected. If there was any doubt what these meetings are about, it disappeared when the Tea Party leader was quoted in the Orange County Register yesterday as saying, "That's why we're putting it on trial."

If the Tea Party wants to hold a political rally I encourage them to do so. It is election season after all. But it should not be held under the banner of the Orange County Board of Education and paid for by the taxpayers.

Thousands of taxpayer dollars have been budgeted to hold what many consider to be nothing but a political rally. As a political fiscal conservative, I could not support spending monies on these meetings – monies better spent in the classroom.

Many of our panelists have traveled many miles to get here and I feel that many, due to time limitations imposed by Trustee Williams and not voted upon by the Board, will not have the opportunity to fully express their views.



David L. Boyd October 20, 2014

The pages that follow include my response to an editorial that Trustee Williams wrote and was published the Orange County Register in September 2013. It was written because some of my constituents had expressed concern after reading the editorial.

My response was written in November 2013 and was thoroughly fact checked at the time. I still believe it to be far and accurate today. (Note: in August 2014 the State of Indiana did withdraw from the Common Core State Initiative but it had not done so at the time Williams wrote the editorial.)

Lastly, as an apparent attempt to defend the cost of holding these meetings, the OCBE website claims the following, "Since the fall months of 2013, there have been increasing mumbers of community members addressing the Board related to concerns with the Common Core State Standards."

This is simply false. If anyone goes to the minutes of our Board meetings that are posted on our website, here's what they'll find regarding the number of people who spoke on Common Core.

 August 2013 Meeting September 2013 Meeting October 2013 Meeting November 2013 Meeting December 2013 Meeting 	- 2 - 14 - 14 - 6 - 8
o January 2014 Meeting oFebruary 2014 Meeting oMarch 2014 Meeting oApril 2014 Meeting oMay 2014 Meeting oJune 2014 Meeting oJuly 2014 Meeting	- 7 - None - 2 - None - 1 - None - None

In the six months leading up to the meeting when Trustee Williams announced that he wanted these meetings to take place, there were a total of three comments on Common Core.

Only when Trustee Williams placed an item on our Agenda in August regarding this meeting did a few people once again comment. Over the period July 2013-July 2014 (13 months) only 27 different individuals commented on Common Core. (An average of two per month.)

That being said, I hope that attendees will come away from the meeting with useful information. For those who have a continuing interest, please visit the OCDE website for factual information.



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Controversy and the Common Core - Setting the Facts Straight

Over the past few weeks I've received a number of comments and questions related to the editorial written by a fellow OCBE Board member and published recently in the Orange County Register. (Ken Williams: Controversy and the Common Core, published September 24, 2013). Those whom I've spoken with know that I'm not an enthusiastic supporter of Common Core as it was adopted in California. I agree with my fellow Board member, Robert Hammond, that there was not enough public input in adopting the Common Core standards in California.

But I am an enthusiastic supporter of truth in editorials, and as I'll comment below, Dr. Williams' editorial falls short.

Like any major revision to established curriculum there are elements that I like and elements that I dislike. But I'm not a curriculum expert and neither is Dr. Williams.

For ease of review I've copied Dr. Williams' editorial word-for-word and added my comments in Bold Italia. They are my comments alone and do not necessarily represent the views of the Orange County Department of Education or my fellow Board members. I hope this will be helpful. If you have any questions or comments please feel free to contact me.

Ken Williams: Controversy and the Common Core

By KEN WELLIAMS / For the Register

As Obernacere implementation is the subject of national headlines, also in 2014, an equivalent isunami will occur in America with a controversial national education curriculum arriving in our schools and classrooms. For practical purposes, it transforms and adversely impacts classrooms and removes parents and locally elected school board members from governing schools in their community.

Common Core is a one-size-fits-all program.

(In a certain degree this statement is accurate. Common Core does provide a consistent, clear understanding of what students in states that have adopted Common Core are expected to learn. But every state has flexibility on how to achieve this goal and states are free to adopt more rigorous graduation requirements. By example, Common Core as adopted in California, supplemental standards can be added.)



It was paid for by the federal government – against federal laws that prohibit Washington from establishing national educational standards, testing and curriculum.

(This statement is simply false. While the Federal Department of Education supports the standards and did provide some financial support, major support came from private non-profit organizations. No rasional person who has examined the facts and has any knowledge of relevant Federal law could conclude Federal laws were violated. To my knowledge no lawsuit has been filed in the three years since Common Core was adopted in California that even makes this claim.)

it's similar to the current national health care debate. Common Core's stealthy implementation by the Obama administration, national and state educational organizations and state governments keep parents and taxpayers in the dark.

(As I commented above, I agree that Sacramento could have done a much better job in educating California citizens on Common Core as it will apply to California students. But unfortunately, it's these types of editorials that contribute to the confusion.)

In 1996, the National Governors Association began a nationwide dialogue to raise national academic standards and strengthen educational accountability. This effort was a consequence of the poor U.S. ranking on international K-12 assessment testing. What began as an admirable goal and pursuit, however, is causing local school boards and parents much anguish as this emerging and disturbing new education paradigm becomes reality.

Some may recall the previous federal education reform plans of the 1990's, Goals 2000 and School-to-Work. Their implementation was thoroughly rejected by the public as a result of the constitutional errogance and defiant nature of government officials. Now, almost two decades later, social and aducation progressives learned from their past mistakes and are using a different approach, i.e., silence. In 2010, U.S. Department of Education Secretary, Ame Duncan, acknowledged this education transformation was a "quiet revolution."

(Not exactly a quiet revolution, at least in professional education circles. Every educational conference that I've attended in the past three years had discussions or workshops on Conunon Core.)

Originally, 46 states voluntarily adopted Common Core with federal funding "Race-to-the-Top" grants. Conservative states such as Alaska, Nebraska, Virginia and Texas declined to adopt the standards.

(It is accurate that many states, including California, were influenced by the possibility of Race-to-the-Top grants. However, the California legislation specifies that California must adopt "high-quality standards or assessments that align with the common set of standards.")

As opposition increased across the country, Indiana and Michigan recently dropped out under public or legislative pressure.

(This is false. In Indiana, for the 2013-14 school year, students are being taught both Indiana Academic Standards as well as Common Core standards and will be tested on both. Indiana has conducted three public hearings in the past few months and the Indiana Department of Education will provide an evaluation of Common Core Standards to various officials. But Indiana has not dropped out of Common Core.

The Michigan Legislature recently conducted hearings on Common Core. The result was that Common Core was reaffirmed.

Anyone who doubts these statements can simply do what I did. Telephone the offices of the Departments of Education for Indiana and Michigan.

I personally believe that this type of review process is healthy and something California should implement. This would allow the state to address many of the nights regarding Common Core. But Dr. Williams' claim that Indiana and Michigan have dropped Common Core is simply false.)

Here in California, Common Core was adopted by the State Board of Education in August 2010. A main objection to Common Core is it circumvents the ideals and concept of "local control." In reality, an unelected, governor appointed, 11-member state board of education, decides without substantive debate.

(Common Core was adopted based on a process approved by a Democratic controlled legislature and signed into law by a Republican governor.)

Local boards have little input or ability to change curriculum.

(In California, education policy is under the exclusive control of the Legislature. This has long been a part of the California Constitution and something that I would like to see changed. But Dr. Williams falls to note that it has nothing to do with the adoption of Common Core.)

Local control of education has been hijacked specifically by unelected officials holding the purse strings in Sacramento; and in general by the federal government and national education organizations.

(Once again, this is false. These appointed officials on the State Board of Education in Sacramento have no control over funding. In fact, the recent adoption of the Local Control Funding Formula has given greater discretion to local school boards in matters of education spending.)

Common Core dismisses the idealism of local control of education by parents, teachers and school boards laid out in the Northwest Ordinance by our founding fathers; it "dumbs down" academic standards; and huge financial costs are born by taxpayers to implement a national curriculum that is unfunded, and has never been tested or proven.

(This is both misleading and false. With respect to education, the Northwest Ordinance, which was adopted in 1787, only states that "Education shall forever be encouraged."

Reasonable people can disagree on academic standards. But educators favoring Common Core gready outnumber those who oppose. They include William Bennett, the conservative former Secretary of Education under President Reagan and Rod Paige, Secretary of Education under George W. Bush.

Dr. Williams is correct that we should be concerned about cost. But California has allocated funds to implement Common Core. Whether the allocation is sufficient remains to be seen.)

Common Core uses code words like higher academic standards, rigorous academic coursework and career readiness. Unfortunately, these concepts are a ruse. Career skills are really training for entry-level jobs and the college-ready concept refers to community college rather than a four year university academic track. In examining the details, under the guise of "higher standards and career readiness," well-intentioned educators, liberal political and education activists impose upon school boards to implement untested progressive academic curriculums. This hurts our nation.

(In addition to "well intended" highly qualified educators, add largely conservative leaders of industry. The Bill and Melinda Gates Foundation provided major funding for the Common Core Initiative.

By way of example, Craig Barrett, former Chief Executive Officer and Chairman of the Board of Intel Corporation and presently a charter school operator (as well as a MAJOR contributor to Republican Party causes) said recently.

"Common education standards are essential for producing the educated work force America needs to remain globally competitive. This voluntary state-lead effort will help ensure that all students can receive the college-and career-ready, world-class education they deserve, no matter where they live. I applicant the states' efforts that got us here today and the work of the National Governors Association and others in supporting this important achievement."

Additional supporters include (to name but a few):

- *The United States Chamber of Commence
- *Former Governor Jeb Bush who has been described in the media as "the nation's leading advocate for Common Core."
- ·The United States Army
- The National Parent Teacher Association
- *The College Board (the organization that designs the SAT exam that every high school student must take to gain admission to a good four-year college.)

In certain states controversial personal data mining has emerged and politics plays a major role in the approved curriculums.

(Personal data mining is a red herring as it applies to Common Core. Data must absays play a part in the assessment of the quality of any educational program and there is no evidence that Common Core-based assessments will collect any data beyond what is already collected for existing standardized tests.)

Similar to the 1990's Clinton administration national education plans, government-endorsed public policy positions play a key role in this curriculum and religious liberties and individual conscience are dismissed.

(Once again this claim is false. Common Core only relates to English and Math. It does not deal with religion or individual conscience. In fact, Common Core is supported by many religious organizations including the Council for Christian Colleges and Universities. The Council endorsed the following statement in 2010, "We recognize the enormous promise that Common Core State Standards released today hold to help all students graduate from high school ready to succeed in postsecondary education.")

Under Common Core, rugged individualism is diluted, group thought and personal attitudes are the norm and moral values overtiy lean political leftward.

(Common Core emphasizes critical thinking an opposed to mere memorization of facts. This is one element of Common Core that I fully support. I'm unclear what Dr. Williams means by "rugged individualism". The term is commonly defined as the practice or advocacy of individualism in social and economic relations emphasizing personal liberty and independence, self-reliance, resourcefulness, self-direction of the individual, and free competition in enterprise. Doesn't critical thinking support these views?

With respect to moral values, only Dr. Williams can explain his belief that Common Core leans left. I can't even speculate how he arrived at that conclusion.)

Experts on academic standards warn Common Core standards are mediocre and will hurt our nation's children.

(Opponents to Common Core only rarely name their so-called experts. But far more professional educators support Common Core than oppose.)

True education reform empowers parental choice, school vouchers, charter schools and aliminating the influence of teachers union.

(One does not need to oppose Common Core to support parental choice, charter schools, and reducing the influence of the teachers unions.

Ken Williams, a physician, has been a member of the Orange County Board of Education since 1996.

(David L. Boyd is president of the Orange Caunty Board of Education. He is a member of the State Bar of California and has been a professional educator for nearly three decades.)

November 11, 2013

The Conservative Case for Common Core

Federal intrusion and misleading rumors do a disservice to an effort that started in the states.

 $\mathbb{N}_{\mathbb{Z}}$

William J. Bennett

Published in the Wall Street Journal Sept. 10, 2014

As the former Secretary of Education for President Ronald Reagen, I have been following the national debate over Common Core standards. The debate is getting hotter, but not always clearer. It's time to get clarity on some things that have been badly and sometimes mischievously muddled.

Let's begin with the ideas and principles behind the Common Core. These educational principles have been debated and refined over decades. First, we can all agree that there is a need for common standards of assessment in K-12 education. And we can all agree that there are common and shared truths in English, literature and math. Think of "We hold these truths to be self evident" as emblematic.

Nearly all Americans agree that to prepare a child for civic responsibility and competition in the modern economy, he or she must be able to read and distill complex sentences, and must be equipped with basic mathematical skills.

When I was chairman of the National Endowment for the Humanities in the 1980s, I asked 250 people across the political spectrum what 10 books every student should be familiar with by the time they finish high school. Almost every person agreed on five vital sources: the Bible, Shakespeare, America's founding documents, the great American novel "Huckleberry Finn" and classical works of mythology and poetry, like the Iliad and the Odyssey.

The same goes for math. Certain abilities—the grasp of fractions, decimals, percentages, ratios and the like—should be the common knowledge of all.

That's the fundamental idea behind a core curriculum: preserving and emphasizing what's essential, in fields like literature and math, to a worthwhile education. It is also, by the way, a conservative idea.

Governors, state education administrators and teachers used these principles as a guide when they developed a set of common standards that were later presented to the country as Common Core. Forty-five states signed up originally. But the process was contaminated by politics, and that brings us to the debate we have now.

in 2009 the Education Department created Race to the Top grants, federal funding for states that met certain educational benchmarks. To qualify, states were required, for instance, to demonstrate that they had a common, high-quality set of standards. Common Core standards satisfied the criteria.

Critics accused President Obame and Education Secretary Ame Duncan of dangling federal money to encourage states to adopt the Common Core. The administration

never should have done this. It made a voluntary agreement among states look like a top-down directive from the federal government. But remember: The original Common Core standards were separate from the federal government, and they can be separated once again.

Conservatives have reason to be upset by this federal overreach. The Obama administration has run roughshod over individual rights and state sovereignty, on issues ranging from health care to climate change. But the federal intrusion into Common Core, however unwelcome and unhelpful, does not change a basic truth: Common, voluntary standards are a good, conservative policy.

Call it Common Core or call it something else, as Arizona has done by renaming its standards "Arizona's College and Career Ready Standards," but public schools should have high standards based on a core curriculum that is aligned with tests that are comparable across state lines. The U.S. has several types of national exams that assume at least some common basis of knowledge and understanding. These exams—NAEP, AP, SAT and ACT—work and most of the country agrees that they are useful.

Why then is Common Core drawing such heavy fire? Some of the criticism is legitimate, but much of it is based on myths. For example, a myth persists that Common Core involves a required reading list. Not so. Other than four seminal historical documents—the Declaration of independence, the preamble to the Constitution, the Bill of Rights and Lincoln's Second Inaugural Address—there is no required reading list. Textbook companies have marketed their books disingenuously, leading many parents to believe that under Common Core the government mandates particular textbooks. Also not true.

The standards are designed to invite states to take control and to build upon them further. The standards do not prescribe what is taught in our classrooms or how it's taught. That decision should always rest with local school districts and school boards.

The principles behind the Common Core affirm a great intellectual tradition and inheritance. We should not allow them to be hijacked by the federal government or misguided bureaucrats and politicos.

Mr. Bennett is a former U.S. secretary of education (1985-88).

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November 17, 2014

In my view, in discussing the Common Core State Standards, its important to distinguish between the standards themselves and the partisan politics related to the role, if any, the Federal government should play in public education.

As an elected official to this non-partisan office, I believe my responsibilities begin and end in making decisions that benefit the special students that the Orange County Department of Education serve.

There are some, including one of our panelists last month, Hugh Hewitt, who believe the Federal government has acted unlawfully in influencing states to adopt the Common Core State Standards. That may or may not be the case. But that not a battle this Board was elected to fight. What is important is that Mr. Hewitt supports the Standards themselves.

"I want to note for the record, I'm not an opponent of Common Core." -Hugh Hewitt

Source: Page 117 of the official transcripts of the Public Hearing on the Coramon Core State Standards conducted by the Orange County Board of Education on October 20, 2014.

I was easily re-elected this year by a 14% margin. Major issues were the Common Core Standards and if our Board should sue the Federal government. At that time my constituents made it clear to me that they expected education dollars to go into the classroom, not to attorneys hired to file lawsuits against the Federal government. I intend to continue to resist any such efforts.

Testimony of William McCallum, Distinguished Professor of Mathematics at the University of Arizona

17 November 2014

Who I am and why I decided to work on the Common Core State Standards

I am a University Distinguished Professor of Mathematics at the University of Arizona. My doctorate in mathematics is from Harvard University and I have been a fellow at the Mathematical Sciences Research Institute at Berkeley and the Institute for Advanced Study in Princeton. In addition to mathematics research and university teaching, I have been involved in K–12 education for 20 years. For my work in this area I was honored to receive the National Science Foundation Award for Distinguished Teaching Scholars in 2005 and the American Mathematical Society's Award for Award for Distinguished Public Service in 2012. I have come to be known in the mathematics and mathematics education communities as someone who can be trusted to care both about the rigor of the mathematics curriculum and about how children learn.

When I was asked to work on the standards I decided to use that trust, knowledge and experience to the utmost, to help build a world where people know, use and enjoy mathematics. I saw a once-in-a-lifetime opportunity to improve our children's prospects for college and career, to give them the sort of mathematics education they deserve and need in order to prosper. Our children are no less capable than the children of other countries; they can meet high standards and they deserve the opportunity to do so.

The three principles on which the standards are based: focus, coherence, and rigor

Focus means not trying to do everything at once. US standards circa 2009 were criticized as being a mile wide and an inch deep; the result of too many pet topics crammed into too many grades. The Common Core restores focus and gives teachers the time to concentrate on what is really important so their students are ready for the next grade level. For example, the strong focus of the standards in early grades is arithmetic. Arithmetic is an important life skill, as well as a thinking subject and a rehearsal for algebra in the middle grades.

Coherence is about making mathematics make sense. Mathematics should not seem like a sequence of disconnected tricks, but like a story in which ideas grow naturally on a trellis of sound basic principles, such as place value and the properties of operations.

