



WHITE PAPER

# The Common Core State Standards: How well are existing items aligned?

How Measured Progress is approaching the Common Core differently

---



# The Common Core State Standards: How well are existing items aligned?

How Measured Progress is approaching the Common Core differently

---

Educators anxious to give their students a head start with the Common Core State Standards may be intrigued by classroom assessment products on the market that are purported to be tightly aligned to the Common Core State Standards in English language arts and mathematics. However, there's more to alignment than meets the eye. A lot of effort has been devoted to re-categorizing items in existing banks according to the new standards. While this is a worthwhile effort, it leads to one-way alignment that does not fill the gaps in coverage associated with new standards not addressed at all by existing items. Furthermore, categorical alignment of existing items does not necessarily capture the spirit of the Common Core, often in terms of Depth of Knowledge. And finally, tests created by randomly drawing individual items from a bank may not cover standards well or address aspects of the Common Core that require mini-sets of items, pairings of passages, etc.

## Common Core Correlation Shows Lack of Alignment

In fact, Rick Hess's *Education Week* piece "How Big a Change Are the Common Core Standards?" includes information from University of Pennsylvania Education School Dean Andy Porter, who published Common Core correlation data in the April 2011 issue of the *Educational Researcher*. His findings: "The Common Core Standards represent a considerable change from what states currently call for in their standards and in what they assess." (Hess, 2011).

Porter's report reveals that the alignment between the Common Core and existing state standards per grade was .25 in mathematics (1.0 is perfect alignment and 0.0 is no alignment) and .30 in reading.

Even when researchers clustered grades (3–6 and 3–8), alignment only improved to .35 in mathematics and .38 in reading. State assessments fared worse: Porter found that the average alignment to the Common Core mathematics standards came out to .19, dipping to .17 for reading (Hess, 2011). Remember, the tests weren't designed to measure those standards, but they offer evidence that you can't just "re-align" a test or its items: there is more work to be done.

“...categorical alignment of existing items does not necessarily capture the spirit of the Common Core, often in terms of Depth of Knowledge.”

Measured Progress's team of curriculum and assessment experts has painstakingly studied the Common Core Standards. When the standards were released, our team paid particular attention to how we would code existing released items to the Common Core. In many cases, we found that item pools were often overly concentrated on one standard. In some cases, we found huge gaps—that there were no existing items that fit under specific Common Core Standards at all. Our approach to creating assessment items has always been to first look at a standard or group of standards and then craft items (or assessments) that best measure that standard. The Common Core is no different. We recognize the need to write items that specifically address those standards.

## English Language Arts

There are several key differences between state English Language Arts (ELA) standards and the Common Core Standards. First, the Common Core calls for a truly integrated model that brings together reading, writing, speaking, and listening. Until now, most state programs have just assessed reading and writing—never speaking and listening. Second, the writing parts of the test traditionally have been separate from the reading parts. This is not the case with the Common Core. For example, Common Core writing standard 9 requires students to analyze literary and informational texts and compose a written response showing evidence from these sources. This is a key way in which the Common Core brings together reading and writing.

Additionally, reading is driven by a careful selection of passages at each grade level. The Common Core discusses the use of qualitative measures, quantitative measures, and matching readers to both the text and tasks. For years, Measured Progress has used this approach to help select passages at the right grade level; however, quantitative measures are not precise. In their paper, entitled *Publishers' Criteria for the Common Core State Standards in English Language Arts and Literacy, Grades 3-12* (Coleman and Pimentel, 2011), authors David Coleman and Susan Pimentel acknowledge how challenging it is to select passages at the right level of difficulty. They will be providing more specific guidelines for publishers and curriculum developers soon (Gewertz, 2011). Measured Progress test development experts adhere to these guidelines as they develop reading items that accurately assess the Common Core.

The Common Core places great emphasis on the importance of students being able to compare content across reading passages. Some Common Core Standards cannot be measured with existing item banks, which lack the types of passages necessary to ask students questions that align with the standards. For example, consider an informational text at grade 6, in which standard 9 asks students to “compare and contrast one author’s presentation of events with that of another (e.g., a

memoir written by and a biography on the same person).” An item bank must include these two types of texts in order to measure this standard accurately. More importantly, a test containing items drawn from the item bank must include the paired passages and questions uniquely developed for that pair.



