

Presenter: Dr. James Milgram

PRICKLY CITY

BY SCOTT STANTIS

$$N = N_0 \left(1 + (L/L_0)^b \right)$$



STANTIS PRICKLYCITY@GMAIL.COM ©8/24/14 SCOTT STANTIS/DIST. BY UNIVERSAL UCLICK FOR UPS

The problems with Common Core

- The **only quality control** for the Common Core Standards rested in the hands of the members of the **VALIDATION COMMITTEE**:
- Let us see how this played out.

The Common Core Validation Committee Charge

- (1) Validate the sufficiency of the evidence supporting each college- and career-readiness standard.
 - Each member is asked to determine whether each standard has sufficient evidence to warrant its inclusion.

The Common Core Validation Committee Charge

- Add any standard that is not now included in the common core state standards that they feel should be included and provide the following evidence to support its inclusion:
- evidence that the standard is essential to college and career success;
- and evidence that the standard is internationally comparable.

Evidently, Common Core was to be as good as the Best International expectations.

- (1) It was for College and Career readiness.
- (2) The standards were to match up with what is done internationally.

CLEARLY, the duties of the Validation Committee were to entirely oversee the development of the Common Core Standards.

NOT TRUE!!

We will see that **this was never the intent** of the real (but hidden) leaders of the project!

We will see that **this was never the intent** of the real (but hidden) leaders of the **project!** In fact there was to be no quality control at all.

The First Draft in Math Stopped with Algebra I

- But the intent and promise of the Common Core project was to prepare students for *both the work force and for college*.
 - Just Algebra I doesn't begin to do this.
- Indeed, to my knowledge, no public four year college or university in the US would admit a student with just this preparation

So I met with the main writers demanding much more math

- But, though they completely understood my concerns, they couldn't do anything
- It appeared that I had to convince ACHIEVE one needs more than Algebra I to be “college and career ready,” not the writers – the first indication that things were not as they had seemed.

So I met with ACHIEVE demanding much more math

- I showed them data, including the report of the National Math Panel, and what is done in the high achieving countries.
- Finally, **they allowed** the writers to include some geometry and the material for a weak Algebra II course, but that was it!

And then the Powers Behind the Throne Reacted

- Almost immediately afterward the members of the Validation Committee received a note indicating that
 - We no longer had any authority to make or even request changes in the standards.
- Instead we were asked to sign a letter asserting that the standards were excellent.

My Comments: Second Draft Core Standards

In K-8 there are two main issues that I see. The first is that the development of basic arithmetic is not completed until sometime in fifth grade.

My Comments: Second Draft Core Standards

In K-8 there are two main issues that I see. The first is that the development of basic arithmetic is not completed until sometime in fifth grade. By that time, our students would be at least 2 years behind the students in the high achieving countries.

My Comments: Second Draft Core Standards

In K-8 there are two main issues that I see. The first is that the development of basic arithmetic is not completed until sometime in fifth grade. By that time, our students would be at least 2 years behind the students in the high achieving countries. Moreover, all available evidence seems to indicate that students need rock solid backgrounds in whole number arithmetic

My Comments: Second Draft Core Standards

In K-8 there are two main issues that I see. The first is that the development of basic arithmetic is not completed until sometime in fifth grade. By that time, our students would be at least 2 years behind the students in the high achieving countries. Moreover, all available evidence seems to indicate that students need rock solid backgrounds in whole number arithmetic - both solid understanding of place value and why standard algorithms work, as well as considerable mechanical skill –

My Comments: Second Draft Core Standards

In K-8 there are two main issues that I see. The first is that the development of basic arithmetic is not completed until sometime in fifth grade. By that time, our students would be at least 2 years behind the students in the high achieving countries. Moreover, all available evidence seems to indicate that students need rock solid backgrounds in whole number arithmetic - both solid understanding of place value and why standard algorithms work, as well as considerable mechanical skill – in order to be able to handle fractions, and ultimately, algebra. Core Standards simply do not aim toward this level of mastery.

My Comments: Second Draft Core Standards

But this Draft was actually stronger than the final version which had even less mathematics,

My Comments: Second Draft Core Standards

But this Draft was actually stronger than the final version which had even less mathematics, but all the problems indicated in my review above.