Focus and coherence also imply teaching students to draw on what they know, and make connections, instead of turning every single thing into its own separate topic. Some important topics in arithmetic were moved earlier than was previously the case in many state standards (e.g. fluency with two-digit addition from Grade 3 to



Grade 2), while others were moved later (division of fractions from Grade 5 to Grade 6). Taken as a whole, the reorganization of topics replaces the plate-piled-high smorgasboard approach of previous standards with a carefully thought out sequence of courses. This represents a smartening up of the curriculum.

As for rigor, the Common Core received full marks for content and rigor in a 2010 review by the Fordham Institute. The standards call for a rigorous balance in what we seek to instill in students of mathematics during the K-12 years. Conceptual understanding, procedural skill and fluency, and applications are all required by the standards.

How do the standards prepare students for college?

The definition of college readiness in the standards is readiness for entry-level, credit-bearing courses in mathematics at four-year colleges as well as courses at two-year colleges that transfer for credit at four-year colleges.

From the beginning we knew that this meant the high school standards would have to have three years of mathematics at the level of Algebra II. But college readiness and STEM readiness are two different things. Some critics of the standards have confused this difference. The mathematical demands that students face in college will vary dramatically depending on whether they are pursuing a STEM major or not. Students who intend to pursue STEM majors in college should know what is required. That was true before the Common Core, and it remains true today. States still can and still should provide a pathway to calculus for all students who are prepared to succeed on that pathway—not only because it is at the heart of many STEM fields, but also because the calculus is one of the greatest intellectual developments in human history.

The Common Core has every promise of increasing the number of students in our country who actually attain advanced levels of performance. Just because the Common Core standards end with Algebra II, that doesn't mean the high school curriculum is supposed to end there. California, for example, had calculus standards before adopting the Common Core, and the state still has them now, as it should. The difference in California today is that better standards can help more of California's students gain the strong foundations they need to succeed in calculus. On the other hand Massachusetts always has and still does leave it to local school districts to decide whether or not to require calculus.

¹ Fordham Institute (2010), The State of State Standards—And the Common Core—in 2010, p. 28

How the standards were written

There are many false accounts of this in circulation today. I myself have often been quoted out of context to support these accounts, and I always try to set the record straight when I learn of such instances.

The Common Core originated in November 2007 with a meeting of the Council of Chief State School Officers (CCSSO) in this city. For many years the states had been hearing that our mathematics curriculum was covering too many topics too superficially. They recognized the power of an agreement to share standards that were focused, coherent, and rigorous. In Spring 2009 CCSSO was joined by the National Governors Association (NGA). Fourty eight states signed a memorandum of understanding to develop common standards in Mathematics and English Language Arts. For mathematics, NGA and CCSSO put together a team of about 80 mathematicians, teachers, educators, policy makers, and state department of education staff, divided into a working group and a feedback group. UC Barkeley mathematics professor Hung-Hsi Wu and Pornona high school teacher Diana Ceja were on the work group, and Cal Poly statistics professor Roxy Peck was on the feedback group.

CCSSO and NGA also constituted a 29 member Validation Committee for both the Mathematics and ELA standards. This committee was not directly involved in the work; their role was to validate the final product. The California members of this committee were Stanford Professors Linda Darling-Hammond and James Milgram, UC Berkeley Professor David Pearson, and Long Beach Unified School District Superintendent Christopher Steinhauser.

Three of us, myself, Phil Daro, and Jason Zimba, were designated as lead writers. The states were our bosses. We started from raw material produced by the working group and developed periodic drafts for them to review. Many states put together teams of teachers at each grade level to provided detailed feedback. We also received reviews from the feedback group, from national organizations such as the National Council of Teachers of Mathematics and the American Federation of Teachers, and from prominent individuals and researchers. I remember in particular one exhausting and exhilarating weekend with my fellow writer Jason Zimba listening to teams of teachers put together by the AFT, who had meticulously read the standards and shared detailed comments with us. Becky Pittard, one of those teachers, from Florida, insisted that we insert a standard about the meaning of the equal sign; and we did, in Grade 1.

In March of 2010 the standards were released for public review, and received over 10,000 public comments. We made many changes large and small in response to these comments. Three months after the public comment draft the standards were released on 2 June 2010.

Throughout, we focused not on our opinions but on the evidence. Our job was to listen carefully and make considered decisions in response to the evidence, and to the amazing quantity of feedback we received from many sources. California's feedback was particularly useful, and we made many changes in response to it. For

example, they wanted us move memorizing the times table from ${\sf Grade}$ 4 to ${\sf Grade}$ 3, and we did.

These standards are built for American students, based on the evidence of the best standards in this country and around the world. Research on high performing countries shows that their teachers tend to focus on fewer topics in each grade, teach them to greater mastery, and build on them the next year in a coherent sequence of topics. Focus and coherence were core principles in the design of the standards.

For years, major national reports have called for us to abandon our mile-wide, inchdeep approach and embrace focus and coherence in school mathematics. The standards finally act on those reports.

Evidence and support for the standards

Research by William Schmidt, a leading expert on international mathematics performance and a previous director of the U.S. TIMSS study, has compared the Common Core State Standards to high-performing countries up through grade 8. The agreement was found to be high. Moreover, no state's previous standards were as close a match to the high performing countries as the Common Core State Standards, and that includes California.

This agreement is no accident. Evidence from international comparisons strongly informed the development of the standards. The bibliography of the standards on pp. 91–93 lists some of the numerous studies, major reports, and international and state standards that were used during the development process.

These standards have been widely praised not just by the presidents of every major mathematical society in the country, but by classroom teachers. They know the standards won't be easy but they know they are the right thing for our students. To quote a teacher in a mixed rural/suburban school district in Missouri:

My dear colleagues teaching in my high school are no longer asking, "We never understood this stuff so why should the students be expected to?" ... We are recognizing the difference between students trained as robots vs. students who can think. ... Elementary school teachers are welcoming professional development so that fractions make sense to them.

Concluding remarks

The standards are an historic agreement between the states and they are also a long overdue promise to our children. But without action the agreement is just empty words, and the promise is broken. We should be standing forward today to deliver on that promise. The road to faithful implementation of the standards is not easy.

http://cdr.sasepub.com/content/41/8/294_abstract

Tough standards don't implement themselves; that's up to states and local districts. There are many challenges ahead: improving curriculum, preparing teachers, and thoughtfully improving assessments. Shared standards help us meet those challenges. Let us take advantage of tough shared standards to give our nation's children a chance to learn the skills they need in order to prosper.

Appendix 8

White Paper: Z. Wurman, Why Students Need Strong Standards (And not the Common Core), American Principles Project, 2014.



WHY STUDENTS NEED STRONG STANDARDS [AND NOT COMMON CORE]

By: Ze'ev Wurman

AMERICAN PRINCIPLES PROJECT

WHY STUDENTS NEED STRONG STANDARDS [AND NOT COMMON CORE]

ZE'EV WURMAN

I. INTRODUCTION

t is well accepted that American students do not do very well in mathematics when compared internationally. Since 1995 we have had regular comparisons of student achievement using the Third International Mathematics and Science Study (TIMSS, since then renamed to Trends in International Mathematics and Science Study) that regularly placed us in the middle of the pack. After almost 20 years of efforts, American 4th graders have improved by 20 points—almost 1/4 of a standard deviation—and our 8th graders have improved by 17 points, about 1/6 of a standard deviation. Still, we have a long way to go given that high-achieving nations score about 100 points—a full standard deviation—higher than we do.

A major thrust since the 1990s in improving our mathematics achievement has been the effort to move an authentic Algebra 1¹ course from high school and into grade 8, similar to what high-achieving countries have been doing for a long time. Tom Loveless cites Robert Moses as an early promoter of this idea to help disadvantaged students from being placed into dead-end math courses in middle school and Bill Clinton as the one who took the idea nationwide.² In the late 1980s Zalman Usiskin, a leading math reformer of his time, insisted that Algebra should be the default 8th grade course for an average American student.³ Whatever the cause, it is undeniable that putting an Algebra course into 8th grade became, perhaps, the most salient

¹ In the following text I will use capitalized "Algebra" to stand for the first half of what the National Mathematics Advisory Fanel described as an "authentic algebra course," frequently described also as "Algebra 1." I will use the capitalized "Algebra 2" to refer to the second half of such a course, and I will use the lower-case "algebra" when I refer to algebra content in a generic sense.

² Tom Loveless, 2013 Brown Center Report on American Education: How Well Are American Students Learning?, Brookings Institution, 2013.

http://www.brcoldings.edu/~/media/research/files/reports/2013/03/18%20brown%20center%201 oveless/2013%20brown%20center%20report%20web.pdf

³ Zalman Usiskin, Why Elementary Algebra Can, Should and Must Be an Eighth-Grade Course for Average Students, Mathematics Teacher v.80 (1987) pp.426-438.

feature of the efforts to reform and strengthen American mathematics education throughout the 1990s and 2000s.

This effort is clearly visible in the data Loveless cites: an increase from 16% of 8th grade students taking advanced math in 1990, to 27% in 2000 and 47% in 2011.4 California is another example of such an effort. In 1997, it adopted mathematics standards intended to prepare all its students to take an Algebra 1 class in 8th grade, similar to the expectations in high-achieving countries. As a consequence, California moved from 16% of 8th graders taking Algebra 1 in 1999, to 32% in 2003 and 67% in 2013.5 But the California story differs from the national story described in Loveless's report. While the national story places a serious question mark on the efficacy of pushing Algebra 1 into grade 8, the California implementation was more careful, and its results more unequivocally positive. More on this later.

The effort to put more middle school children in Algebra classes had its detractors in its early days. Some labeled the effort as "educationally inappropriate" and claimed that it unnecessarily "stresses children." Others opposed it on the grounds that it would widen the gap between advantaged and disadvantaged students, expressing the often-held but frequently unvoiced belief that students from disadvantaged backgrounds are incapable of academically holding their own.

Yet despite such opposition, the reality of an ever-increasing number of foreign students enrolling in our colleges and the economic competition from developing countries -especially the educationally high-achieving Asian Tigers- convinced many of the importance of enhancing the mathematical capabilities of American students. The presidential National Mathematics Advisory Panel studied this particular issue in, perhaps, the greatest depth ever and found:

Although clear and current international data across a wide range of countries on the timing of algebra course work cannot be located, it is clear from TIMSS data and the work of Schmidt et al. (2002) that students in the A+ countries study Algebra as well as Geometry in Grades 7 and 8.

• • •

A search of the literature produced six studies that met the Panel's design criteria and included Algebra or mathematics achievement as an outcome ...

It is important to note that these six studies drew on four national data sets. ... The consistency of their findings is striking. The studies by Ma and others provide some evidence that there are long-term benefits for Grade 7 or 8 students with the requisite mathematical background for algebra if they can take an authentic Algebra course in Grade 7 or 8: higher mathematics achievement in high school and the opportunity to take advanced mathematics course work in Grade 11 or 12.

Loveless (2013), Table 3-1.

⁵ California STAR (School Testing And Reporting) data. The 2013 data refers to students taking Algebra 1 by grade 8 rather than only in grade 8. http://star.cde.ca.gov

... research evidence, as well as the experience of other countries, supports the value of preparing a higher percentage of students than the U.S. does at present to complete an Algebra I course or its equivalent by Grade 7 or 8, and of providing such course work in Grade 7 or 8.6

These findings were reflected in one of the Panel's key recommendations:

All school districts should ensure that all prepared students have access to an authentic algebra course—and should prepare more students than at present to enroll in such a course by Grade 8.7

Indeed, this understanding of the importance of early Algebra was not limited to the National Mathematics Advisory Panel. Less than a year later, in December of 2003, the National Governors Association, the Council of Chief State School Officers, and Achieve, Inc., published a seminal report, Benchmarking for Success, which included this first recommendation:

Action I: Upgrade state standards by adopting a common core of internationally benchmarked standards in math and language arts for grades K-12 to ensure that students are equipped with the necessary knowledge and skills to be globally competitive.8

This report called, then, for what has since become known as the Common Core State Standards. It went on to declare:

Research has revealed striking similarities among the math and science standards in topperforming nations, along with stark differences between those world class expectations and the standards adopted by most U.S. states.... By the eighth grade, students in top performing nations are studying algebra and geometry, while in the U.S., most eighth-grade math courses focus on arithmetic.9

In other words, the rallying cry for the establishment of a common core of content standards in 2008 explicitly acknowledged that for the U.S. to be benchmarked against top-performing countries, we should teach algebra in the 8th grade.

Yet when the Common Core standards were published a little more than a year later, in the early summer of 2010, they firmly placed the first algebra course in ... high school!

⁶ Foundations for Success: Report of the Task Group on Conceptual Knowledge and Skills, p 3-45 to 3-47. U.S. Department of Education, 2008.

⁷ Poundations for Success, The Final Report of the National Mathematics Advisory Panel, p. xviii.U.S. Department of Education, 2008.

⁸ Benchmarking for Success: Ensuring U.S. Students Receive a World-Class Education, NGA, CCSSO, Achieve, (2008).

⁹ Toic.

II. THE CALIFORNIA EXPERIENCE WITH EARLY ALGEBRA TAKING

Many would naturally ask whether teaching an Algebra course to all students is a reasonable expectation for grade 8. After all, many of us remember the difficulty we ourselves had with algebra. Can we reasonably expect that <u>all</u> students can handle it?

Here is some of the clearest evidence that we can.

The Japanese school system consists of a six-year primary school, a three-year lower secondary school, and a three-year upper secondary school. The first nine grades are compulsory, and enrollment now is 99.99%. According to 1990 statistics, 95.1% of age-group children are enrolled in upper secondary school.

<u>Japanese Grade 7 Mathematics</u> explores integers, positive and negative numbers, letters and expressions, equations, functions and proportions, plane figures, and figures in space. Chapter headings in <u>Japanese Grade 8 Mathematics</u> include calculating expressions, inequalities, systems of equations, linear functions, parallel lines and congruent figures, parallelograms, similar figures, and organizing data. <u>Japanese Grade 9 Mathematics</u> covers square roots, polynomials, quadratic equations, functions, circles, figures and measurement, and probability and statistics. The material in these three grades is compulsory for all students.¹⁰

As is clear from the above, twenty years ago 99.99% of Japanese students completed by grade 9 what would be called in this country both an Algebra 1 and a Geometry course. Further, at least 95.1% of them completed this content successfully, because they were allowed to continue to secondary school. This shows that teaching Algebra 1 to the whole 8th grade cohort, or teaching Algebra 1 and Geometry to the whole grades 8-9 cohort, is eminently possible.

As already mentioned, in 1997 California adopted standards that attempted to prepare all students in K-7 to take an Algebra class by grade 8. Yet California realized that such a major change cannot happen overnight, and it emphasized that only "students who have mastered foundational skills, as indicated by good performance on the algebra readiness test, would take algebra in the eighth grade." 11

In the early days after 1997 only a few California schools prepared most or all of their students for Algebra 1 in grade 8. Figure 1 describes the situation in 2004. It is worth noting that among schools that enrolled more than 30% of students in 8th grade Algebra, only a single school scored in the "advanced" range; most other schools ended in the "basic" or "below basic" achievement

¹⁰ Preface to Kunihiko Kodaira, Ed., Japanese Mathematics. University of Chicago School Mathematics Project, 1996.

¹¹ Mathematics Framework for California Public Schools, California Department of Education, 2000, p. 199.

range. The majority of schools enrolled less than half of their students in Algebra by grade 8, and their achievement centered on the boundary between basic and proficient.12

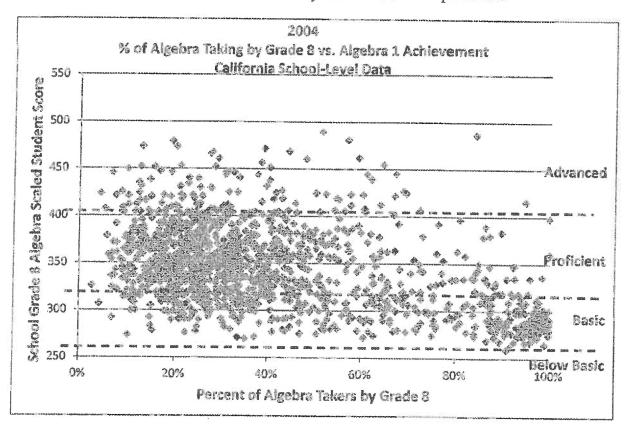


Figure 1

Figure 2 describes the California situation in 2012. The contrast is stunning: About 40% of schools enrolled 30% or more of their students in Algebra by grade 8, with the average solidly in the "proficient" range. And dozens of such high-enrolling schools scored "advanced," in contrast to the single school in 2004.

The picture in 2012 is not perfect, yet the improvement is remarkable. Over the period of only eight years, many schools learned how to prepare their entire student body for Algebra by grade 8, and many of them maintained that enrollment without dropping the average school achievement.

 $^{^{12}}$ Data for Figures 1 & 2 comes from California STAR database. Charter schools and regular public schools with less than 60 students in grade 8 were excluded.

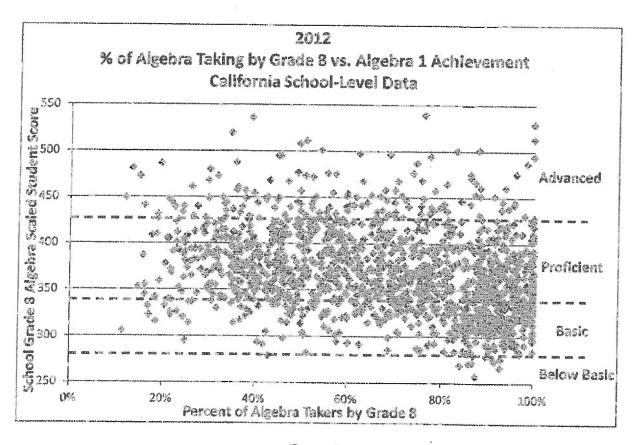


Figure 2

That was the picture regarding schools. Figure 3 shows the Algebra-1-by-grade-8 taking of the overall student cohorts in California since 1999, when only 16% of the cohort took Algebra by grade 8. Since then, the number of students taking Algebra 1 by grade 8 more than quadrupled to 67%. Yet despite this enormous increase, the fraction of successful students scoring "proficient" and "advanced" kept increasing from 11% in 2002, the first year that scaled scores were available, to over 36% in 2013. Also notable is the fact that there was only minimal growth in students scoring "basic" and "below basic" over that period.