The types of content students are asked to read and write about in the Common Core also differ from what is currently included in many state tests. As students advance, there’s a growing emphasis on informational text. This is somewhat true even at grades K-5, where students are encouraged to read social studies and science informational texts. Starting at grade 6 and continuing through grade 12, there are 10 specific standards each for science and social studies at each grade level. Students are encouraged to find justifications for answers, articulate different points of view, read actual historical documents, and analyze those texts and understand what points of view are being expressed. In the past, students were encouraged to read in these content areas, but never to this level of detail.

The Common Core also places a greater emphasis on using media—a component that to date has not been included in state tests. For example, at grade 4, standard 7 requires students to “make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.” The inclusion of media aims to engage students in a meaningful way in a task, as well as help them integrate media with research skills. It also provides students with different sources and unique opportunities to analyze materials in ways they have never been able to in tests prior to the Common Core.

If there’s already a pre-existing item bank that has been coded to the Common Core Standards, educators will find that there are lots of gaps. The passages are driving the kinds of items that will measure the Common Core. Within many existing banks coded to the Common Core there will be a lot of standards that aren’t coded, or if they are coded to many standards, won’t be accurately coded. There are a couple of very general standards that might be used very frequently. Most importantly, most testing programs using existing banks aren’t getting at the intent behind the Common Core, which is really to reflect a progression of difficulty, to help move students along, so that by the time they are finished with high school, they truly are ready for college or career.

## Mathematics

As anyone who has taken more than a cursory look at the mathematics standards can tell you, a curriculum based on Common Core State Standards in mathematics will look very different from one based on traditional state standards.

Most sets of state standards consist of content and process standards. Content standards define what students should be able to do by the end of each grade level, while process standards indicate the broader skills students should continually develop over time. Unfortunately, the content standards have often been treated as checklists of isolated topics, while the process standards are essentially ignored. Phil Daro, a member of the Common Core

Content Standards writing team, wrote that when standards are treated as checklists, “students are taught ‘standards’ instead of mathematics.” (Daro et al. 2011).

The mathematics standards identify what students should know and be able to do. But they do a lot more than that. Many standards begin with the word *understand*. Understanding—conceptual knowledge—is what ties mathematics together. The standards are grounded in a progression of learning and coherence of concepts. Mathematics is a discipline that builds on itself. For example, if students have a firm knowledge of the concept of addition of whole numbers, they can use that knowledge to develop an understanding of the meaning of addition of fractions. When the meaning of an operation is *understood*, it is much easier for students to retain how to perform it. In the mathematics standards, conceptual and procedural knowledge are joined together. Traditional standards focus on the “doing.” This becomes a problem when the “doing” pertains to the demonstration of low-level skills. Therefore, items written to traditional standards will focus primarily on “doing.” Items written specifically for the Common Core State Standards must accomplish more.

One part of the Common Core, the “Standards for Mathematical Practices,” describes the types of expertise that students should be developing throughout their mathematics education. An example of a practice that can be measured by traditional items is *Attend to precision*. However, that measurement takes us only partway there. The description of this practice also includes precision in mathematical communications, which has seldom been measured with traditional items. *Make sense of problems and persevere in solving them* is another practice. This practice is critical to preparing students to use mathematics in college and the workplace. Students must encounter items involving rather complex problem situations in order to develop this expertise. Scenarios with enough richness and depth to measure this practice are seldom, if ever, contained in item banks developed to measure state standards.

Students take tests, not item banks. In evaluating an item bank in mathematics, one should ask not only whether the items match the Common Core State Standards, but how well they match them, especially in terms of conceptual depth. Are the situations in word problems realistic; will they convey to the students that mathematics is actually used in the real world? In the “Introduction to the Common Core State Standards,” the authors write, “Mathematical understanding and procedural skill are equally important, and both are assessable using mathematical tasks of sufficient richness.” Are most items in the bank adequate to meet that goal?

