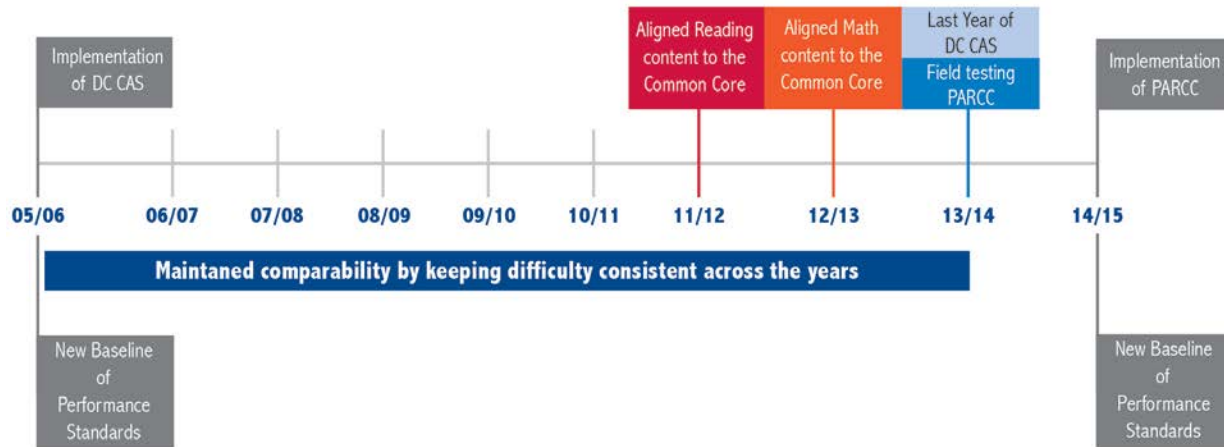




DC CAS Briefing

DC CAS Comparability Summary



- At the inception of the DC Comprehensive Assessment System (DC CAS) exam, OSSE made a commitment to maintaining comparability across DC CAS test years.
- OSSE’s decision to maintain comparability is consistent with national standards and decisions made by other states, and allowed for a single transition to new standards for the Partnership for Assessment of Readiness for College and Careers (PARCC) assessment in School Year 2014-15.
- CTB/McGraw-Hill, DC’s testing vendor, ensured that the test remained valid while ensuring comparability and consistent levels of difficulty across the years.



DC CAS Briefing

Overview: DC CAS Now and Beyond

The annual District of Columbia Comprehensive Assessment System (DC CAS), administered by the Office of the State Superintendent of Education (OSSE), measures student knowledge in Reading in grades 3 to 10; Composition in grades 4, 7, and 10; Mathematics in grades 3 to 8 and 10; Science in grades 5, 8, and high school; and Health in grades 5, 8, and high school. DC CAS is the District's standardized test used to meet federal requirements under the Elementary and Secondary Education Act, otherwise known as the No Child Left Behind Act. The District first began administering DC CAS in 2006.

Assessments like DC CAS are high-stakes measurements used across the country to gauge student achievement and classroom effectiveness using a prescribed set of educational standards. In the last few years, states across the country have banded together to benefit from educator best practices and sustained academic programming to ensure that schools adhere to more rigorous and aligned educational standards to better position our youth in the global economy. These new standards are the Common Core State Standards (CCSS).

Starting in 2010, the District began adopting the Common Core standards. As part of the District's compliance with federal requirements, the school district committed to transition from the DC CAS assessment to a better aligned Common Core assessment, commonly referred to as PARCC (the Partnership for Assessment of Readiness for College and Careers), when it becomes available in SY2014-15. PARCC is a 20-state consortium of state education agencies working together to develop a common assessment.

Until the transition to the PARCC assessment, OSSE has committed to maintaining comparability of DC CAS results across testing cycles. This allows families and schools to assess the success of their students and teachers, as well as allowing the public to determine the success of the District's broader educational reform efforts.

The following explains OSSE's process of developing the DC CAS assessment, in conjunction with their assessment vendor, CTB-McGraw Hill.

Assessment Process

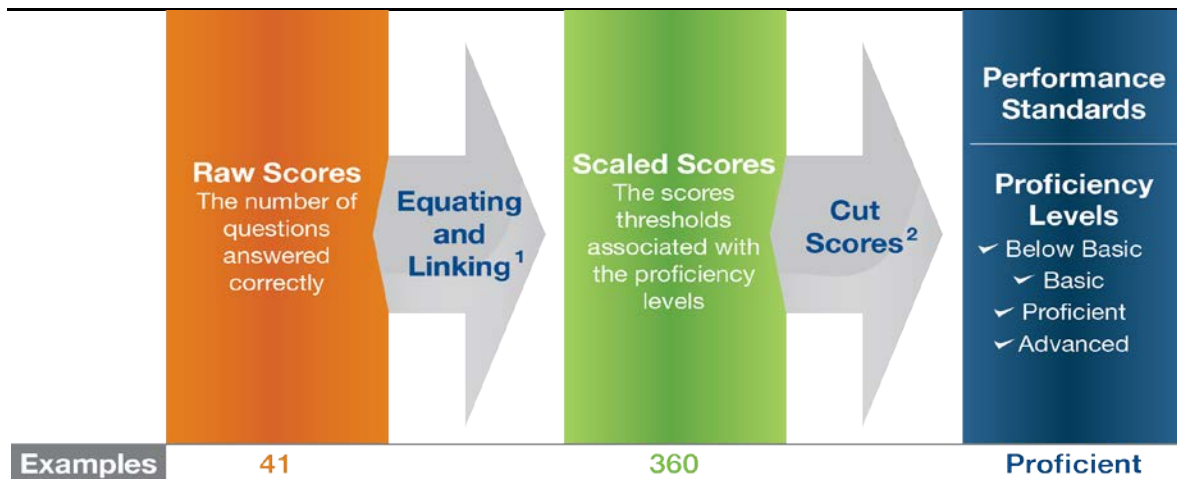
OSSE and CTB-McGraw Hill go through a year-long process of quality review in collaboration with national assessment experts to ensure adherence to performance standards and comparability of the test over time. (See graphic below)