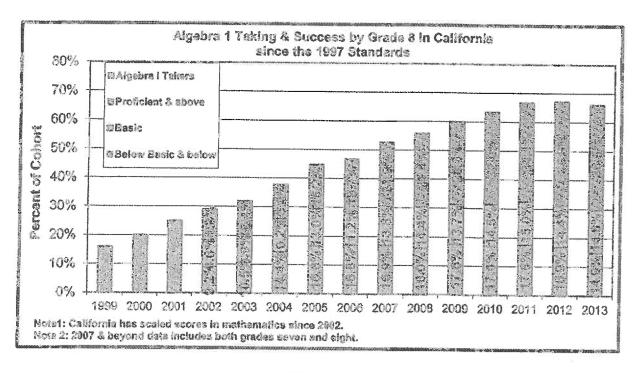


Figure 3

Figure 4 provides another perspective to this growth. It shows that since 2002 the number of successful Algebra 1 grade 8 students more than tripled, from 52,000 to almost 170,000. In other words, each year California produces over 100,000 more successful students in Algebra 1 by grade 8 than it produced a decade ago.

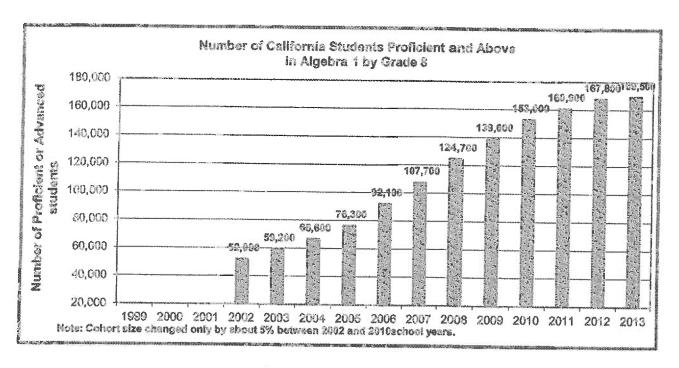


Figure 4

One may reasonably wonder whether those large changes affected all groups of students equally, or whether they were concentrated in specific groups. Figure 5 tells the story. One can easily observe that while the overall ratio of increase in successful takers between 2003 and 2012 was an impressive 2.8-2.9¹³, the increases in successful takers from among various disadvantaged subgroups was much higher: up to 4, 5, and even 6 times their rate in the early 2000s!

	Sau	A STATE OF THE STA	inosty Opti vy Proficier) it & Advance:	d d		
Algebra 1 Fraction of Cohors			ori	Number of Students			
by Gr. 8	2003	2012	Ratio	2003	2012	Ratio	
Low SES	5.7%	28.6%	5.05	11,730	73,051	6.23	
Afam	4.2%	23.0%	5.52	1,879	6,572	3.92	
Hispanic	5.2%	23.6%	5.49	10,236	63,493	6.20	
Cohort*	12.4%	35.8%	2.89	59,200	167,800	2.83	

Figure 5

The next question one should ask is how these large changes affected the course-taking pattern in high school. Figure 6 tells much of the story.

¹³ Figure 5 shows the increases both in terms of percent-of-cohort and in terms of absolute student numbers, to account for changes in cohort size and cohort composition.

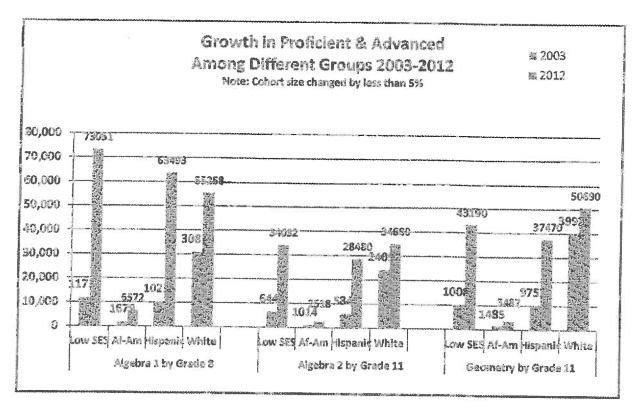


Figure 6

It shows that the large increases in proficiency rates with Algebra by grade 8 directly translate to large increases in successful taking of more advanced mathematics courses such as Geometry and Algebra 2. And, as in the case of Algebra 1, the gains of students from disadvantaged backgrounds are much larger than those of white students. Finally, when one compares the numbers of successful Calculus AB takers (score >=3) between 2003 and 2012, one sees California white students growing by a factor of 1.61 while Hispanics grew by 2.46 and African –Americans by 1.9. Similarly, the Calculus BC numbers are 2.4, 5.13, and 4.06 respectively.¹⁴

There are two lessons to draw from this massive data set. The first is that preparation of all K-7-students to take an Algebra 1 class in grade 8 benefits the minority and disadvantaged students the most. The explanation seems pretty obvious. When grade 8 Algebra is considered an accelerated course, students that get the required acceleration—tutoring, home support—come mostly from advantaged households. Only when everyone is prepared in grades K to 7 to reach algebra in grade 8 do the disadvantaged students get their chance to shine. The second lesson is no less important: early Algebra-taking translates directly into increased successful taking of advanced mathematics in high school—not only Geometry and Algebra 2 but even Advanced Placement Calculus AB and BC courses.

¹⁴ Calif. AP State Reports for 2003 and 2012, http://research.collegeboard.org/programs/ap/data/archived.

III. NAEP AND OTHER NATIONAL RESULTS

It was mentioned before that Tom Loveless has studied this issue nationally, comparing the reported state increases in 8th grade algebra-taking with state NAEP results. His sobering conclusion was inconsistent with the California experience: "States with rising percentages of eighth graders taking Algebra I, Geometry, and other advanced math classes were no more likely to raise their NAEP scores from 2005-2011 than states with declining percentages of eighth graders in those courses." Even worse, he found that "boosting the percentage of students in higher level courses is associated with decreases in the mean scores of those courses—suggesting a watering down effect."

Yet the California story differs from the national story in a critical respect: Only in California have the content standards for grades K-7 been sufficiently strengthened to potentially allow every student to be prepared for Algebra in 8th grade. Other states and jurisdictions, while attempting to strengthen somewhat their content standards, have not set them at a level expecting all students to be ready for Algebra by grade 8. Consequently, their efforts to place more students in Algebra 1 by grade 8 frequently backfired, as they were driven more by political will than by concerns about students' preparedness. 15

As the result, Loveless's observation does not seem to apply to California. Where he saw a dilution of course content with growing enrollment, California has not experienced that, and the success rates on the Algebra test—the cut scores and content have not been changed since 2002—have continued to rise. Similarly, increased successful Algebra 2- and Geometry-taking in California, as well as its large increases in successful AP calculus taking, attests further to the success of California's implementation of 8th grade Algebra 1 and the veracity of increased student scores. When it comes to NAEP scores, California more than kept up with the nation. Its mathematics scores since 2000 have risen by 21 points in grade 4 as compared to 17 points nationally, and they have risen 18 points in grade 8 as compared to 12 points nationally. This growth was achieved despite demographics changes in California that would seem to make such growth more difficult: Latinos grew from 42% to 48%, low SES students from 42% to 54%, and the fraction of white students decreased from 35% to 25% over the same period.16

¹⁵ See, for example, Charles T. Clotfelter, Helen F. Ladd, and Jacob L. Vigdor, The Aftermath of Accelerating Algebra: Evidence from a District Policy Initiative (Washington, DC: National Center for Analysis of Longitudinal Data in Education Research, American Institutes for Research, 2012).
¹⁶ NAEP data.

IV. COMMON CORE MATHEMATICS STANDARDS' IMPLICATIONS FOR THE DISADVANTAGED

Despite all the acknowledgments of the importance of teaching Algebra in grade 8 from Robert Moses and Zalman Usiskin, despite the similar recommendation of the National Mathematics Advisory Panel, and despite Common Core's promise in its Benchmarking for Success report, the Common Core standards emerged in the summer of 2010 with their Algebra 1 course firmly planted in the high school. Moreover, if one examines the totality of the Common Core high school standards, one sees diluted content for Geometry and Algebra 2 courses and insufficient content even for a solid trigonometry course, let alone pre-calculus. Jason Zimba, one of the lead authors of the Common Core standards, freely acknowledges this fact. Furthermore, a student who starts an authentic Algebra 1 course in grade 9 (or completes it by the end of grade 9) is unlikely to complete pre-calculus following the path Common Core prescribes, even if pre-calculus content were included in the Common Core.

In some sense this is more than strange. Preparedness for STEM and maintaining American competitiveness was the major rallying cry for the supposedly rigorous Common Core standards. As we have seen, our competitors do teach their students authentic Algebra 1 prior to or in grade 8, and so many of them come here to study in college that they already make up a majority in many graduate STEM programs. Further, we know that fewer than one out of six students who do not reach a pre-calculus course in high school will complete a STEM degree. It boggles the mind that after all the rhetoric of "rigor" and "international competitiveness," the best the Common Core offers in terms of preparing American students for college is less than what has been already offered by many states over the last decade or more.

But the true travesty of the Common Core is its failure to deliver on its promise of a genuine Algebra course in grade 8, and the devastating impact that failure is bound to have on the achievement of minorities and disadvantaged students. Although politicians and administrators in many states promise to allow "acceleration" and to retain the 8th grade Algebra courses they currently have, these are empty promises. Few, if any, schools will offer acceleration beyond the Common Core in the early grades, because the national Common Core tests will assess only the grade-level Common Core content at each grade in grades 3-8. As in California in the 1990s, such acceleration will be overwhelmingly provided through paid

¹⁷ One should not confuse an authentic Algebra I course with some algebraic content present in most/all elementary grades. Most state standards, as well as the Common Core, have algebra-related content strands often starting from Kindergarten, and Common Core supporters frequently confuse the two. Yet Appendix A of Common Core mathematics contains an explicit Algebra I course description destined for the first year of high school.

¹⁸ S. Carr, Teachers Feel Urgency of Common Core Standards, The Advocate, 9/4/2013. http://theadvocate.com/home/6914390-125/common-core

¹⁹ STEM in Postsecondary Education, National Center for Education Statistics (NCES-2013-152), October 2012.

tutoring by affluent families of students attending public schools. The biggest victims of this reversal will be the poor and the disadvantaged. Their families tend not to be able to afford the extra-curricular tutoring.

The result? Most grade 8 Algebra 1 classes in poor schools will soon close, when the pipeline of prepared students coming out of K-7 dries up, and STEM-bound students will come almost exclusively from advantaged backgrounds, whether in private or public schools. This will be the legacy of Common Core.

V. CONCLUDING REMARKS

The national standards movement justified its emergence arguing that many state standards embody low academic expectations, are non-competitive in the international marketplace, and place American students and the American economy at a disadvantage. It promised rigorous and internationally-benchmarked standards that would increase STEM preparedness of American students and improve our competitive posture.

Unfortunately, these promises were unfulfilled when the mathematics standards emerged in June 2010. Not only have they not improved the rigor of the high school curriculum, but in many cases they have severely retarded the progress states have made over the last decade or more. The biggest and most obvious sign of this lowering of expectations is Common Core's placement of an authentic Algebra 1 course in grade 9 rather than grade 8. This runs contrary to what our international competitors do, what many mathematics education reformers have been promoting in this country for three decades, and what the national standards movement itself explicitly promised in its 2008 manifesto Benchmarking for Success. Not only will a delayed Algebra placement—and its generally low high school expectations—not increase American high school STEM preparedness, it will also likely sharply reduce it.

But the cruelest irony of the Common Core mathematics is in the huge negative impact it is bound to have on the achievement of minority and disadvantaged students. Those are precisely the students who need rigorous expectations from early elementary grades within their regular curriculum, as they are less likely to get family or paid extra-curricular support. Massive and robust data from the California experiment over the last 15 years clearly demonstrates this fact. Yet despite its soaring rhetoric of college-readiness for all, the Common Core has abandoned precisely these students.

ABOUT THE AUTHOR

Ze'ev Wurman is visiting scholar at the Hoover Institution. Between 2007 and 2009 he served as a senior policy adviser with the Office of Planning, Evaluation, and Policy Development at the U.S. Department of Education. Wurman served as a commissioner on the California Academic Content Standards Commission that in 2010 evaluated the Common Core's suitability for California adoption.

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Appendix C

Z. Wurman, Common Core's Validation: A Weak Foundation for a Crooked House, Pioneer Institute, 2014

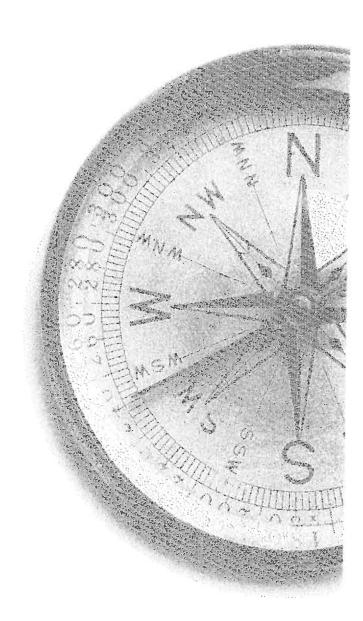


Common Core's Validation A Weak Foundation for a Grooked House

No. 112 April 2014

A Pioneer Institute White Paper

by Ze'ev Wurman



PIONEER INSTITUTE
PUBLIC POLICY RESEARCH

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Common Core's Validation A Weak Foundation for a Crooked House

Ze'ev Wurman

Contents

Overview	Number of the state of the stat
Background	1
Membership and Purpose of the Validation Committee	2
Post Facto Attempts to Validate Common Core's Standards	4
A. David Conley's 2011 Study A.1 Biased and unrepresentative survey sample A.2 Limited survey instrument A.3 Results not appropriately broken down	5 5 5 5
B. The 2012 Schmidt and Houang Study B.1 Visualization B.2 Congruence B.3 Common Core-like standards and achievement B.4 Quality of coding of the standards	5 6 7 8 11
C. Other studies on international benchmarking	11
Conclusions	12
Postscript	13
About the Author	14
Endnotes	15

"There Was a Crooked Man" by Mother Goose
There was a crooked man, and he walked a crooked mile,
He found a crooked sixpence against a crooked stile;
He bought a crooked cat which caught a crooked mouse,
And they all lived together in a little crooked house.

Source: The Dorling Kindersley Book of Nursery Rhymes (2000)

Overview

The final version of the Common Core standards was released in June 2010. Also released at the same time was a report containing the signatures of 24 members of the Common Core Validation Committee, a committee appointed in the summer of 2009 to review the various drafts of the standards and to assure the public that the standards in mathematics and English language arts were research-based, rigorous, and internationally competitive.

The report, however, did not make it clear that the Validation Committee consisted of 29 members and that five of its original members did not sign a form attesting that Common Core's standards were comparable in rigor to the standards of the highest-performing countries in the world. Two Validation Committee members who did sign off later attempted to provide evidence to support their sign-offs. But their research was poorly executed and failed to provide evidence to sustain their claim that Common Core's standards were internationally competitive and could prepare American high school students for college-level work. Moreover, other studies of the standards since their release have raised concerns about their rigor.

As the situation now stands, Common Core's standards remain unvalidated despite the fact that over 46 states adopted them on the basis of a promise on their Race to the Top (RtfT) applications in 2010 that they would be internationally benchmarked and, hence, rigorous. As outlined in the RtfT applications, these standards were supposed

to be "supported by evidence that they are internationally benchmarked." But they were not. This paper explains the problems in the post facto studies that sought to validate Common Core's standards and the concerns raised by the other studies.

Background

In December 2008, the National Governors Association (NGA) in partnership with the Council of Chief State School Officers (CCSSO) and Achieve Inc. published Benchmarking for Success, a report whose main recommendation called for "adopting a common core of internationally benchmarked standards in math and language arts for grades K-12 to ensure that students are equipped with the necessary knowledge and skills to be globally competitive." Elaborating on the need for national standards, the report promised "to provide to states a roadmap for benchmarking their K-12 education systems to those of top-performing nations." It went on at some length to describe what students in high-achieving countries are doing:

By the eighth grade, students in topperforming nations are studying algebra and geometry, while in the U.S., most eighth-grade math courses focus on arithmetic. In science, American eighthgraders are memorizing the parts of the eye, while students in top-performing nations are learning about how the eye actually works by capturing photons that are translated into images by the brain. In fact, the curriculum studied by the typical American eighth-grader is two full years behind the curriculum being studied by eighth-graders in high-performing countries.

In September 2009, the Common Core State Standards Initiative (CCSSI)¹ issued the first draft of its Career- and College-Readiness Standards (CCRS) in mathematics and English language arts (ELA).² The standards documents were criticized for their definition of career and college readiness; their exemplars; the assumption that both career and college readiness can be satisfied by the same set of standards; and the non-transparent process in which they were developed. For example,

- (1) College readiness was set at the level of Algebra 1 in mathematics.
- (2) The exemplars for the mathematics standards, provided in only four of 11 domains, were unsuitable for teaching purposes.³
- (3) Doubts were expressed by two major experts on career readiness, Michael Kirst of Stanford University and Paul Barton of Educational Testing Service, that the same standards can serve to prepare students for both college and career.⁴
- (4) No records are available to show why members of the various CCSSI committees were chosen or what their relevant credentials were. The Standards Development Work Group was composed chiefly of staff members of or consultants to Achieve, Inc., National Center on Education and the Economy (NCEE), and the two major college testing companies (College Board and American College Testing, or ACT).5

Although CCSSI later included educators on its review committee, control of the standards stayed in the hands of the actual standards-writers: William McCallum, Jason Zimba, and Phil Daro⁶ in mathematics, and David Coleman and Sue Pimentel in English language arts/reading.⁷

In July 2009, CCSSI announced the members of a Validation Committee (VC) whose purpose was to:

- Review the standard-writing process;
- Ensure that the standards were internationally benchmarked;
- Ensure that the standards were researchbased; and
- Add missing standards if they were needed and could be justified.⁸

Membership and Purpose of the Validation Committee

Most of the 29 members of the VC had doctorates in education. Several had no doctorates. Two had doctorates in psychology. Only one had a doctorate in mathematics. None had a doctorate in English literature or language. Only a few committee members had had more than a casual experience in writing educational standards: R. James Milgram (mathematics), Sandra Stotsky (ELA), and Dorothy Strickland (early childhood). In addition, both Milgram and Stotsky had worked on or reviewed standards in many states. Given that all 50 states have had standards for a decade or more and that there is a pool of experienced people who have written standards in mathematics or ELA, it is not clear why so few were on the VC.

