

Emails from the writers highlighting some of the changes made based on the teacher's comments and Recommendation

Email from David Coleman one of the writers of the English language arts standards

Dear Dalia and Darion

I wanted to write for a number of reasons. First, Sue and I wanted to thank you again for your very thoughtful, specific, and useful feedback at our Sunday session. Your commitment to the students you teach is everywhere apparent.

As you saw in the previous revision, we take your comments very seriously and have continued to do so. The public draft will be released this week, and we are delighted to tell you that, despite the very short amount of time, we have been able to include much of what we discussed and you felt was most urgent. I just wanted to review a few of those changes here.

1. An important section was added to the introduction based on your feedback, on what the Standards do not include:
 - 1) The *Standards* define what all students are expected to know and be able to do but not *how* teachers should teach. The *Standards* must be complemented by a well-developed, content-rich curriculum consistent with the expectations laid out in this document.
 - 2) While the *Standards* do attempt to focus on what is most essential, they do not describe all that *can* or *should* be taught. A great deal is left to the discretion of teachers and curriculum developers. The aim of the *Standards* is to articulate the fundamentals, not to set out an exhaustive list nor a set of restrictions that limits what can be taught beyond what is specified herein.
 - 3) The *Standards* set grade-level standards but do not define the intervention methods or materials necessary to support students who are well below or well above grade-level expectations. No set of grade-level standards can fully reflect the great variety in achievement levels of students in any given classroom. However, the *Standards* do provide clear signposts along the way to the goal of college and career readiness for all students.
2. We have refined the progressions in every area so that they are far clearer and incorporated much of your feedback in doing so.
3. Fluency and monitoring comprehension has been added to College and Career Standard 10 in reading, so now the notion of fluency extends to later grades, as you requested.
4. Mary Ann and team, you will be delighted to know that we have extended narrative writing into 9-12, based on the NAEP framework.
5. There are several other detailed changes, so thanks again for your contributions.

I am sure Dalia will get you the new draft as soon as it is possible.

All best,

David Coleman
Student Achievement Partners, LLC

Email from Jason Zimba, Phil Daro and William McCallum the three writers of the Mathematics standards

Dalia and Alice

We wanted to circle back to you on the sessions with teachers you organized in Washington, D.C. The upcoming draft of the math standards has many changes, changes that we hope amount to significant improvements, coming directly out of our conversations with the teachers.

Some selected examples:

- In elementary grades,
 - The teachers urged us to integrate number competencies better. We agreed, and we made a number of changes aimed at improving the standards.
 - In kindergarten especially, we hope the standards now do a better job connecting number and quantity.
 - The teachers suggested that we merge the number-related strands, to emphasize unity and promote connections. Changing the organization of the standards was not a small decision at such an advanced stage of the work. But the team's critique weighed on us, and we had to question the design we'd chosen. The requirement from states to put the standards into a format resembling ELA presented an opportunity to do something. Together with feedback from other directions, this led to a cascade of changes and a shift in the top level of the document. In the elementary grades, it is now:

Number: Counting and Cardinality

Number: Operations and the Problems They Solve

Number: Base Ten Computation

Number: Fractions*

Measurement and Data**

Geometry***

**The teachers said, "Wouldn't it be easier to talk about fractions as numbers if they're under Number?"*

***The teachers said the word "Quantity" in this spot was working against us in connecting number to quantity*

****The teachers said, "Just call it Geometry for crying out loud."*

- The pace of learning in early grades has been adjusted in various ways to respond to the teachers' suggestions. For example, the teachers suggested the number limits in kindergarten be changed to 20, and that has been done. They argued that decomposing a number in two ways is too sophisticated for kindergarten, and that has been fixed.
- Gaps were filled, such as rote counting by decades, skip counting, and carrying place value understanding up through the grades (Numbers up to 100 in grade 1; numbers up to 1000 in grade 2; numbers up to 10,000 in grade 3; numbers up to 100,000 in grade 4).
- The teachers provided an extremely helpful characterization of regrouping that now replaces all the previous attempts at describing this: "Sometimes it is necessary to decompose from a higher value unit or recompose to a higher value unit." A related

- The teachers asked us to clarify the implications of the order in which the standards are presented. There is now a note in the standards that attempts to explain this (see “How to Read the Grade-Level Standards”).
- The teachers identified problems of alignment between the grade-level introductions and the grade-level standards, all of which we have tried to fix in this draft.
- In high school,
 - In a number of places, the teachers helped us craft the standards to better explain the level of sophistication being expected. Often we realized that we completely agreed with what the teachers were saying - yet the wording of the standards had failed to convey the desired meaning. Together we worked on reformulations that better communicated the intent, adding phrases such as “in simple cases” or “in common modeling situations,” or “using technology.”
 - The teachers helped us to improve the standards mathematically in a number of places – for example,
 - The teachers exposed a mathematical fallacy about irrational numbers that all the mathematicians reviewing the document had overlooked.
 - adding a solution method to quadratic equations
 - fixing a confusion between expressions and functions
 - stating clearly that that sums of rational numbers are rational
 - clarifying the characterization of triangle congruence criteria
 - clarifying the difference between the laws of arithmetic and the properties of operations.
 - clarifying the presentation of sequences as functions
 - The teachers identified some very poorly-worded standards that we simply deleted.
 - The narrative introductions in high school needed a lot of help with language, and the teachers found many fixes to this.
 - The teachers called for better connections between concepts and skills. Again we agreed, and again the requirement from states to put the standards into a format resembling ELA presented an opportunity. Related concepts and skills are now grouped under the cluster headings.
 - The teachers urged us to expand the glossary – we have done so.

There are dozens of other things we could recount –changes large and small, but even the small changes are important to make the language clearer to teachers and make the standards more usable.

Please thank the teachers on all three teams for the depth and expertise that they brought to this task. We feel the draft is much stronger thanks to the extraordinary effort AFT and its teachers have invested in collaborating with us.

All the best,

Jason Zimba, Phil Daro and William McCallum