In most cases, just taking individual items in a test and saying each item matches the content of a standard in the Common Core does not necessarily make a test that measures the Common Core. The spirit of the Common Core State Standards is different from that of traditional state standards. A test that uses existing items is unlikely to truly measure either the learning progressions underlying the Common Core content standards or the *Mathematical Practices* in an adequate manner.

## Looking Forward

Much work must be done to bridge the gap. Measured Progress is not only building new items to match the Common Core State Standards; we are also looking at how the tests will be built. Our goal is to create rich items, also to build an integrated suite of assessment solutions for formative, interim, and summative use in measuring the Common Core State Standards. Such assessments will give classroom teachers the flexibility and customization capacity to improve student learning by informing instruction in real time. We are building a solution that is rigorous and responsive—rigorous enough to meet the increased demands of assessing the Common Core State Standards and responsive enough to meet the needs of the classroom teacher.

In our Measured Progress COMMON CORE™ **Assessment Program**, we currently offer educators more than 4,000 multiple-choice and constructed-response items in both English language arts and math, as well as 90 short pre-configured **Testlets**—**all** built to the Common Core. Soon we will be able

to offer a range of assessments and new item types that can be used for a variety of Common Core assessment purposes.

While teachers now have the opportunity to choose items from the COMMON CORE **Item Bank**, they also have the option of administering pre-configured **Testlets** that align to key clusters in reading and mathematics. What is even more significant is that we are adding the flexibility to allow teachers to customize the pre-configured tests we build, so that if they only want multiple-choice items because of time constraints, they can omit the other item types. Or, if their instruction didn’t include one of the content clusters, items touching on that content may be omitted as well. All the while, we provide professional development on how to construct tests to provide valid information. We’re working to create a solution that will give teachers a base to work from that allows them to approach the Common Core flexibly, but coherently.

Constructing and providing a useful way for educators to use a variety of items—constructed-response, performance tasks, and other formats that allow teachers to evaluate student work—will better help them detect student misconceptions. While multiple-choice items can yield a great amount of information, they do not provide the complete diagnostic picture teachers need to boost student achievement. Teachers assess their students every day and need the right tools to guide instructional practices, particularly during a tremendous shift in our educational standards. We believe that a solution created expressly for that purpose does the best job of preparing students for the Common Core.

Simply reconfiguring our existing tests without regard for the goals included in the Common Core seemed disingenuous and contrary to the high level of quality that our users expect and we demand of ourselves. Measured Progress has chosen a different strategy for fully assessing the Common Core to best guide educators to help their students become college- and career-ready. This is because the standards have articulated higher expectations and end results. We’re already hard at work to meet those challenges.

## Bibliography

Coleman, D. and Pimentel, S. (2011, August 25). *Publishers' Criteria for the Common Core State Standards in English Language Arts and Literacy, Grades 3–12*. Retrieved September 7, 2011, from [http://www.corestandards.org/assets/Publishers\\_Criteria\\_for\\_3-12.pdf](http://www.corestandards.org/assets/Publishers_Criteria_for_3-12.pdf)

Daro, P., et al. (2011). *Learning Trajectories in Mathematics: A Foundation for Standards, Curriculum, Assessment, and Instruction*. The Consortium for Policy Research in Education.

Gewertz, C. (2011, July 22). Common-Core Writers Craft Curriculum Criteria. Retrieved August 30, 2011, from [www.edweek.org](http://www.edweek.org): <http://www.edweek.org/ew/articles/2011/07/21/37curriculum.h3o.html>

Hess, F. (2011, June 1). How Big a Change are the Common Core Standards? Retrieved August 30, 2011, from [www.edweek.org](http://www.edweek.org): [http://blogs.edweek.org/edweek/trick\\_hess\\_straight\\_up/2011/06/how\\_big\\_a\\_change\\_are\\_the\\_common\\_core\\_standards.html](http://blogs.edweek.org/edweek/trick_hess_straight_up/2011/06/how_big_a_change_are_the_common_core_standards.html)

Porter, A. (2011). Common Core Standards: The New U.S. Intended Curriculum. *Educational Researcher*, 40 (3), 103–116.