In May 2010, CCSSI asked the VC to approve formally the Common Core standards attesting that they were:

 Reflective of the core knowledge and skills in ELA and mathematics that students need to be college-and careerready

- Appropriate in terms of their level of clarity and specificity
- Comparable to the expectations of other leading nations
- Informed by available research or evidence
- 5) The result of processes that reflect best practices for standards development
- A solid starting point for adoption of cross-state common core standards
- A sound basis for eventual development of standards-based assessments

Surprisingly, 24 out of the 29 VC members agreed that both sets of standards met the Committee's charge. The official report on the VC does not indicate that some members did not agree. Nor did the report refer to their grounds for disagreement. Three dissenting views are available, and I quote from them below.

From R. James Milgram:

With respect to the standards' appropriateness in terms of their level of clarity and specificity:

"I conclude that they are, but "appropriate" needs to be clarified. The standards are not at the level of those of the high-achieving countries or the top state mathematics standards – including California, Minnesota, Indiana, and Massachusetts. Moreover this difference in level is significant, being approximately 1 - 2 years at the end of eighth grade."

With respect to the standards' comparability to the expectations of other leading nations:

"This is where the problem with these standards is most marked. While the difference between these standards and those of the top states at the end of eighth grade is perhaps somewhat more than one year, the difference is more like two years when compared to the expectations of the high-achieving countries – particularly most of the nations of East Asia."

With respect to the standards' being informed by available research or evidence:

"This is also a problem area. First, as indicated in the first paragraph of my report, there are a very large number of important standards that are unique to this document, not reflective of any expectations I am aware of that appear in the standards of the high- achieving countries, or that have been supported by any reliable research I am aware of. The individual standards listed on the first page of my report are analyzed in considerable detail in the body of that report. For most of them, I have indicated reasons for serious doubts as to the likelihood that serious research would validate them. "10

From Dylan William:"

"I can agree with statements 1, 6 and 7. I can persuade myself that statements 4 and 5 are just about OK (although it's a stretch). However, I cannot in all conscience endorse statements 2 and 3. The standards are, in my view, much more detailed, and, as Jim Milgram has pointed out, are in important respects less demanding than the standards of the leading nations. For this reason, while I can see there are strong political reasons for securing consensus, and while I can see that they are the best that we can get at this stage, I am unable to agree to "sign off" on the standards if doing so is taken to be assent to all 7 propositions,"12

From Sandra Stotsky:

With respect to the standards' being reflective of the core knowledge and skills in ELA and mathematics that students need to be collegeand career-ready:

"In my judgment, Common Core's standards for grades 6-12 do not reflect the core knowledge needed for authentic college-level work and do not frame the literary and cultural knowledge one would expect of graduates from an American high school, ... These minimal requirements, laudatory in themselves. would not be considered adequate to frame a literature and language curriculum in any country. In addition, the distribution of literature and informational standards indicate about a 50% division between imaginative literature and informational texts in the English language arts/reading class at all grade levels, a division that is inappropriate at the secondary level given English teachers' academic background and what they are prepared to teach based on their undergraduate or graduate coursework. ... "

With respect to the standards' appropriateness in terms of their level of clarity and specificity:

"Many standards are paraphrases of the "anchor" "college and career readiness standards." Many others are unclear in meaning, not easily interpretable, or unteachable. The "college and career readiness standards" that govern all grade-level standards have no discernable academic level; for the most part, they are simply a set of poorly written, confusing, content-empty, and culture-free generic skills with no internally valid organization of their own. ..."

With respect to the standards' comparability to the expectations of other leading nations:

"The two English-speaking areas for which I could find assessment material (British Columbia and Ireland) have far more demanding requirements for college readiness. The British Commonwealth examinations I have seen in the past were far more demanding in reading and literature in terms of the knowledge base students needed for taking and passing them. No material was ever provided to the Validation Committee or to the public on the specific college readiness expectations of other leading nations in mathematics or language and literature."

With respect to the standards' being informed by available research or evidence:

"No evidence was ever provided to the Validation Committee supporting the specific 'college and career readiness standards' as a group and their use as an organizing scheme for generating gradelevel standards. In fact, the evidence that can be located is either counter-evidence or misinterpreted evidence ... Nor is there clear evidence that career readiness is similar to college readiness." ¹³

In sum, committee members with the most relevant content knowledge and experience writing or evaluating standards refused to sign off on the Common Core standards citing their low level and incomparability with those of high-achieving nations. Requests for evidence supporting the standards or the names of countries with which they were supposedly benchmarked had gone unanswered. In the final version of the standards, released in June 2010, the level of college readiness in mathematics was a weak Algebra 2 that included some Geometry standards.14 The level of college readiness in English language arts/reading was not clear. Several high school standards require reading

of this country's seminal political documents, suggesting that students are to be able to read adult material by the end of high school. It remains to be seen whether significant sections of these late 18th-century documents are assessed on college-readiness tests.

Post Facto Attempts to Validate Common Core's Standards

Two VC members who attested to the rigor and international competitiveness of the standards in May 2010 later attempted to validate their decision.

David Conley's 2011 study claims to show that Common Core's college-readiness standards lead to college readiness. It carefully avoids asking the key question: "Do the college readiness standards reflect a sufficient level of preparation for college coursework?"

William Schmidt's 2012 study claims to show that Common Core's mathematic standards are "similar to" or "aligned with" those of high-achieving countries, and that the greater the alignment of a state's standards to Common Core's, the higher-achieving its students are. This study suffers from a sloppy methodology and a creative use of statistics in its attempt to show what it claims to show.

In both studies, researchers engage in a post facto effort to justify what they had already attested to in 2010.

A. David Conley's 2011 Study

In a 2003 study, David Conley had determined what knowledge and skills are necessary to succeed in college based on a survey of higher education faculty. ¹⁵ Instead of showing whether Common Core's standards reflected this knowledge and these skills, his 2011 study asked teachers of a wide range of college freshman courses about the

relevance of the Common Core standards to their courses and then claimed that Common Core's standards are aligned with college requirements. ¹⁶ His study suffers from at least three major methodological deficiencies.

A.1 Biased, unrepresentative survey sample

The study used a two-stage selection process. In stage 1 it identified a stratified random sample of two- and four-year private and public colleges. In stage 2 the study requested each college to provide a liaison person, who in turn was asked to provide a "representative teacher" who taught entrylevel courses at the college. In other words, the second stage selection was not random. The liaison person might have been more involved in education than in disciplinary content compared with average faculty. The recommended instructors might have been better than average teachers or they might have expressed interest in Common Core and in being surveyed. We don't know. To avoid selection bias, the liaison could have been asked to provide a list of three to five instructors, one or two of whom would be randomly drawn. The weakness of the sample selection was pointed out to the study project officer early on, yet the methodology was not modified.17

A.2 Limited survey instrument

The survey instrument asked the respondents to rate how relevant each standard was to teaching their course. It did not also ask the more important question: "What content knowledge is necessary to succeed in your course?" (a question asked in Conley's first study). Evaluative questions relating to the overall sufficiency of the standards were also never asked, such as: "Do the standards reflect a sufficient level of preparation for your course?" or "Do the standards reflect a better, or a worse, level of preparation as

compared to your current requirements?" While missing content could be identified on a single optional item, it would have miniscule weight compared to the hundreds of responses on the standards themselves. The chosen methodology thus elicited many positive responses because most of the content of Common Core's mathematics standards is relevant to some extent in any freshman mathematics course.

A.3 Results not appropriately broken down

The report did not disaggregate the results by two-year and four-year colleges. This is of key importance because much of the criticism of the Common Core has focused on the inadequacy of its definition of college readiness for selective four-year colleges. By lumping the results together, the study doesn't shed any light on this cardinal educational question.

B. The 2012 Schmidt and Houang Study

William Schmidt, an educational statistician at Michigan State University, together with a colleague, carried out a study to explore whether the Common Core State Standards in Mathematics (CCSSM) are comparable to the expectations of leading nations and what reasonable outcomes might be expected after adoption of the Common Core.18 For an answer to the first question, Schmidt and Houang used the methodology they developed map mathematics curriculum content in grades 1-8 in the six highest-achieving countries in the 1995 Third International Mathematics Science and Study (TIMSS), reported in 2005.

B.1 Visualization

Figure 1, from the 2005 study, shows what topics at least four of the six highest-achieving countries (also known as the A+

countries) taught at each of these grade levels. The profile has a distinct triangular shape. The shape of the topic-by-grade profile conveys information on coherence and focus.

A few things should be noted:

- The descending order of the rows reflects a logical and coherent progression of topics in terms of complexity. So, for example, 3D geometry is introduced after 2D geometry.
- Only very few topics span more than half the grades. Most topics are taught to mastery and then are no longer taught. This reflects the focused nature of the progression.
- The number of topics per grade (the number of topics in a vertical column) is limited. This allows for depth in instruction.

The Common Core State Standards in Mathematics (CCSSM) profile in Figure 2 in Schmidt and Houang's 2012 paper does resemble the overall shape of the curriculum profile of the A+ countries in Figure 1. It is somewhat "thicker" than Figure 1 because Figure 1 reflects only the topics in at least four of the six highest- achieving countries on the 1995 TIMSS test, while Figure 2 reflects all the standards in a complete set of standards and hence is somewhat fuller.

Based on the seeming similarity in overall shape, Schmidt and Houang declare that because:

"... CCSSM bears a strong resemblance to Figure 1 (A+ model), at least in terms of its general shape. From that point of view, it can be suggested that the CCSSM are coherent and focused."

Schmidt and Houang then conclude this part of their paper with:

"There being no major differences between the two sets of standards, this provides further evidence that the CCSSM are coherent and very consistent with the international benchmark,"

However, the order of the rows in Figure 2 differs from the order of rows in Figure 1. Figure 3 shows these differences in vivid color.

Apparently, Schmidt and Houang rearranged the original cohesive and hierarchical order of topics so that now, for example, in Figure 2, "3D Geometry" comes before "2D Geometry Basics," and "Relations of Common and Decimal Fractions" comes

Figure 1: Mathematics topics taught at each grade level by at least four of the six A+ countries in the 1995 TIMSS as reported in Schmidt and Houang, 2012

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before students even study "Decimal Fractions." In other words, their Figure 2 is an artificially-produced shape that leads to their desired visual conclusion of "coherence" and "consistency" with the 2005 A+curriculum profile.

B.2 Congruence

Figures 1 and 2 have less than 60% congruence: 86 overlapping topic-grade combinations versus 58 non-overlapping ones. 19 This weak congruence further undermines Schmidt and Houang's claim of consistency between CCSSM and high-achieving countries in K-8. Because some of the inconsistency may result from the fact that Figure 1 reflects the curricular choices of two-thirds or more of

Figure 2: Mathematics topics in the Common Core State Standards as reported in Schmidt and Housing, 2012

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Topic Introduct in Common Gaza Standards &

the A+ countries – not complete sets of topics taught in all six countries – Schmidt and Houang, after noting this fact, proceed to fill in another 29 topic-by-grade combinations out of 45 possible ones²⁰ in order to create a "complete" A+ curriculum profile.

A fair way to do it would be to choose these 29 topics randomly from the possible 45.11 Instead, they first chose all "those topics that were consistent with those in the CCSSM and then randomly chose from the rest." This process guarantees maximal congruence between the two figures, but

even after putting their thumb on the scale, the congruence between the Common Core and the simulated A+ curriculum profile barely reaches an unimpressive 73%:110 overlapping topic-grade combinations and 39 non-overlapping ones.

To address this new problem, Schmidt and Houang define a new ad hoc measure of congruence for their study and, mirable dictu, their newly invented measure of congruence reaches the impressive "value of 889 implying an almost 90% degree of consistency between the two sets of standards."

Figure 3: Figures 1 and 2 side by side, with rows colored to show differences between the original topic order and the revised order in Schmidt and Houang, 2012

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E Common Core's Validation

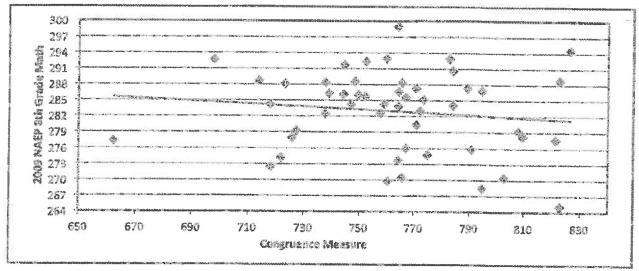
R3 Common Core-like standards and achievement Schmidt and Houang then move on to demonstrate how alignment of state standards with CCSSM positively relates to state achievement on the grade 8 mathematics test given in 2009 by the National Assessment of Educational Progress (NAEP). Table 1, based on Table 2 in their 2012 paper, shows how similar the standards in various states are to those in CCSSM.²²

However, this measure of congruence with the Common Core does not show a positive relationship with achievement. In fact, of the ten states with standards most like the CCSSM, only two (Washington and Minnesota) are in the top ten on NAEP achievement, while four of them (Alabama, California, Mississippi, and Oklahoma) are in the bottom ten on the NAEP grade 8 mathematics test, and the overall relationship is negative as shown in Figure 4.

Table 1: Degree of congruence between state and Common Core's mathematics standards as reported in Schmidt and Houang, 2012

Aost like	Alabama	California	Florida	Georgia	Indiana
ICSSM	Michigan	Minnesota	Mississippi	Oklahoma	Washington
A consequence	Idaho Utah	North Dakota	Oregon	South Dakota	Tennessee
v dinglednekommuk, 1786	Alaska	Arkansas	Colorado	Delaware	Hawaii
	Massachusetts	New Mexico	New York	North Carolina	Ohio
	Pennsylvania	South Carolins	Texas	Vermont	WestVirginia
east like	Connecticut	Illinois	Maine	Maryland	Missouri
	Montana	Nebraska	New Hampshire	Virginia	Wyoming
CSSM	Arizona Nevada	lowa New Jersey	Kansas Rhode Island	Kentucky Wisconsin	Louisiana

Figure 4: Relationship of state achievement on the 2009 grade 8 NAEP mathematics test to the congruence between Common Core's standards and the standards for all 50 states as determined by Schmidt and Houang, 2012.



Nevertheless, Schmidt and Houang don't give up their quest to show a positive relationship. The easiest way to do so is to remove the states in the second (lower right) quadrant because they "pull" the right side of the graph down. They "declare" that the states in this quadrant are somehow "different" from the others and put them in a separate group, as shown in Figure 5.

They now get a positive relationship between CCSSM and student achievement for the "blue" states (Group A), but the separated "red" states (Group B) still show a negative relationship. Then they proceed to arbitrarily remove the one lower-right state that pulls this relationship down (Mississippi) implying it is an obvious outlier, and ... finally ... they get their sought-after positive relationship for

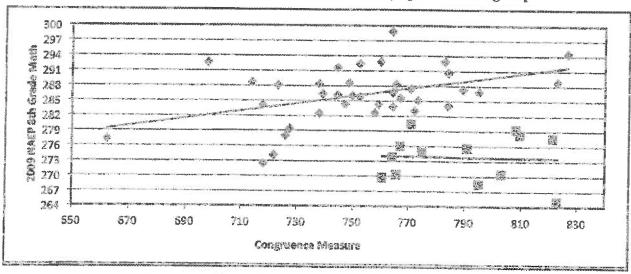
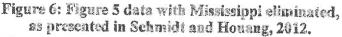
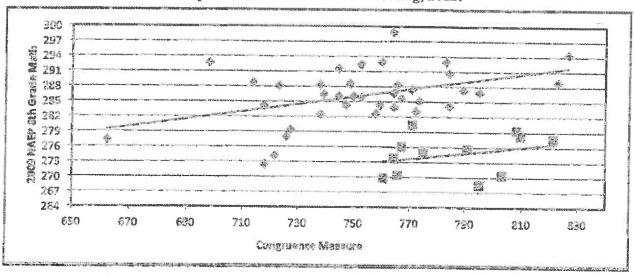


Figure 5: Figure 4 data with states arbitrarily split into two groups.





these states too.²³ They present Figure 6 in their 2012 paper, arguing not only that both Group A (blue) and Group B (red) show a positive relationship, but that the

"estimated value of the regression coefficient (.06) was essentially the same (at least within the bounds of error) as the corresponding coefficient for Group A, suggesting a parallel relationship between the two groups even though it was not significant for Group B."

Yes, it does ... after they have eliminated an offending state and carefully split them into groups to find positive relationships where previously there were none.²⁴

Once Schmidt and Houang have figured out how to get a positive relationship, they then make it seem even stronger. It is well-known that high-achieving states can afford to have higher cut scores. But those aligned-but-low-achieving southern states get more federal funds because they contain more disadvantaged students. So they "correct" for cut-score rigor and for intensity of federal funding and – presto – now they get a strong relationship.²⁵

While admitting that they "do [congruence] in a novel way ... coupled with several assumptions," they also admit that these analyses "should be viewed as only exploratory in nature, merely suggesting the possibility of a relationship." But when the time comes for a conclusion, Schmidt and Houang are quite categorical when they write:

The totality of the multiple analyses we have done suggests a statistically significant positive relationship between the degree of congruence between a state's standards and the CCSSM and achievement as defined by the 2009 NAEP

assessment, but is only an indication of correlation not of causality. On the other hand, combining these analyses with the strong degree of consistency that the CCSSM have with those of the countries whose eighth-grade students achieve at the highest levels, makes the likelihood of such a relationship even greater.

B.4 Quality of coding of the standards

Schmidt and Houang's research also suffers from an even more fundamental flaw.