- OSSE creates quality assessment items by conducting content, bias, and quality reviews; field testing of items before they are finalized; and a statistical analysis of student responses by national experts after the assessment is given.
- Each year, the test vendor goes through a process of "equating" or "linking" to ensure that the conversion from a raw score to a scaled score accurately takes into account the difficulty of the individual questions. The goal is for scaled scores to take the difficulty of that year's test into account to meaningfully compare scaled scores from one year to the next.



DC CAS Briefing

- Additionally, each year OSSE can opt to revise performance standards or maintain the same cut scores as in previous years, thus allowing comparability of proficiency levels. Cut scores refer to the upper and lower bounds for each proficiency level (i.e., below basic, basic, proficient, advanced). When reviewing or resetting performance standards, the test vendor goes through a multi-step process of analysis and facilitation of discussions with local educators to produce recommendations for OSSE to consider.



1. Equating and Linking are the statistical linking of scores on one or more assessments for purpose of comparability. The process for equating and linking are the same; however, equating occurs when the test constructs are identical year over year; linking occurs when test constructs are similar but not identical year over year. The standard error associated with linking is low when the assessment contains a large number of anchor items.
2. Cut scores are the score thresholds associated with proficiency levels.

Equating and Linking in the Context of the Common Core Standards

The test vendor adapts the DC CAS assessment every year by substituting and introducing new items. As the District has integrated the Common Core standards into the DC CAS, the content and rigor of DC CAS has changed more significantly than in previous years.

- Every year, DC CAS assessment items undergo content shifts, in order to maintain test integrity and minimize teachers “teaching to the test”.
- The transition to Common Core standards for Reading in School Year 2011-12 and for Math School Year 2012-13 required more substantial content shifts than previous years.
- As the content difficulty of DC CAS questions continues to gradually increase as the test more closely adheres to Common Core Standards, the test vendor’s equating/linking process in some grade levels and content areas requires fewer questions to be answered correctly to achieve the same scale score as in the previous year. This equating/linking process is conducted by the test vendors without input from OSSE and ensures comparability year over year. Without this step, test results cannot be compared meaningfully from one year to the next.



DC CAS Briefing

Determining Performance Standards

As noted above, annually OSSE may consider adjustments to the DC CAS performance standards. With the pending introduction of PARCC in SY2014-15, OSSE has committed to maintaining comparability of the performance standards until that time. This consistency allows for comparable annual information for families, schools, and the public. With the introduction of PARCC, DC will adjust its assessment standards to the levels defined by PARCC.

For the 2012-13 school year, the test vendor conducted a standard-setting review process associated with both the reading and math sections of the DC CAS. This process resulted in possible alternative standards (i.e., revised cut scores for proficiency levels).

After the vendor completed this process, OSSE reaffirmed its decision to maintain current standards based on the following rationale:

- ✓ OSSE is committed to maintaining comparability between the 2011-12 and 2012-13 school years instead of resetting performance standards before the major PARCC overhaul that will occur in the 2014-15 school year.
- ✓ Resetting standards introduces complications to all local education agencies (LEAs) that use the value-added model as part of their teacher assessment and accountability systems, as well as OSSE's school accountability system as established by the ESEA Waiver.
- ✓ As a result of the aforementioned complications, New York and Kentucky, states that opted to reset their standards, also waived or softened all of their associated accountability systems as they believed they were creating a new baseline. OSSE determined that introducing this type of complication to our accountability systems twice within a few years is unwarranted and potentially detrimental to families and schools.
- ✓ OSSE is working to ensure a smooth transition to the new performance standards connected with PARCC, which will be based on empirical data associated with college success. Given the complexity of this transition, OSSE wants to focus its efforts on a single transition process.
- ✓ Lastly, OSSE is confident that opting for comparability across years was also important to allow for robust evaluation of the effectiveness of recent education reforms.

After the final DC CAS results were tabulated, OSSE analyzed what the results would have been under the alternative standards proposed by the vendor's review committee. The table below illustrates the proficiency levels under the consistent standard that OSSE maintained from previous years, versus what the proficiency levels would have been under the alternative standards. As shown below, the test scores for reading would have been higher and the test scores for math lower. While this is what the test scores would have been under the alternative standards, the scores would not have been comparable to the years prior, nor would they be comparable to the future standard set by PARCC in 2015.

2013 DC CAS Standard vs. DC CAS Alternative Standard

	2013 Consistent Standards	2013 Alternative
Reading	49.5%	52%
Math	53%	45.5%