My Comments: Second Draft Core Standards

But this Draft was actually stronger than the final version which had even less mathematics, **but all the problems indicated in my review above.** So here's what we were looking at

My Comments: Second Draft Core Standards

But this Draft was actually stronger than the final version which had even less mathematics, but all the problems indicated in my review above. So here's what we were looking at



Since the standards were far from being either “excellent” or even benchmarked to the level of typical international expectations, I refused to sign the letter.

What was the Attitude of the Writers?

- It seems that they actually felt, as I did, that the standards were woefully weak.
- **Bill McCallum, Jan. 2010:**
- “It's not what we aspire to for our children. It's not what we as a nation want to set as a final deliverable. I completely agree with that, and we should go beyond that.”

The second lead writer was Jason Zimba:

- Jason Zimba, March, 23, 2010:
- The standards are “for the colleges most kids go to, but not for the colleges most parents aspire to.”
- They are “not for STEM” and “not for selective colleges.”

- He pointed out that What Common Core means by “college ready is
- “a student who passed Algebra II.”

What does data show?

- Here is the determination of the odds of obtaining a 4 year college degree vs. the highest mathematics course completed in high school.

Table 5. Bachelor's degree attainment rate by highest level of mathematics reached in high school by 1982 and 1992 12th-graders

<u>Level of math</u>	Class of 1982		Class of 1992	
	<u>Percentage reaching this level of math</u>	<u>Earned bachelor's</u>	<u>Percentage reaching this level of math</u>	<u>Earned bachelor's</u>
Calculus	5.2	82.1	9.7	83.3
Precalculus	4.8	75.9	10.8	74.6
Trigonometry	9.3	64.7	12.1	60.0
Algebra 2	24.6	46.4	30.0	39.3
Geometry	16.3	31.0	14.2	16.7
Algebra 1	21.8	13.4	16.5	7.0
Pre-algebra	18.0	5.4	6.7	3.9

SOURCES: National Center for Education Statistics: High School & Beyond/Sophomore Cohort (NCES 2000-194) and NELS:88/2000 Postsecondary Transcript Files (NCES 2003-402 and Supplement).

To Illustrate how weak this is

- If students with only the Common Core preparation wish to major in a STEM area, their odds of obtaining a degree in STEM are 2%. **This is NOT A MISPRINT – 2%!!**

-

-

To Illustrate how weak this is

National Center for Education Statistics

Table 7.
HIGHEST MATH COURSE IN FIRST YEAR: Percentage distribution of the highest level of mathematics in which 2003–04 beginning bachelor's and associate's degree students earned credits, by STEM entrance and persistence through 2009

STEM entrance and persistence through 2009	Beginning bachelor's degree students				Beginning associate's degree students			
	No math	Precollege-level math only ¹	Introductory college-level math ²	Calculus and advanced math	No math	Precollege-level math only ¹	Introductory college-level math ²	Calculus and advanced math
Total	40.1	8.7	30.1	21.2	49.2	24.5	22.9	3.4
Students who entered STEM fields in first year								
STEM leavers ³	34.3	9.3	24.0	32.4	44.2	21.2	28.4	6.2
Students who left PSE without a degree/certificate	39.9	12.1	20.2	27.8	50.5	16.2	28.0	5.3 !
Students who switched major to a non-STEM field	29.7	7.0	27.1	36.2	36.8	27.1	28.9	7.2 !
STEM persisters/completers	14.3	3.1 !	19.3	63.3	25.1	13.9	33.4	27.6
Students who completed a STEM degree/certificate	13.7	2.1 !	15.0	69.2	16.8 !	12.2 !	44.0	27.1
Students who entered STEM fields after first year								
STEM leavers ³	36.4	10.7	30.1	22.8	43.5	22.5	30.6	3.3 !
Students who left PSE without a degree/certificate	34.6	11.4 !	36.1	18.0	48.9	27.9	19.7	‡
Students who switched major to a non-STEM field	37.6	10.3 !	26.4	25.7	35.8	14.9 !	46.3	‡
STEM persisters/completers	27.1	5.4	20.0	47.6	37.5	17.8	27.4	17.3
Students who completed a STEM degree/certificate	24.2	4.3 !	17.4	54.1	18.5 !	12.6 !	37.0	31.9 !

See notes at end of table.

To Illustrate how weak this is

- If students with only the Common Core preparation wish to major in a STEM area, their odds of obtaining a degree in STEM are 2%. **This is NOT A MISPRINT – 2%!!**
- I would suggest that this is not what the people of Georgia want for their sons and daughters.