In the beginning of their paper they say that "[a]pplying the same methodology [as their 1997 TMISS analysis], we coded the Common Core State Standards in Mathematics." Yet either this statement is incorrect, or the coding was done in a sloppy manner. For example, Systematic Counting is described in their 1997 analysis as "general permutations, combinations, etc. ... introduced for grade 10."26 In their current CCSSM coding, systematic counting shows up in grade 7, despite the fact that CCSSM clearly places permutations and combinations in high school.27 Similarly, Schmidt & Houang find Constructions Using Straightedge and Compass in CCSSM grade 7, while anyone can easily verify for himself that such constructions are placed by CCSSM in high school.28 That the coders could not distinguish between formal geometric constructions and informal ones, or understand what systematic counting is, casts a doubt on the validity of the whole paper, because its superstructures assume reliable coding of the standards.

In sum, even if it were true that the profile of the topics in the Common Core Mathematics Standards is similar to the curriculum profile of the A+ countries, and that states whose standards seem – in Schmidt and Houang's coding – more like the CCSSM show higher achievement on the NAEP 2009 test, their conclusion wouldn't be based on a sound foundation. All their statistical manipulations are fundamentally based on how the CCSSM were coded. Because this coding is unreliable, the findings based on them are equally unreliable.

C. Other studies on international beachmarking

The conclusion of the 2012 Schmidt and Houang study—that the CCSSM are "consistent with the internationally benchmarked standards and as a result are coherent, focused, and rigorous"—is not supported by other research. The question of whether Common Core's standards are "comparable to the expectations of other leading nations" has been studied by others.

Mathematician Jonathan Goodman of the Courant Institute at New York University found them having "significantly lower expectations with respect to algebra and geometry than the published standards of other [high-achieving] countries." 29

Andrew Porter, dean of the Graduate School of Education at the University of Pennsylvania found them "different from the standards of countries with higher student achievement, and they are different from what U.S. teachers report they are currently teaching." Porter also found to his surprise that "ft]op-achieving countries for which we had content standards put a greater emphasis on 'perform procedures' than do the U.S. Common Core standards. High-performing countries' emphasis on 'perform procedures' runs counter to the widespread call in the United States for a greater emphasis on higher order cognitive demand." ²⁰

Performing procedures refers to developing students' facility in performing arithmetic operations, manipulating expressions, and solving equations, while emphasis on higher order cognitive demand means direct focus on reasoning such as understanding why a particular operation is executed the way it is, or why a step in an operation is logically justified. Porter et al. are saying that Common Core focuses on such direct teaching of understanding, in contrast with top-achieving countries that focus of students' fluency with actually doing the mathematics and expect understanding to develop naturally out of such work.

As mentioned earlier, Stanford mathematician R. James Milgram found their expectations below that of high-achieving countries. As he commented: "the difference is more like two years when compared to the expectations of the high achieving countries - particularly most of the nations of East Asia." Milgram also found that the standards fail to prepare students for STEM careers, their proclaimed raison d'être.³¹

Conclusions

Advocates of Common Core's mathematics standards claim they are rigorous, reflect college-readiness, and are comparable with those of high achieving countries. The two members of the Common Core Validation Committee with college-level mathematics content knowledge refused to sign off on them, finding them significantly lower than those of high-achieving countries.

With respect to Common Core's English language arts standards, Common Core's VC member, David Conley, certified them as internationally benchmarked and research-based in 2010, and then went on to try and prove his case more than a year later. His 2011 study was poorly done and its results shed little light on whether Common Core's ELA standards can actually prepare students for more than a community college.

William Schmidt, another VC member, also attested in 2010 that Common Core's standards were comparable to those in high-achieving countries. But Schmidt and Houang's 2012 study—the only study that claimed the standards met international expectationslacks reliable coding of the standards, and uses a variety of visual and statistical strategies to create the illusion that the profile of topics in Common Core's mathematics standards is, indeed, comparable to the curriculum profile of six high-achieving countries. In fact, their own data suggest that Common Core's mathematics standards are not at all like those of international high achievers, and that-at least from a statistical point of view-they do not carry any promise of improving American educational achievement.

Not only do Common Core's standards remain unvalidated, but there are now many doubts that they could be validated as research-based, rigorous, and internationally competitive. Indeed, there is growing concern that they are far below the level of standards in high-achieving countries. Yet, these standards were officially adopted by over 46 states, national tests are being piloted based on them, textbooks and other curriculum materials have been aligned down to them, and all our seemingly independent indices of academic achievement or potential for college-level work have been or are in the process of being aligned down to them. What should be done?

Postscript

After my analysis of Schmidt and Houang's 2012 study was completed for this report, Tom Loveless at the Brookings Institution published his own analysis of this study. He makes two points:

- (1) The degree of overlap between state mathematics standards and Common Core's mathematics standards that Schmidt and Houang claimed they found "proved to be a poor predictor" of changes in state achievement at grade 8 on NAEP tests since 2009, whether or not states were placed in smaller groups.
- (2) Even if one accepts Schmidt and Houang's measure of overlap and their findings for its predictive value (i.e., that the more a state's mathematics standards looked like Common Core's mathematics standards, the greater the impact on state achievement), the impact is educationally insignificant for individual students even if statistically significant for the state as a whole.³²

About the Author:

Ze'ev Wurman is a visiting scholar at the Hoover Institution. Between 2007 and 2009, he served as a senior policy adviser with the Office of Planning, Evaluation, and Policy Development at the U.S. Department of Education. Wurman served as a commissioner on the California Academic Content Standards Commission that in 2010 evaluated the Common Core's suitability for California adoption.

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Endnotes

- 1. CCSSI is the organization created by the three authors of *Benchmarking for Success* to develop the Common Core standards.
- 2. https://web.archive.org/web/20091019070946/http://www.corestandards.org/
- 3. Z. Wurman, "Common Core standards undermine California's gains," San Francisco Chronicle, Dec. 22, 2009
- 4. See http://www.edweek.org/media/comments_regarding_draft_common_standards_edit2.pdf. Interestingly, in 2013 NAGB decided that they could not support equating college-readiness with career-readiness because it found that between two thirds and three quarters of its math framework objectives were "not evident as prerequisite" in any of the training required for the careers studied, a finding Cornelia Orr, the board's executive director, called "quite shocking." http://www.edweek.org/ew/articles/2013/08/15/01nagh.h33.html
- 5. Members of the standards-writing teams are listed here: <a href="https://web.archive.org/web/20090708081452/http://www.nga.org/portal/site/nga/menuitem.6c9a8a9ebc6ae07eee28aca9501010a0/7vgnextoid=60e20e4d3d132210VgnVCM1000005e00100aRCRD&vgnextchannel=759b8f2005361010VgnVCM1000001a01010aRCRD
- 6. Phil Daro was a staff member of America's Choice, a for-profit intervention program for "turn-around" (failing) schools. So was Sally Hampton, compiler of Appendix B in Common Core's English language arts document. America's Choice was a program offered by the NCEE, directed by Marc Tucker, a member of the review committee.
- 7. Members of the review committee are listed here: http://www.nga.org/files/live/sites/NGA/files/pdf/2010COMMONCOREK12TEAM.PDF
- 8. The original 25 Validation Committee members are listed here: <a href="https://web.archive.org/web/20091019070946/http://www.nga.org/portal/site/nga/menuitem.6c9a8a9ebc6ae07eee28aca9501010a0/7vgnextoid=f541ea15a18e3210VgnVCM1000005e00100aRCRD&vgnextchannel=759b8f2005361010VgnVCM1000001a01010aRCRD. Later CCSSI added four teachers/principals as members.
- 9. Reaching Higher: The Common Core Validation Committee, June 2010. http://www.corestandards.org/assets/CommonCoreReport_6.10.pdf
- 10. Michigan House Testimony, p.9 at: http://house.michigan.gov/sessiondocs/2013-2014/testimony/Committee223-3-20-2013-9.pdf
- 11. William was Deputy Director of the Institute of Education, University of London, with a strong knowledge of international expectations.
- 12. Email to Keith Gayler at CCSSO, May 2010.
- 13. S. Stotsky, Common Core Standards Miss the Mark, National Association of Scholars, June 2010. http://www.nas.org/articles/Common Core Standards Miss the Mark
- 14. The Common Core never backed off from their ridiculously low definition of college-readiness in September 2009: Algebra 1. While some standards might suggest that college-readiness is higher than that, no other definition was provided by CCSSI. In May 2013, NCEE published results of

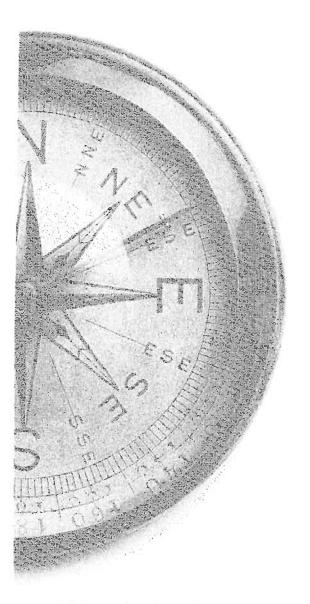
- a study by Phil Daro, one of the Common Core mathematics standards writers, asserting that completion of Algebra I is all that is necessary to be ready for college (as in Common Core's first draft of its mathematics standards in September 2009). http://www.ncee.org/college-and-work-ready/
- 15. Understanding University Success, Center for Educational Policy Research (Eugene, OR) 2003. https://www.epiconline.org/publications/documents/UUS_Complete.pdf
- 16. David T. Conley, et al., Reaching the Goal, Educational Policy Improvement Center, (Eugene, OR) 2011. http://www.epiconline.org/publications/documents/ReachingtheGoal-FullReport.pdf
- 17. Email from the author to Ash Vasudeva, Bill & Melinda Gates Foundation project officer for Conley's study, April 23, 2010.
- 18. W.H. Schmidt, R.T. Houang, Curricular Coherence and the Common Core State Standards for Mathematics, Educational Researcher v41 p. 294 (2012)
- 19. Cohen's kappa.
- 20. W. H. Schmidt, H. C. Wang, C. C. McKnight, "Curriculum coherence: an examination of US mathematics and science content standards from an international perspective," J. of Curriculum Studies, v37 p525 (2005). Approximately 45 additional topics are taught in less than a majority of the A+ countries in grades 1-8.
- 21. Schmidt himself wrote in 2005 that "[c]hoosing additional topics to round out a composite curriculum would be arbitrary." Ibid, p. 537.
- 22. Schmidt & Houang (2012), Table 2, p. 301.
- 23. Figs. 4-6 are recreated from their paper. Mississippi's congruence measure lies between 821 and 826 based on their paper. Here it is estimated to be .823.
- 24. A description of a statistical technique that is used to prove anything one wants is described here: http://slatestarcodex.com/2014/01/02/two-dark-side-statistics-papers/
- 25. Cut-score rigor is positively correlated with achievement but it is unclear whether it causes higher achievement or is caused by higher achievement. Schmidt and Houang's use of it as an explanatory variable presumes, without substantiation, that causality flows from cut-scores to achievement. How federal funding may affect the dependency between standards alignment with the Common Core and student achievement is an even bigger mystery. After all, one could easily argue that if Common Core standards are so effective, their effectiveness might actually increase in poorer populations.
- 26. Schmidt, McKnight, Valverde, et al. (1997), Many visions, many aims, Volume I: A cross-national investigation of curricular intentions in school mathematics. Dordrecht: Kluwer. p. 63
- 27. High school CCSSM standard S-CP 9, "Use permutations and combinations to compute probabilities of compound events and solve problems." Presumably they got confused by a grade 7 standard (7.SP.8) "Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation."
- 28. High school CCSSM standard G-CO 12, "Make formal geometric constructions with a variety of tools and methods (compass and straightedge ..." In grade 7 the standard (7.G.2) says "Draw

lii Common Core's Validation

(freehand, with ruler and protractor, and with technology) ..."

- 29. J. Goodman, A comparison of proposed US Common Core math standard to standards of selected Asian countries, July 2010. http://www.educationnews.org/ed_reports/94979.html
- 30. A. Porter, et al., Common Core Standards: The New U.S. Intended Curriculum, Educational Researcher v40 p. 103 (2011).
- 31. R.J. Milgram and S. Stotsky, Lowering the Bar: How Common Core Math Fails to Prepare High School Students for STEM. Pioneer Institute, September 2013. http://pioneerinstitute.org/?wpdmdl=381&
- 32. Tom Loveless, A Progress Report on the Common Core, March 2014. http://www.brookings.edu/research/reports/2014/03/18-common-core-loveless

17





Orange County Board of Education PUBLIC HEARING ON THE COMMON CORE STATE STANDARDS (CCSS)

Testimony of Ze'ev Wurman Visiting Scholar, Hoover Institution Nov. 17, 2014

Mr. President, Members of the Board,

I am a visiting scholar at the Hoover Institution at Stanford University. Between 2007 and 2009 I served as a senior policy adviser at the U.S. Department of Education. I served as a commissioner on the California Academic Content Standards Commission that in 2010 evaluated the Common Core's suitability for California adoption. I have authored multiple studies evaluating the Common Core mathematics standards. I am also an executive in a semiconductor start-up company in the Silicon Valley.

In my testimony today I want to address the following points.

- That all the existing research evidence, with one exception, points to the CCSS having significantly reduced expectations as compared to international high achievers, and that the only study that found CCSS on par with the suffers from multiple fatal flaws that render its finding useless and misleading.
- That the Common Core's reduced expectations in K-8 will directly lead to reduced enrollment, particularly of disadvantaged and minority students, in advanced mathematics courses in high school, and is bound to harm their chances to pursue challenging and rewarding careers and that, consequently, this renders the California additions to the CCSS in high school, such as calculus and advanced statistics, an empty promise of world-class education.
- That the Next Generation Science Standards, developed by Achieve and adopted by our State Board of Education, consist of low-level science expectations that do not promote the necessary skills for developing skilled scientists and technologists. They are geared towards making students into technology consumers rather than technology developers.

Research Evidence

Since the publication of the Common Core standards, a handful of comparative studies were performed to compare the Common Core standards to those of other states and nations. Dr. Stotsky and I published one such study in 2010 and our conclusions about mathematics were:

Common Core's project was a laudable effort to shape a national curriculum. Unfortunately, rather than build on the strengths that can be documented in Massachusetts or California, the draft-writers chose to navigate an uncharted path. Consequently, although they sometimes include an interesting treatment of several new ideas that are potentially useful for the

¹ S. Stotsky, Z. Wurman, "Common Core Standards Still Don't Make the Grade," July 2010, http://pioneerinstitute.org/download/common-cores-standards-still-dont-make-the-grade/

development or implementation of a standard, by grade 8 their standards are a year or two behind the National Mathematics Advisory Panel's recommendations, leading states, and our international competitors.

Dr. Jonathan Goodman, professor of mathematics at the Courant Institute at the New York University, studied the Common Core mathematics standards and his conclusions were:²

The proposed Common Core standard is similar in earlier grades but has significantly lower expectations with respect to algebra and geometry than the published standards of other countries I examined. The Common Core standards document is prepared with less care and is less useful to teachers and math ed administrators than the other standards I examined.

Dr. James Milgram, professor of mathematics at the Stanford University, studied them as a member of the Common Core Validation Committee and testified about his findings in front of the California Academic Content Standards Commission in 2010:³

The above standards illustrate many serious flaws in the Core Standards. Also among these difficulties are that a large number of the arithmetic and operations, as well as place value standards, are one, two, or even more years behind the corresponding standards for many if not all the high achieving countries. Consequently, I was not able to certify the Core Mathematics Standards are benchmarked at the same level as the standards of the high achieving countries in mathematics.

Dr. Andrew Porter, Dean of the Graduate School of Education at the University of Pennsylvania, led another study comparing the Common Core mathematics to other states and countries. Among his conclusions:⁸

Those who hope that the Common Core standards represent greater focus for U.S. education will be disappointed by our answers. Only one of our criteria for measuring focus found that the Common Core standards are more focused than current state standards ... How much focus is desirable is unknown, but clearly the Common Core standards could have been more focused than they are.

We also used international benchmarking to judge the quality of the Common Core standards, and the results are surprising both for mathematics and for ELAR. Top-achieving countries for which we had content standards put a greater emphasis on "perform procedures" than do the U.S. Common Core standards. High-performing countries' emphasis on "perform procedures"

² Goodman, J., "A comparison of proposed US Common Core math standard to standards of selected Asian countries," http://www.educationnews.org/ed_reports/94979.html

³ Milgram, R.J. at http://pioneerinstitute.org/download/review-of-common-core-math-standards-testimony-to-the-california-academic-content-standards-commission/

Porter, A., et al., "Common Core Standards : The New U.S. Intended Curriculum," Educational Researcher 40:103 (2011)

runs counter to the widespread call in the United States for a greater emphasis on higher order cognitive demand.

In contrast with all these rather unanimous findings by multiple studies, a recent study by Professors Bill Schmidt and Richard Houang from Michigan State University compared the Common Core mathematics standards with the curricula of six high-achieving countries on an international benchmark, the so-called "TIMSS A+ countries," and their findings are starkly different:⁵

There being no major differences between the two sets of standards [TIMSS A+ and the Common Core], this provides further evidence that the CCSSM are coherent and very consistent with the international benchmark.

Unfortunately, Schmidt & Houang findings are not supported by their own evidence. I direct your attention to figures 1 & 2 Appendix C. These figures are from the Schmidt & Houang paper, and they represent the mapping of the TIMSS A+ countries (fig. 1) and of the Common Core (fig. 2) on a standard set of mathematics topics growing in complexity downward, and across grades 1 through 8 moving right. The characteristic shape of figure 1—the upper-right triangular shape—reflects coherence and focus of topic progression, as more complex topics are introduced later and—in general—lasting only for a few years before being replaced by new topics. Schmidt & Houang explicitly refer to this characteristic shape when they discuss the "no mojor difference between the two sets of standards" in their findings.

Yet it turns out there is a major difference between the two figures. In figure 2 the order of the rows has been scrambled to achieve the triangular shape. As the result, the topics are not in increasing complexity anymore so, for example, "3D Geometry" comes before "2D Geometry Basics," or "Relations of Common and Decimal Fractions" come before student even study "Decimal Fractions." Clearly, the focus and coherence of figure 1 are simply lost in the attempt of Schmidt & Houang to reshuffle the Common Core to give the illusion of the triangular shape they are after. Figure 3 shows this misleading illusion in stark color.

in summary, all available research evidence shows that by the middle school, the Common Core mathematics falls one to two years behind our high achieving international competitors, and comparative studies find them not only less rigorous but also less coherent, Schmidt & Houang illusive study notwithstanding.

Rigor of Mathematics in K-8

Since the 1990s, a major thrust in improving our mathematics achievement has been the effort to move an authentic Algebra 1 course from the high school and into grade 8, similar to what high-achieving countries have been doing for a long time. Supporters of this idea include math education reformers, civil right leaders such as Robert Moses, and even President Clinton during his time in office. As the

Schmidt, W.H., Houang, R.T., "Curricular Coherence and the Common Core State Standards for Mathematics," Educational Researcher 41:294 (2012)

consequence, the nation more than doubled the enrollment of 8th graders in Algebra 1 course since 1990. More recently the Presidential National Mathematics Advisory Panel recommended:

All school districts should ensure that all prepared students have access to an authentic algebra course—and should prepare more students than at present to enroll in such a course by Grade 8.

This call for more prepared students to take early Algebra was echoed in the 2008 clarion call for Common Core, the Benchmarking for Success report written by the three progenitors of the Common Core—National Governors Association, Council of Chief State School Officers and Achieve Inc. It said:

Action I: Upgrade state standards by adopting a common core of internationally benchmarked standards in math and language arts for grades K-12 to ensure that students are equipped with the necessary knowledge and skills to be globally competitive.

Benchmarking for Success has called, then, for what has later became known as the Common Core State Standards. It then goes on to declare:

Research has revealed striking similarities among the math and science standards in topperforming nations, along with stark differences between those world class expectations and the standards adopted by most U.S. states. ... By the eighth grade, students in top performing nations are studying algebra and geometry, while in the U.S., most eighth-grade math courses focus on arithmetic.

Yet when the Common Core standards were published a little more than a year later, in the summer of 2010, they firmly placed the first algebra course in ... the high school!

Common Core proponents repeatedly praise it for its "rigor" and how it will prepare children for the "21st Century" and how it will prepare more American students for STEM and increase our competitiveness. Yet when it comes to the clearest benchmark of rigor and high expectations in K-8, the Common Core not only punted, but it retarded and reversed the progress states made over the last decade or more. Common Core defenders frequently argue that "Kindergarten through seventh grade Common Core standards include all of the prerequisite content students will need to have learned to be prepared for Algebra I in the eighth grade." If this were true, why did they put the first Algebra course in grade 9 instead?

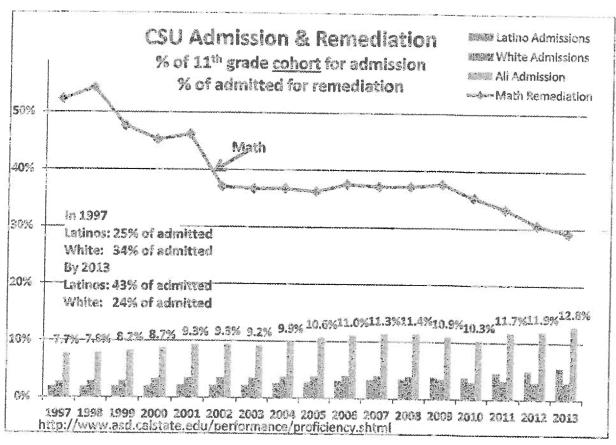
Other promoters of Common Core argue that Common Core's 8th grade is "effectively an Algebra class." Such argument can be voiced only by a mathematically incompetent speaker. Simply comparing the content of grade 8 Common Core with 7th grade California pre-algebra shows that Common Core includes only a <u>single minor algebra standard</u> beyond the pre-algebra course, while it lacks other significant content present in the old pre-Algebra standards. Appendix A shows this comparison.

Perhaps as importantly to consider is who will be the likely victim of this retreat from high expectations that Common Core dictates.

The increase in early algebra taking in California since the 1997 standards is quite staggering. While in 1999 only 16 percent of students took early algebra, four times as many, 67 percent, took early Algebra in 2013. This huge increase did not lower that success rate. In fact, the success rates of those students kept rising as their number exploded. To give you a better sense of this growth, the number of successful early algebra takers rose from 52,000 in 2002 to 170,000 in 2013, while the cohort size barely budged.

But it gets better. Because California set up its standards to prepare <u>all</u> students for Algebra in grade 3 and because it attempted to place all those who were ready into such classes, the biggest beneficiaries of this effort were minority and disadvantaged students. While the whole cohort success increased by a factor of three, low SES students and minority students rates of success jumped by factors of five and six-double the rate of the whole cohort.

Even more impressive is the fact that this early Algebra 1 taking directly translated into much higher rate of successful taking of advanced mathematics such as Algebra 2 and Geometry in the high school. As in the case of early Algebra 1, the minorities are the prime beneficiaries, growing at a much faster rate than white students. And the proof is in the pudding: despite aimost doubling the fraction that enters the California State University system since late 1990s, the remediation rates in mathematics dropped from over 50 percent to less than 30 percent!



The key element that enabled this massive surge of minority student success was the rigorous and carefully laid out K-7 standards that prepared everyone for Algebra 1 taking in grade 8. Not every student was ready, but every student that was ready was given a chance to excel and forge ahead, with lasting benefits. And they had full four years of high school to reach not only Algebra 2 but pre-calculus and calculus, to be prepared for selective colleges and STEM.

When challenged, Common Core defenders respond that they plan on maintaining the existing grade 8 algebra classes in the schools. Perhaps they do. Yet who are the students who will enroll in these advanced classes? The regular K-7 Common Core does not prepare students to take Algebra in grade 8, so only students that are pushed by their parents, that are provided extra-curricular often paid tutoring, will be able to make the jump and end-up in those classes. Most minority and disadvantaged students will not get that extra support to accelerate, and whatever is left of those advanced classes will be filled mostly with student coming from affluent families.

Since 2013 and the elimination of the STAR test, it became difficult to obtain indications of Common Core's impact, since the state stopped collecting data about early Algebra 1 enrollment or success. Still, some indications do exist. In the San Louis Coastal USD enrollment in middle school Algebra 1 fell from 62 percent in 2013 to 9 percent this year. Even in my own district of Palo Alto, middle school Algebra 1 enrollment fell from 92 percent in 2013 to 67 percent this year.

Given these trends of decreased student preparedness, there is little prospect for significant number of students being able to take the advanced mathematic courses that California added to the Common Core.

The New Generation Science Standards (NGSS)

I have spent much of my adult life in the high technology operations of the Silicon Valley, overwhelmingly surrounded by immigrant engineers from around the globe. So I was excited and hopeful when I heard about the National Research Council (NRC) effort to increase STEM preparedness of our own students. Imagine my disappointment when I saw the low expectations of the NRC Science Framework that begot the NGSS:

The overarching goal of our framework for K-12 science education is to ensure that by the end of 12th grade, all students have some appreciation of the beauty and wonder of science; possess sufficient knowledge of science and engineering to engage in public discussions on related issues; are careful consumers of scientific and technological information related to their everyday lives; are able to continue to learn about science outside school; and have the skills to enter careers of their choice, including (but not limited to) careers in science, engineering, and technology.

In other words, it was the NRC explicit intent to teach our children only science appreciation and make them into "careful consumers," but it did not intend on making our children science and technology creators. Predictably, based on that Framework, the NGSS defines a pedestrian and unambitious vision of what it expects our students to know. In its own words:

The NGSS do not define advanced work in the sciences. Based on review from college and career faculty and staff, the NGSS form a foundation for advanced work, but students wishing to move into STEM fields should be encouraged to follow their interest with additional coursework.

The Fordham institute, a strong supporter of national standards and of Common Core, conducted a review of the NGSS and found that it "falls to ensure that that *all* students will be equipped with sufficient content to make real the option of taking more advanced courses in the core STEM disciplines." In other words, not only the NGSS doesn't expects student to master advanced science; it doesn't even prepare students for subsequent taking of advanced science courses.

All this is summarized in NGSS's final grade awarded by Fordham – a "gentleman's C" – while Ohio's current standards are judged "clearly superior."

When it comes to alignment between NGSS and Common Core, Fordham found that "in several cases, where NGSS expectations require math in order to fully understand the science content, the math goes well beyond what students would have learned in classrooms aligned to the Common Core." Further, "the NGSS themselves fail to integrate math properly into their science performance expectations." Hence, the review concludes, "the math in the NGSS and the math in the CCSSM are not fully aligned."

Conclusions

Despite promises to be internationally benchmarked, Common Core reneged on its promise and placed Algebra 1 firmly into the high school, reversing a decade of progress across the land and putting us one or more years behind our international competitors.

One can reasonably ask: if the Common Core is truly dumbed down, why do the test results from pilot states show many more students failing? This apparent contradiction is easily explained once it is understood that while the new breed of tests doesn't ask much in terms of math knowledge, it expects student to answer in particular ways and formats that are largely unfamiliar to teachers and students. In other words the new tests are not about deeper or broader knowledge of math but rather about the difficulty of guessing what the test makers had in mind and aping the prescribed form of answers.

California data clearly shows that the biggest impact of these dumbed down K-8 expectation will fall on minority and disadvantaged students, who typically do not get the extra-curricular support they need to accelerate.

The default Common Core high school mathematics is misleadingly touted as "college-ready," yet it will lead at best to community and non-selective colleges. The retarded pace in K-8, and the deficient content in high school, will further restrict the number of qualified students able to pursue STEM cereers rather than increase it as promised.

The proposed New Generation Science Standards are flawed and almed at preparing science and technology consumers rather than technology creators. They offer a faise promise of enhancing STEM preparedness, yet in reality they fall significantly below Ohio's current science standards.

But, perhaps, the biggest tragedy of all will be that most high school students and parents will now be luiled into a false sense of security when they will hear their child is "on track to be college-ready." This will further reduce the pressure on students to reach beyond the diluted Common Core and NGSS offering to acquire adequate college preparedness. Like in the case of elementary grades, minority and disadvantaged students will be particularly hardly hit by this fog of doublespeak about college readiness.

Thank you for your time. I am ready to answer any of your questions.

Appendix A

Comparison of algebraic content between California 1997 7th grade standards and CCSS grade 8 standards.

Standards Relating to the Number System and Algebra 1997 California Standards Grade 7 Common Core Standards Grade 8

- Students know the properties of, and compute wish, rational numbers expressed in a variety of forms
- scientific notation; convention between fractional forms: irrational numbers; consumnal laboration.
- Students use exponents, powers, and roots and use exponents in working with fractions
- radicals & exponents; fractions with exponents.
- Students express quantitative relationships by using algebraic terminology, expressions, equations, inequalities, and graphs
- m zinnelih expressions; represent relationships graphically.
- Students interpret and evaluate expressions involving integer powers and simple roots
- multiply and divide managinals with exeguents; positive a negative exponents.
- Students graph and interpret linear and some nonlinear functions
- graph quadratic and cubic functions; plot theor functions; linear slope; line fitting to date.
- Students solve simple linear equations and inequalities over the rational numbers
- solve two stap linear equations and begundles; solve problems.

- Know that there are numbers that are not rational, and approximate them by rational numbers.
- irretional numbers.
- · Work with radicals and integer exponents.
- radical & exponents; sclenelite notation; plot linear functions; linear slope; positive & negative exponents.
- Analyze and solve linear equations and pairs of simultaneous linear equations
 - solve linear equations; solve systems of two linear equations.
- Define, evaluate, and compare functions.
- function as input/output relationship; threat relation as a function; represent functional relationships graphically.
- Use functions to model relationships between quantities.
 - line fisting to date.

Legend

PURPLE: Present in both sets of standards. SLUE: Present in one set only. UNDERLINED BLUE: Key coment. **OPINION**

Ken Williams: Controversy and the Common Core

For the Orange County Register



Published: Sept. 24, 2013

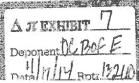
As Obamacare implementation is the subject of national headlines, also in 2014, an equivalent tsunami will occur in America with a controversial national education curriculum arriving in our schools and classrooms. For practical purposes, it transforms and adversely impacts classrooms and removes parents and locally elected school board members from governing schools in their community.

Common Core is a one-size-fits-all program. It was paid for by the federal government – against federal laws that prohibit Washington from establishing national educational standards, testing and curriculum.

It's similar to the current national health care debate. Common Core's stealthy implementation by the Obama administration, national and state educational organizations and state governments keep parents and taxpayers in the dark.

In 1996, the National Governors Association began a nationwide dialogue to raise national academic standards and strengthen educational accountability. This effort was a consequence of the poor U.S. ranking on international K-12 assessment testing. What began as an admirable goal and pursuit, however, is causing local school boards and parents much anguish as this emerging and disturbing new education paradigm becomes reality.

Some may recall the previous federal education reform plans of the 1990's, Goals 2000 and School-to-Work. Their implementation was thoroughly rejected by the public as a result of the constitutional arrogance and defiant nature of government officials. Now, almost two decades later, social and education A TEXHIET



progressives learned from their past mistakes and are using a different approach, i.e., silence. In 2010, U.S. Department of Education Secretary, Arne Duncan, acknowledged this education transformation was a "quiet revolution."

Originally, 46 states voluntarily adopted Common Core with federal funding "Race-to-the-Top" grants. Conservative states such as Alaska, Nebraska, Virginia and Texas declined to adopt the standards. As opposition increased across the country, Indiana and Michigan recently dropped out under public or legislative pressure.

Here in California, Common Core was adopted by the State Board of Education in August 2010. A main objection to Common Core is it circumvents the ideals and concept of "local control." In reality, an unelected, governor appointed, 11-member state board of education, decides without substantive debate. Local boards have little input or ability to change curriculum.

Local control of education has been hijacked specifically by unelected officials holding the purse strings in Sacramento; and in general by the federal government and national education organizations. Common Core dismisses the idealism of local control of education by parents, teachers and school boards laid out in the Northwest Ordinance by our founding fathers; it "dumbs down" academic standards; and huge financial costs are born by taxpayers to implement a national curriculum that is unfunded, and has never been tested or proven.

Common Core uses code words like higher academic standards, rigorous academic coursework and career readiness. Unfortunately, these concepts are a ruse. Career skills are really training for entry-level jobs and the college-ready concept refers to community college rather than a four year university academic track. In examining the details, under the guise of "higher standards and career readiness," well-intentioned educators, liberal political and education activists impose upon school boards to implement untested progressive academic curriculums. This hurts our nation.

In certain states controversial personal data mining has emerged and politics plays a major role in the approved curriculums. Similar to the 1990's Clinton administration national education plans, government-endorsed public policy positions play a key role in this curriculum and religious liberties and individual conscience are dismissed. Under Common Core, rugged individualism is diluted, group thought and personal attitudes are the norm and moral values overtly lean political leftward.

Experts on academic standards warn Common Core standards are mediocre and will hurt our nation's children. True education reform empowers parental choice, school vouchers, charter schools and eliminating the influence of teachers union.

Ken Williams, a physician, has been a member of the Orange County Board of Education since 1996.

OPINION

Ken Williams: Are Common Core standards lawful?

This op-ed appeared the OC Register's Opinion Special Report on the Common Core published December 13, 2013.

Common Core's role in local and state education violates three federal laws.

BY KER WILLIAMS FOR THE SECISTER

Every educator supports our children being prepared for college and career readiness. All hold up critical thinking and writing skills, high academic standards and STEM technology. Common Core has well-intentioned standards and benchmarks and the concept of online testing with quicker available assessment scores is a good one.

But Common Core is different than adopted curriculum and assessments. This is a significant source of controversy. Common Core defines standards. It is not a curriculum (what to teach to achieve standards), pedagogy (teaching method) or assessment (the measure of a student's knowledge).

The conservative Sutherland Institute notes, however, "standards drive and influence curriculum, pedagogy, assessments, instructional materials, accountability systems and more. Indeed, the primary purpose of standards is to establish guideposts that direct all aspects of schooling toward a defined goal."

So what guideposts or benefits do we establish in adopting common national standards? Since all children are impacted, parents whose children attend either public, private or home schools would answer that question differently.

The California Learning Assessment System provides an example of how problems occur when transitioning to untested instruction, curriculum and assessments.

in the 1990's, CLAS was embraced as being state of the art. The same groups now driving Common Core similarly promoted it. CLAS was described as having "... critical thinking and conceptual understanding, problem-solving based on real-life problems, meaning-centered rather than memorization-oriented learning

opportunities, active learning which makes connections to student's experiences, collaborative learning and interdisciplinary learning."

CLAS curriculum and assessments were subjective, political, used open-ended questions and asked invasive questions about family relationships. Children who scored well on previous state assessment testing, when tested under CLAS didn't do as well. CLAS was eventually removed from California's classrooms.

The U.S. Department of Education, in advancing Common Core, unlawfully violated three federal laws (20 USC 1232a, 20 USC 3403 and 20 USC 7907a) prohibiting the federal government's role in local and state education. The federal government provided economic "incentives" via Race to the Top "awards" in the 2009 economic stimulus package. These "voluntary" funds were sent to financially strapped states for the purpose of adopting these national educational standards.

The Obama administration pressed states to adopt Common Core and national assessments in exchange for billions of dollars in federal funding and waivers from the onerous provisions of No Child Left Behind.

Dismissed by Common Core advocates is the explicitly worded prohibition in the U.S. Department of Education Act (20 USC 3403, Public Law 96-88): "No provision of a program administered by the Secretary ... shall be construed to authorize the Secretary ... to exercise any direction, supervision, or control over the curriculum, program of instruction ... over any accrediting agency ... over the selection or content of library resources, textbooks, or other instructional materials by any educational institution or school system."

Common Core decreases the role of parents and local school boards in the decision making process. Chapman Law School, Constitutional Professor of Law, Hugh Hewitt told me, "The implementation of Common Core is drawing increasing fire from proponents of local control of education, and the critics are right that no serious legal analysis has been out forward of the new program's intersection with – others would say trampling of – federal laws guaranteeing autonomy of local school boards."

Dr. Ken Williams is a member of the Orange County Board of Education.

PUBLIC COMMENT: ORANGE COUNTY BOARD OF EDUCATION NOVEMBER 17, 2014

The passage of Common Core reminds me of Nancy Pelosi's famous quote immediately after Congress passed Obamacare: "We had to pass the bill so that you can, uh, find out what is in it". That strange mentality was present in the passage of Common Core. Not only was the public unaware of what was in Common Core, we didn't even know it was being devised, and state officials who signed on to Common Core did so without even knowing what was in it. They chose to believe its authors' promotion and promises instead of prudently waiting for proof it was superior to the education system it replaced.