From: Ron Rosier [mailto:rosier@georgetown.edu]

Sent: Friday, June 28, 2013 4:25 PM

To: Herb Clemens; Donald Saari; Charles Steinhorn; Marilyn Strutchen; MAA Pres; AMATYC Pres; AMS Pres; AMS President; TODOS Pres; ASA Pres; ASL Pres; Kasbaum, Diana L. DPI; AWM Pres; BBA Pres; SIAM Pres; IMS President; AMTE Pres; MAA Pres; NAM Pres; NCTM Pres; NCSM President; AMS ExDir; AMS Sec; AMS Wash Dir; AMTE ExDir; ASA ExDir; ASL ExDir; AWM ExDir; BBA ExDir; IMS ExDir; SOA Rep; MAA ExDir; NAM ExSec; NCSM ExDir; NCTM ExDir; SIAM ExDir; AMATYC ExDir; Peter R. Turner
Cc: William McCallum; Jason Zimba; Phil Daro; Ken Krehbiel; breen; Annette Emerson ldavy@hunt-institute.org; ldavy@hunt-institute.org; hy; Ellen Whitesides; Lisa Kolbe

Subject: Request for Agreement on Support Statement for CCSS

Dear All,

At the last CBMS meeting, there was discussion of trying to get the CBMS society presidents to agree on a joint statement from CBMS in support of the Common Core State Standards (CCSS). There was also discussion about getting a group of knowledgeable CCSS supporters to develop a set of common talking points. (FYI, I have appended below the summary of the discussion from the minutes of the meeting.)

I recently contacted Bill McCallum who graciously volunteered, in consultation with the other writers of the CCSS and other key persons, to draft both a Support Statement and a set of Talking Points. I have attached copies of both.

For the Support Statement, I would request and need a brief affirmative reply from each society president before I would add your name to the statement or make the statement public. Note that the statement does not express the formal support from the member societies (something which is rarely if ever given by many of our member societies for any kind of statement) but rather is an expression of support from the presidents, something which is much more doable and likely just as effective in promoting the statement.

The talking points are for use by you, your members, your local affiliates, etc., and do not require any statement of support.

I want to express my sincere thanks to Hy Bass, Ken Krehbiel of NCTM, Mike Breen and Annette Emerson of AMS, and Lucille Davy, who have, along with the CCSS writers Bill McCallum, Jason Zimba, and Phil Daro, been participating in the email discussions which resulted in the attached documents. I know we can count on the expertise of these folks to make good use of whatever formal statement of support CBMS can offer toward the

effective implementation of the Common Core State Standards in Mathematics.

I look forward to hearing from you.

Ron

> From the minutes of the last CBMS meeting:

Public Education about the Common Core State Standards (CCSS). There is much misinformation being promulgated about the CCSS. Also there is growing political pressure (e.g. the Republican National Committees rejection of the CCSS) on governors and state legislators to withdraw from the CCSS. Gojak said we need to think strategically as a community to put together a constructive effort to promote CCSS. She said that Lucille Davy chairs a partner group involving businesses and CEOs that are working to promote CCSS and counter the misinformation. We need to find ways to work with such groups. There was then discussion of trying to build grass roots support, getting members to write legislators and governors about the good that the CCSS will do. Devaney suggested trying to get the math organizations to join with the math ed organizations to put together common talking points.

The most effective argument is not one that is defensive, but rather one that discusses the positives. It was finally agreed that we should try to put together a CBMS response, perhaps involving such folks as Mike Breen and Annette Emerson from AMS, Ken Krehbiel from NCTM, Lucille Davy, Hy Bass, the three CCSS Math authors and others. Clemens said this could be a really major project. Rosier was asked to try to coordinate this for CBMS in contact with some of the society presidents. Saari said this may be doable if we can get a good set of talking points and then let the various societies take them and run with them. There are two issues here, the local and the national.

Besides a set of talking points for the local level, Gojak also made a plea for a joint statement signed by all the CBMS societies. Rosier reiterated that he has no expertise in this area but that he will be willing to attempt to coordinate getting those with the expertise to work together on these two issues for CBMS.

Ronald C. Rosier
Conference Board of the Mathematical Sciences
1529 Eighteenth St NW
Washington DC 20036
rosier@georgetown.edu
410-730-1426 (Home - try this first)
202-293-1170 (CBMS)
www.cbmsweb.org [www.cbmsweb.org]