Today we have evidence of the foolishness of that decision.

Teachers, once excited about its advertised potential, can no longer support it. Parents who were given a glowing description of Common Core, are now becoming increasingly disappointed and angry over false promises as the numerous negatives emerge.

Parents are describing Common Core math as a form of child abuse. Others speak out against Common Core History material that exaggerates and embellishes wrongs by our forefathers, while ignoring America's historical virtues. A.P. History curriculum has been described as deeply blased, inaccurate, and a revisionist version of American history.

American patriotism is discouraged, and a growing number of critics say the curriculum is more favorable to a hard-core Marxist version of governing.

The Holocaust is not mentioned, let alone used as an example of what can happen under a dictatorship form of governing. Our Constitution is not emphasized as the reason for America's successful form of governing that propelled us — into being the leader of the free World.

The question on many of our minds is why all the above was allowed to happen by those we are suppose to trust the most: Our elected officials.

Deponent DO BOF E

Tonnie O'Neil

Dear Board of Education Trustees,

My Stella (2nd grade) is having difficulty with math and I have to say I don't blame her. When she brought home math homework a couple weeks ago, I didn't even understand what I was looking at and I wasn't sure how to help her at first. After a few minutes of studying the worksheet, I found that she was being asked to first deconstruct the number, then proceed with adding all of its different parts together to get the sum. Each problem was written in a number sentence, not vertically with a line below the equation where you could solve for the sum below.

I rewrote the equation for Stella in the vertical way, drew a line below it and a "plus" sign to the left, and asked her, "Stella, have you ever seen this before? Do you know how to do this problem this way?" What she said shocked and upset me. "No, Mom," she said, eyes looking downward and she seemed ashamed for some reason. "My teacher didn't teach us how to do that." I assured her that it was OK and not to worry—that I could teach her an easier way to add two-digit numbers. I asked her, "Do you know what you do first?" She did not know to start by adding the two numbers on the far right column. She did not know that since they added up to another two-digit number, that she needed to "carry the 1," and she did not know what to do next. As I proceeded to show her how to then add the [now] three numbers in the left column, she was able to do it easily and we had the sum after really just a minute or two after instruction. The disappointed look on her face changed to a look of relief and satisfaction and she laughed. I asked "What's so furmy? "Mom, that's a really good shortcut and way easier" she replied.

I then told Stella that I wanted her to do her math problems the way I showed her from now on, and I told her I would be talking to her teacher about their math work and the methods they are using to teach these concepts. We have a conference next week and I plan to discuss in detail the second-grade math curriculum.

Here is a picture of the worksheet that caused the confusion. Note my own penciled-in equation at the top right area of the page. The penciled-in part is what she did NOT know how to do until I taught her.

As a parent, I am outraged. This common core math is confusing and our current system of eaching math is not "broken." Why is Washington and Sacramento trying to "fix" it?! I am dready exploring math tutoring options for my children, and I am upset that our family will have o make further financial sacrifices in order to place our children in decent math classes to help leprogram them from the confusion that is common core math. As taxpayers, we deserve and temand adequate standards, sensible methodology, and every educational opportunity for our children within the public school system. Common core is providing none of those things and we want our great state OUT.

Sincerely,

Amanda Earnest San Clemente, CA I cannot make it to tonight's meeting, but I want you to see this test my 5th grader took ast week. She received a 100% on her Star Test and also got a 98% on the GATE test and yet the got two of these wrong that we know so far. I have a parent conference meeting with her eacher tomorrow, but I was able to get a copy of the exam.

Question#1 - She answered that Steve was correct. She got it incorrect, because the answer is that both are correct. Why? Because if you put parentheses ()around the 7 and the 2, Bonnie is also correct. No where does it say that you can add to the problem! Putting () around the numbers, changes this equation! Apparently some teachers gave full credit if you answered Steve was correct, but some didn't. Subjective?

Question #3 – Use parentheses to show the order you would use to find the answer. My daughter simply put () around the correct numbers. She got it half wrong, because she didn't work out the problem, but the problem is already solved! No where does it say to work out the problem.

Her school is Truman Benedict Elementary in San Clemente. Thank you!

Name	
------	--

5th Grade Assessment - First Learning Cycle

Solve each problem with at least one strategy (show your work and your entwer)

1. Stove and Bonnie evaluated this expression: 15-7-2. Stave said his answer was 6. Bonnie said her answer was 10. Which answer makes sense to you and why? Is it possible that both are correct? How?

2. Compare $3 \times 2 + 5$ and $3 \times (2 + 5)$. How are these expressions the same? How are they different? How are the parentheses important?

3. Use parentheses to show the order you would use to find each snawer.

$$3 \times 30 \div 5 + 1 = 19$$
 $3 \times 30 \div 5 + 1 = 15$

How did the symbols help you decide which order to use?

November 17, 2014

Dear Roard of Education Trustees,

My Stella (2nd grade) is having difficulty with math and I have to say I don't blame her. When she brought home math homework a couple weeks ago, I didn't even understand what I was looking at and I wasn't sure how to help her at first. After a few minutes of studying the worksheet, I found that she was being asked to first deconstruct the number, then proceed with adding all of its different parts together to get the sum. Each problem was written in a number sentence, not vertically with a line below the equation where you could solve for the sum below.

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As a parent, I am outraged. This common core math is confusing and our current system of teaching math is not "broken." Why is Washington and Sacramento trying to "fix" it?! I am already exploring math tutoring options for my children, and I am upset that our family will have to make further financial sacrifices in order to place our children in decent math classes to help deprogram them from

the confusion that is common core math. As taxpayers, we deserve and demand adequate standards, sensible methodology, and every educational opportunity for our children within the public school system. Common core is providing none of those things and we want our great state OUT.

Sincerely,

Amanda Earnest San Clemente, CA My children are suffering from the Common Core new Math curriculum.

Both of them have been very well evaluated by their teachers but personally they feel "dumbs" when it comes to common core math. It has taken a while to bring back Steve out of the low self esteem that this has caused on him.

They feel they are not good at it as "it doesn't make sense".

and when I try to explain to them their answer is "No mom, you don't know how to".

This new curriculum has broken the line of communication between me and my children and eliminated some trust that they had in me.

I see how Natalie takes forever using drawings to move a problem that takes just two simple steps.

During the last month I have worked with Steve separately explaining him the natural way of doing math to help him with his self esteem. When Natalie (a year older) asks a question from her homework, Steve now answers almost immediately. She takes forever to get the answer (if at all, usually she doesn't get it) and then cries as she witnesses her little brother get the answer faster than she does. Last week she was begging me to return her to second grade as she wasn't feeling suitable for third grade!!

We are talking about a girl who got evaluated with 4s in every single subject and all O (outstandings) at the last period of her report card from last year!! Inclusive in second grade Natalic would cry during her math homework.

We are ready to teach both of our children the logic way to learn math.

It doesn't make sense to me that a student who is performing well at school feels so unsuitable for her class.

Please do not confuse the "getting deeper" with "stupidity". Common Core is ruining their academic math foundations and as Dr. Milgram stated, "IT WILL PUT OUR CHILDREN TWO YEARS BEHIND OUR INTERNATIONAL COMPETITORS"

Both of them attend Malcom Elementary. Natalie is in 3rd grade Steve is in second grade.

Alejandra Baker

November 16, 2014

Dear Orange County Department of Education,

My son no longer attends public school due to the changes in math. He went from truly enjoying math to hating it. He didn't understand why he now had to draw pictures and listen to the teacher talk for 40 minutes without any exercise of the new concept. Due to this change of standard teaching methods, he quickly became bored and uninterested in school. I frequently spoke with the teacher and discovered she didn't like the new Common Core Math either. I tried to talk to the principal, only to be told that the new standards were wonderful and that kids who struggled in math would excel. What about the kids who did well in math? Why should they be penalized and forced to learn math at a lower level? Why can't the teacher work with a child who struggles? Isn't that the job of a teacher; or is it to facilitate the classroom?

Every child is an individual with different strengths. Some are good in math and some are good in language arts. Common Core is trying to instill equality rather than individual exceptionalism. Needless to say; my child now attends a school that does not use Common Core. Yet, what a shame that I was forced to pay for my child's education because my own state would not do their job and ask the right questions before signing the dotted line. Unfortunately, so many decisions are based on money and not on what is right for the children.

Sincerely, Helen Kingsbury Helen Kingsbury To the Honorable Members of the Orange Country Board of Education: November 14, 2014

I have been a public school teacher for the last seventeen years and I am very concerned that the Common Core Standards will negatively impact the future of my students and of our country. I am concerned that these standards have not been proven to be effective in preparing my students for a globally competitive work force. I have yet to see credible evidence that it will accomplish all that the proponents aromise it will.

What I have seen firsthand, however, is the frustration of administrators, teachers, parents and shildren. I have seen children in tears and with discouragement on their faces. I try my best, of course, to incourage them. But my second graders believe that if they are not able to do something after trying for a thile, then that must mean that they are not smart. I receive notes several times a week from parents tating that they tried to help their child with the homework but they could not understand it since it did not hake sense. In the teacher's lounge at my school, the conversations among the staff show that morale is eteriorating suddenly and quickly.

I was initially excited about teaching my students in a more rigorous manner and I believed the hype urrounding Common Core. However, many red flags appeared to me that I could not ignore; others are etter at articulating those than I am so I will leave it to them to explain. Common Core has already affected ne on a personal level. My husband and I are now homeschooling our children and I have started to look eyond a career in teaching. To think of leaving my job is something I never considered in my seventeen ears of teaching. However, I no longer feel like I am doing something to help children. Teaching them in ays that are not cognitively appropriate feels like pushing a six month old baby to walk. It does not feel ght at all and I cannot continue to do it with a clear conscious.

I urge you to take these words to heart and to consider reinstating our previous 1997 California State tandards. My students made great progress and were quite successful when these were taught and I work ith mostly ELLs. I am grateful for your time to share my views and my experiences with you.

Vernika Akino

Annette L. Gibson 12 Whalers Bluff Newport Coast, Ca. 92657

School District: Laguna Beach Unified School District

Parent: 3 School aged children

Occupation: Small Business Owner, Registered Nurse

Birthdate: March 16, 1966 Phone: 949 715-7355

Email: algibsonm@cox.net

To the Orange County Board Of Education,

I ran for school board in Laguna Beach in the last election to help remove Common Core from the Curriculum. The Curriculum is harmful to our education system and will affect many generations to come if we do not remove it quickly. I would never put my kids in the education system that has long-term effects on my kid's education. My kids will continue to attend private school. I will continue to fight this harmful curriculum even though my kids will not be affected. We have to do the right thing for future generations. This will go down in history as the biggest violation of our Constitution, and over reaching of the Federal Government.

Thank You.

Annette L. Gibson

Dear Members of the OC Board of Education:

I am writing this letter to express my concern regarding the implementation of the Common Core curriculum in our schools. I have two children, one in the 8th grade and another in the 6th grade. They currently attend a very high achieving charter school in Orange County, and are good students. They both really enjoy school but we have all struggled with the implementation of the new CC curriculum and standards. My children have struggled because it is a significant change from the way math has been taught as well as the lowering of the standards across the board has made them feel like the last year and a half has been a repeat and are getting board in school. I have struggled with helping them with their math homework because they are no longer being taught simple method of computation.

Simple math problems have become more complicated by adding unnecessary steps to complete. As a licensed CPA, I find this both a waste of time and completely frustrating. If we truly want our children to "dig deeper" into mathematics, then let's continue to teach them how math makes our modern world function and apply it in way that fascinates and enlightens them, not turn them off entirely.

When I first heard about Common Core and the ability to set a national bar in education, I thought it sounded like a great idea. However, when I actually saw what my own children brought home in the form of homework, I was extremely shocked that this was the "improvement" I read about. Considering the ages and grade levels of my children, I am deeply concerned that by lowering the math levels by two years, we will completely impact their success with high school, college and beyond. If America is lowering the bar of education requirements, how will my children compete with other students from schools who have not?

Aside from the academic problems I have seen, I read the survey which will be sent home to high school children in the near future which I found to be completely out of line with educational standards. Asking my child what his sexual orientation is, or the number of partners he has engaged in sexual activities is crossing the line of government involvement with my children's education! I would not answer a questionnaire like this as an adult, I find it completely frightening that underage children will be forced to.

Please suspend or repeal our participation in the common core standards and curriculum until we find a better way to teach our children.

Sincerely.

Gina M. Schumann

County of ODANE	- Carlon		
On NOV-13, 2014 before personally appeared	me, P.M.	AROUEZ NOTACE PUBLI Here insert Name and Title of the Office SCHUMANUM Name(a) of Signer(a)	<u>Lì c</u>
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Dear Members of the OC Board of Education:

I am writing this letter to express my concern regarding the implementation of CC in our schools such as:

- 1) In the area of mathematics, my children are confused by the methods that are being used to teach the math topics such as the matrix math used to teach multiplication, the drawing of models to calculate division of fractions, and the explanations required for simple math problems. I have experienced that the teachers themselves are grading the students' work inconsistently and subjectively. For example: 2/6 + 3/6 = ? What is the sum? Explain how you found the sum. This is a very simple equation that any 5th grader can solve. Her answer was: Add 3/6 + 2/6 = 5/6. Apparently she was only 50% correct in her answer. Another example: Complete the equation to show how to subtract the fractions: 7/10-4/10. Her answer: 7/10-4/10 = 3/10. Again she only gets it 50% correct because she doesn't fill in all the boxes that shows 7/10-4/10 = (7-4)/10 = 3/10. Fractional word problems where she sets up the equation in the traditional manner (without drawing of any models) and arrives at the right enswer, but because she hasn't filled in every single box (which by the way my daughter said the teacher didn't show the children how to fill in all the boxes) she is penalized for every box that didn't have a number filled in. As a parent, I am concerned because this system is discouraging and penalizing those children who have mastered math using methods previously taught to them and has worked for us in my generation and before. This is simple math! I am also concerned that our school is telling us that K-12 math will "go deeper and narrower" under common core and yet we are told that all the same math will be included previously, it is just arranged differently. If more time will be spent on less topics, it is impossible to say that all the topics included in the pre-common core curriculum will be covered.
- 2) in the English/Language arts I am concerned about the decrease in literary/fictional reading and an increase in informational/factual reading. One of my children likes to read. The other does not. My child that likes to read enjoys reading for pleasure. He does not enjoy reading science books and history books. My child that does not like to read can be motivated to read when she is given literary books (fiction) that she finds entertaining. I believe that children who are given books that they don't enjoy reading will ultimately do less reading. Additionally, it has been said that reading (and writing) fictional stories lead to more creativity.
- 3) I have reviewed the questions in the "healthy kids survey" modules and have grave concerns about my children being asked to answer questions that I believe have no place in education at the school such as sexual orientation, whether their parents served in the military among other topics that I feel is an invasion of privacy.
- 4) I am also concerned about the financial burden the implementation will have to our schools requiring all new text books, additional technology, retraining of teachers and the excessive absence incurred by our teachers while they are being taught common core.

While the intent of raising our educational standards sounds like a good idea, the common core solution seems to be problematic as evidenced by states and school districts that are further along in their implementation.

Please suspend or repeal our participation in the common core standards and curriculum until we find a better way to teach our children.

Sincerely,

Hiangkie T. Harr

SEE ATTACHED

State of California		
County of ORAN G	E	
On Nov. 17, 2014 before	e me,	MARCOUSE NOTARY PUBLIC
personally appeared HIRA	JGKIE	TJUAN Name(a) of Signer(s)
P. MARQUEZ Connhission # 1996s Notary Public - Califor Orange County My Comm. Expires Mov 28	nia B	who proved to me on the basis of satisfactor evidence to be the person(s) whose name(s) is/ar subscribed to the within instrument and acknowledge to me that he/she/they executed the same is his/her/their authorized capacity(ies), and that be his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal. Signature:
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Dear Orange County Board of Education,

I, Britt Fant, do solemnly swear that the following is true to the best of my knowledge.

My name is Britt Fant. My daughter is a first grader in the Newport Mesa School District. This is my affidavit of how unhappy I am with the Common Core State Standards.

I believe that the standards are low and unacceptable. The California Standards we had prior to Common Core were far more superior. I feel that the standards will not help my daughter be college and career ready. Instead she will fall behind and not be able to attend college and have the opportunity to obtain a successful career.

My wife and I have decided that our daughter will not be attending public school next year as she enters 2nd grade. This is very disappointing to me because I was so excited to have my daughter attend school at NMUSD. My son was not able school at NMUSD because he attended the Yorba Linda School District where his mother lives. I know that the school district here in NMUSD was great and I was so grateful that my daughter would able to reap the benefits of this.

It is very sad and reprehensible that NMUSD and the Board of Ed for California got rid of outstanding standards and replaced it with these horrible standards that are in the Common Core State Standards.

Sincerely

Britt Bane

SUBSCRIBED AND SWORN BEFORE ME

HOTARY PUBLIC

MIKE SOLEMAN OF COMM. 2077/855 OF COMM. 2077/855 OF COMMAN OF COMM

Dear Orange County Board of Education,

I, Ruth Fant, do solemnly swear that the following is true to the best of my knowledge.

My name is Ruth Fant. My daughter is a first grader in the Newport Mesa School District. This is my affidavit of how unhappy I am with the Common Core State Standards (CCSS).

I believe that the standards are inappropriate and inadequate. The California Standards we had prior to CCSS was far more superior. This statement is based on the many speeches Dr. Sandra Stotsky, Dr. James Milgram and Ze've Wurman have made regarding their knowledge of CCSS.

I have also spoke with many teachers regarding their thoughts of CCSS. They are very frustrated with the new standards and feel that the standards are horrible. They are trying to go above and beyond for their students but still fear speaking out against it because they do not want to loose their job or feel that they will be branded as an insubordinate.

My husband and I have decided that our daughter will not be attending public school next year as she enters 2nd grade. We do not want to expose our daughter to the harms of Common Core. Our daughter is not a guinea pig and the school, the district and the government has not been given our permission to treat her like one. They should have vetted these standards before California adopted them. I have expressed our decision to pull our daughter out of the public school to many teachers. Even though they understand why we wish to pull her out they have also asked me not to leave because they feel that I will not be able to be as effective in fighting Common Core if my child is not in the public school system.

As much as I am committed to fighting Common Core I cannot continue to expose my daughter to the damage Common Core will cause her. I will continue my fight against Common Core. I believe that it is worth the fight and that it will be equally important to fight it even if my daughter is not exposed to it. The American children need our help.

Thank you for your time.

Sincerely,

Ruth Fant

CALIFORNIA JURAT WITH AFFIANT STATEMENT ☐ See Attached Document (Notary to cross out lines 1–6 below) ☐ See Statement Below (Lines 1–5 to be completed only by document signer[s], not Notary) Signature of Document Signer No. 1 Signature of Document Signer No. 2 (if any) State of California County of DEANGE Subscribed and swom to (or affirmed) before me on this proved to me on the basis of satisfactory evidence EVALIE DUNGAN to be the person who appeared before me (.) (,) COMM. # 1974274 OTARY PUBLIC-CALIFORNIA ORANGE COUNTY MY COUNT EXP. MAY 3, 2016 Name of Signer proved to me on the basis of satisfactory evidence to be the persop who appeared before me.) Signature Signature of Notary Public Place Notary Seal Above - OPTIONAL . Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document. Top of thumb here Top of thumb here Further Description of Any Atlached Document

Signer(s) Other Than Named Above: _

Affidavit of Laura O'Neal

I, Laura O'Neal, residing at 11545 Allen, Tustin CA born on September 9, 1967. I swear the below information that I am giving is true:

I removed my children from the Tustin School District in September 2014. My children Riley and Morgan O'Neal attended the public schools from 2006-2014. The schools that Riley O'Neal and Morgan O'Neal attended were Peter's Canyon Elementary and Pioneer Middle school in Tustin Ranch. The reason for the removal was the implementation of Common Core State Standards and the change in the curriculum.

It was with much regret that I had to pull my children from a school that we both loved. I with all good conscience could not continue to expose them to standards that I do not agree with.

Laura M. O'Noal

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AFFIDAVIT

STATE OF CA

COUNTY OF Orange

Jessica Treglia being duly sworn according to law, deposes and attests under penalty of perjury to the following:

I, Jessica Treglia, of the City of Irvine, State of CA, being first duly swom on oath, state that:

- 1. I am over 18 years of age and competent enough to testify of my own knowledge of the facts stated herein.
- 2. All the facts stated by me herein are true, correct and complete to the best of my knowledge and understanding.
- 3. In 2013, I removed my children from Red Hill Lutheran School because they adopted Common Core State Standards without first holding a public meeting for parents who were paying tuition to have their kids attend the school. When I asked the principal to provide evidence to back the claims made by the proponents of the new standards, she was unable to direct me to a particular school or district using the standards with success.
- 4. In the fall of 2013, my fourth grade son was struggling with the new Common Core math. I was unable to find a public school in my area that had not adopted the standards. When I called my local neighborhood school, I was told they were adopting Common Core, though they knew very little about the development of the standards or the new changes in Math and English. My husband and I had to find a small alternative school in order to provide our children with a well-researched and proven educational system. As a parent, I feel my children should not be subjected to an experimental education reform based on very new science related to educational data mining and learning analytics.
- 5. Currently, we drive to Yorba Linda, CA to attend a non Common Core school. It is terrible that there are so few alternatives for parents and children in one of the wealthiest counties in CA. Both of our children, however, are excelling as a result of a classical education model. My son is now a student who loves math. He is mastering the fundamentals and working hard without the added and unnecessary confusion built into the Common Core math standards.

(Printed Name of Affiant) Jossica Treglia

(Signature of Affiant)

NOTARY CERTIFICATION	
SWORN to and subscribed before me, this the day of	, 20
NOTARY PUBLIC	
My Commission Expires:	

My name is Eric Stoelting. I am 46 years old and have lived continuously in Orange County for 19 years.

I am the father of four daughters, three of which graduated from either Pacific Coast High School or ACCESS, and one which is still currently attending CHEP.

My three older daughters are all currently pursuing higher education. One is currently in medical school, one is in nursing, and one is studying for a degree in nutrition.

I first give credit to their faith in God for their current success but I am also confident that their years in CHEP and PCHS/ACCESS helped to dramatically prepare them for their current studies.

With the current onset of Common Core State Standards however I am greatly concerned over the luture of these programs. Common Core greatly lowers the standards and quality of education that these programs will be able to offer and will adversely affect my daughter's education.

I am not allowing my daughter to use any of the Common Core curriculum or attend any Common Core based classes offered onsite. Due to the data mining and data sharing required by the consortia and the unnecessary stress related to the testing, I am not going to allow my daughter to participate in the Smarter Balanced state testing this spring.

Unless I can be COMPLETELY assured that no Common Core curriculum will be used and that no data mining will result from the online classes offered, I have to unfortunately say that I will not be putting my youngest daughter into PCHS next fall. I say that with regret because I feel that their program, especially in writing, greatly helped my older daughters in their academic pursuits.

Common Core is an untested, non-piloted, not rigorous, unfunded federal mandate that must be rejected at the local, county, and state level. The Orange County Board of Education must refuse this unconstitutional federal overreach and return to using the previous standards that actually worked. I have three daughters that show that they did.

State of California County of Grounge

This DAY OF COLLEGE BY

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Personally known to me or proved to me on the basis of Batisfactory evidence to be the person who appeared before me.

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CATHY CARTWRIGHT A COMM. # 1991313 OF COMM. # 1991313 OF COMMY OF CHARGE MY COMMY CHARGE EAP. SER. 16, 2018

11/17/14

Dear OCBE.

In September 2013, the private Christian school my son attended for k-6th grade brought in Common Core math and a revised edition of Language Arts books my Mary Ann Ricket. My child dramatically affected to the point that we left the school in December 2013. He was a high achieving student and loved math. He was an inchors math student. The new common core math was remedial at best. He wrote on his homework "child's slay" which brought my attention to the problem of this math book. He was bored and at times confused on how to answer a question. Math was no longer a clear result of solving problems. Each week he was asked to restate the problem in his own words, he was asked to explain "How do you know this is correct?" It was confusing and had no single answer for test questions. It was poorly implemented and no parent should accept this nonsense in math. I asked to see his test and was told it was no longer available. ?? Common core turned math into a nightmare! 70% was to be individual grade and 30% group grade. That is completely unacceptable that my son would only be able to produce a "C" score on his own and have to depend on other students to achieve his year end grade. To achieve an "A" score this math required him to work in groups and get a group grade. Again nonsense! Learning to work in groups is one thing but making it a percentage of a grade is ridiculous!

No more honors math. There was no book for honors! This new math was remedial. Teaching no new concepts other than a strange way to problem solve last years problems.

I personally visited with the math teacher to discuss how my son missed the three estimating questions which I could not understand. She could not explain to me why my son got the answer wrong to me. After drilling her, the only thing should could say there was more than one right answer and if he did not defend his answers it was wrong? It was clear from the very beginning, not only was the book full of strange writing exercises and many different ways to estimate problems, it was also apparent they had each kid in class explain their answer and the teacher would write them on the board. Various answers. All correct??

if a person did not verbally provide an answer for the board and defend the answer it would be wrong. It was very odd to explain to a math teacher that a bridge could not be built using these 3 different estimating techniques. We could not get a man on the moon using these 3 different estimating techniques. A correct answer is a correct answer.

The very real problem with common core math is that it is nothing but a way to change math up so much that all kids reset to a remedial place and no one exceeds!

My son is now in a new school that will never agree to common core! Many kids have transferred in and more are expected. He is in 7th grade and is excelling in Alegebra I. Had we stayed back with the common core, he would have been in course 2 which is not preparing our kids for STEM colleges.

My son will never attend a public school or any private school with Common Core and the indoctrination of the leftist ideology in the language arts books. Examples attached.

Sincerely,

Irene Yazbak

CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

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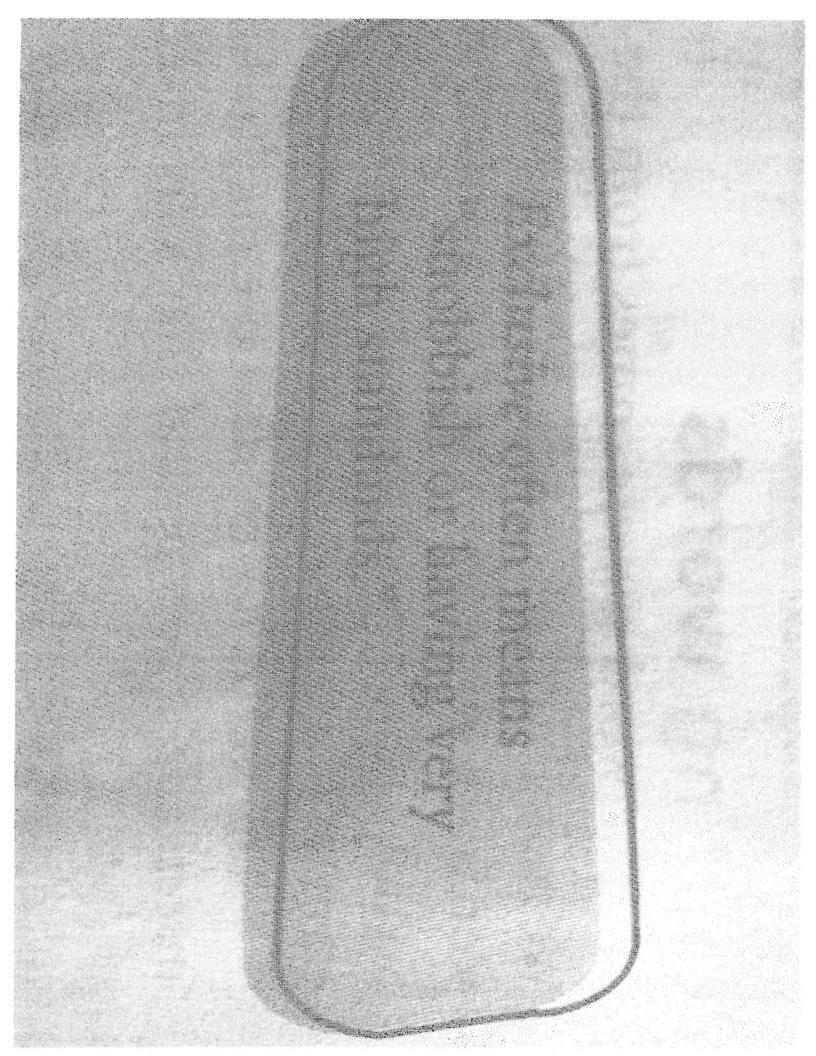
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Trustees, Orange County Board of Education

Subject: Common Core State Standards

Garrett Kaylor, 3519 E. Meadowridge Rd., Orange, CA 92867

I have lived in Orange County since birth, 1958. I received an excellent education attending public schools in Orange County. I graduated from Foothill High/TUSD and earned scholarships to USC, and then achieved a Masters at Cal St. Fullerton. I achieved a 99th percentile in math on the SAT test. Education in my era was outstanding. Without much (was there any?) standardized testing, or Federal (state) standards, our schools turned out well qualified students each year. Since then, scores have been slipping. Is more testing the answer? Are external standards, unrelated to our local needs going to turn things around? Probably not. I teach ir. High and High School math. Common Core math is certainly a different approach. Parents do not like it. Parents don't usually like math in the first place, give them something new to dislike and you're asking for trouble. The implementation is backwards. Implement new standards first, and then figure out if you like them, or how to teach them later. Makes no sense.

How is the testing going in other states, where the standards are further along? In the Washington Post, 8/17/14, "Common Core tests fail kids in New York again," they illuminate the difficulties for students with disabilities, "The test items were far too difficult for many students, thus providing teachers and parents with no real information on what they learned. For many students, the tests were little more than exercises in frustration. For example, on the third-grade ELA test, students with disabilities, as a group, could only answer about 31 percent of the questions correctly. For the bottom 25 percent of test takers with disabilities, the scores were the same as you might expect from chance.

On the eighth-grade math test, results were similar. The average student with a disability was awarded only 29 percent of the possible points. Students with disabilities at the 25th percentile got only 16 of the possible 72 points. Similar results were obtained by the state's English Language learners, and results were not much better for students in high-needs school. And "Proficiency rates continued to be horrendous for students who are English Language Learners—only 11 percent "passed" math, and 3 percent "passed" the English Language Arts tests. Results were equally dismal for special education students, whose "passing" rates were 9 percent in math and 5 percent in ELA."

"Finally, along with the release of the scores, the New York State Education Department provided the first official tallies of students who "opted out" from taking the exams. Between 55,000 and 65,000 students were opted out of the 2014 New York Common Core tests by their parents."

Testing is not education. Standards are not education. Teachers and parents determine the effectiveness of education. Education is learning, tailored for the individual student. Federal standards, technology and one-size-fits-all curriculum will not improve scores and certainly will not improve student, parent, or teacher morale.

I urge you to discontinue the implementation of the Common Core State Standards.

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Garrett Kaylo

California all-purpose acknowledgment

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To the Honorable Members of the Orange County Board of Education

My name is Lorrie Kaylor. I have been a resident in the city of Orange for twenty four years. I have lived in Orange County my whole life, and I attended and graduated from Villa Park High School.

I'm a teacher, with a B.A. in Psychology, from Cal State Fullerton, and a M.A. in Education from Claremont Graduate University, I hold a clear multiple subject teaching credential. I've taught for 17 years.

Studies show that Common Core standards are inferior standards. They seem to be frustrating and even harmful to kids, and do not allow for much teacher or parent input.

The number one greatest factor for student achievement is parental involvement, regardless of income or background of the family. In fact, a Harvard Family Research Project had the following findings:

December 2005

Parental involvement and Student Achievement: A Meta-Analysis William H. Jeynes

Taken together the results of this study are very instructive. First, the results are fairly substantial and support the belief that parental involvement has a significant impact across various populations. Second, not only does voluntary parental involvement have an influence, but parental programs do as well. Therefore, schools should adopt strategies to enhance parental engagement in their children's schooling. Third, teachers, principals, and school counselors should familiarize themselves with the facets of parental involvement that can help the most, so that they can guide parents on what steps they can take to become more involved. These include time-intensive parental involvement activities such as reading to one's children and communicating with them, and subtle involvement activities like parental style and expectations. Given the substantial influence of parental involvement, educators should consistently encourage parents to become more involved in their children's schooling.

Unfortunately, with Common Core, parents are unable to help their children, because the untested methods are confusing and unrecognizable to them. Also, the homework is beingdone more on computers, and textbooks are going away.

I've always tried to involve parents and gave them ways that they could help their children at home, which also helped me as a teacher. The Common Core standards are making this parental involvement almost impossible, and I believe that student achievement will suffer.

The California 1997 were tops in the nation. The math and science were even referred to as the "Gold Standards." The William B. Fordham Institute rated straight A's across the board for ELA, Math and Science. They rated Common Core with an A- for math, a B+ for ELA, and a C for science. Why would we exchange superior standards for sub-par?

Please reinstate the 1997 standards to help parents and teachers to continue to help students achieve. Thank you.

Joni & Kaylan

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

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Barry and Stacy Revnolds 52 Via Canclon San Clemente, CA 92673 714-267-5750

October 14, 2014

To Whom it May Concern:

Our daughter attended Vista dei Mar Elementary School (Capistrano Unified School District) as a 5th Grader during the 2013-2014 school year. Vista del Mar was one of the first schools in the area to provide their students with Google Chrome Books. In December 2013 the school principal notified parents that the 5th Graders would be receiving Chrome Books after the new year for use in the classroom. However, they did not inform parents that the students would be assigned a permanent user name and password for a personal Google account.

In February 2014 our daughter came home from school and advised us that she had to use our personal computer (with her newly assigned Google account) in order to complete her homework. We were never provided the user id/password information from the school (which was directly linked to our daughter's school identification number). Nor were we told that she would be required to complete her homework using the Google account.

Shortly after our daughter started using the Google account to turn in homework assignments we discovered that the school administration was using the time stamp element of the Google account to track when students were completing their work. This was brought to our attention one evening when our daughter refused to finish an assignment after an evening event, claiming that her teacher would "call her out in front of the class" for completing her homework after 9 p.m. She indicated that the teacher would review students homework on the Google site and ask kids why they were up late doing homework - and even told them they should be in bed sleeping.

In a 60-day period, the school provided our daughter with an internet account without our knowledge or permission and then proceeded to override our parental judgment. The implications of invasion of privacy and usurping parental authority have been far reaching. The idea that our daughter's personal education records are on the internet ready to be hacked is one that should leave all parents awake at night.

Sincerely,

Barry and Stacy Reynolds

1825 El Paso Lane Fullerton, CA 92833

November 14, 2014

Board Trustees
Orange County Department of Education
200 Kalmus Drive
Costa Mesa, CA 92626

RE: Common Core Concerns

Dear Board Trustees:

I am writing to let you know how Common Core has impacted students in my district.

First, the increased testing has hampered true learning. I have witnessed this first hand as my 10-year-old has had between two to five tests every week. There is no time for deep learning to occur because he constantly needs to get ready for the next test. Is the new goal of education to develop skilled test takers as opposed to knowledgeable students? If so, why? How many jobs depend on good test-taking skills?

Second, I have seen a decline in math education. We seem to be moving backwards. For example, last year at this time, my sixth grader had started working through a pre-algebra textbook. This year, the sixth grade class (same teacher) is working on fractions and has been for over 6 weeks. These students learned to add, subtract, multiply and divide fractions in fourth grade and are frustrated with learning the same thing...but this time with drawings. They would like to move on but are stuck with this regimented curriculum. What could possibly be the *educational* goal of limiting students?

And finally, due to the stress of the "not always connecting" iPads and the increased battery of tests, some students have turned to self-mutilating behaviors. These students have no history of this kind of behavior. Common Core disorder turns out to be a new national psychological problem. Who is ultimately responsible for this type of child abuse? The Common Core Public License specifically states that neither NGO nor CCSSO will be liable for any damages, a poor endorsement of their product. So, who is responsible? The Board? Superintendent? Principals?

I urge you, elected officials, to do everything in your power to get Common Core and all that goes with it (data collection, assessments, failed math strategies, etc) out of our schools. Thank you.

Sincerely,

Jean Uyemori