



MATHEMATICS HIGH-QUALITY INSTRUCTIONAL MATERIALS GUIDANCE

Mathematics Standards Overview

In July 2010, the District of Columbia adopted the [Common Core State Standards](#). In doing so, the District of Columbia joined 42 other states in formally signing on to the state-led initiative, which was coordinated by the [National Governor's Association](#) (NGA) and the [Council of Chief State School Officers](#) (CCSSO).

With the aim of ensuring students across the country graduate from high school prepared to succeed in postsecondary courses and workforce training programs, the Common Core State Standards were created in collaboration with teachers, school administrators, and experts and define the knowledge and skills students should acquire in their pre-K through grade 12 academic careers.

The grade-level standards:

- Are aligned with college and work expectations;
- Are clear, understandable, and consistent;
- Include rigorous content and application of knowledge through high-order skills;
- Build upon strengths and lessons of current state standards;
- Are informed by other top performing countries, so that all students are prepared to succeed in our global economy and society; and
- Are evidence-based.

In the District of Columbia, the new standards began implementation in the 2011-12 school year, and were fully implemented in the 2014-15 school year.

Mathematics Shifts

The Common Core State Standards for Mathematics build on the best of existing standards and reflect the skills and knowledge students will need to succeed in college, career, and life. Understanding how the standards differ from previous standards—and the necessary shifts they call for—is essential to implementing them.

The following are the key shifts called for by the Common Core:

Shift 1: **Greater focus on fewer topics**

The Common Core calls for greater focus in mathematics. Rather than racing to cover many topics in a mile-wide, inch-deep curriculum, the standards ask mathematics teachers to significantly narrow and deepen the way time and energy are spent in the classroom.

Shift 2: **Coherence - Linking topics and thinking across grades**

Mathematics is not a list of disconnected topics, tricks, or mnemonics; it is a coherent body of knowledge made up of interconnected concepts. Therefore, the standards are designed around coherent progressions from grade to grade. Learning is carefully connected across grades so that students can build new understanding onto foundations built in previous years.

Shift 3: Rigor - Pursue conceptual understanding, procedural skills and fluency, and application with equal intensity

Rigor refers to deep, authentic command of mathematical concepts, not making math harder or introducing topics at earlier grades. To help students meet the standards, educators will need to pursue, with equal intensity, three aspects of rigor in the major work of each grade: conceptual understanding, procedural skills and fluency, and application.

Read more about the mathematics shifts [here](#).

EdReports Review Process

EdReports reviewers use [review tools](#) to create free, evidence-rich reports of programs that are comprehensive (year-long) and coherent (lessons connected to one another day-to-day, unit-to-unit), with a sequenced learning path to prepare students for grade-level mastery. These reports are developed to provide educators, stakeholders, and leaders with independent, evidence-rich information about the quality of instructional materials from those who will be using them in classrooms.

Expert educators use the tools to evaluate full sets of instructional materials against criteria. The tools are built from the experience of educators, curriculum experts, and leading rubric developers and organizations that have conducted reviews of instructional materials, lessons, and tasks.

Each report found on [EdReports.org](#) represents hundreds of hours of work by educator reviewers. Working in teams of four to five, reviewers use educator-developed review criteria, evidence guides, and key documents to thoroughly examine their sets of materials. After receiving more than 25 hours of training on the EdReports review tools and process, teams meet weekly over the course of several months to share evidence, come to consensus on scoring, and write the evidence that ultimately is shared on the website.

All team members look at every grade and indicator, ensuring that the entire team considers the program in full. Final reports are the result of multiple educators analyzing every page, calibrating all findings and reaching a unified conclusion.

Characteristics of High-Quality Mathematics Materials

The EdReports mathematics review criteria identifies the indicators for high-quality instructional materials. The review criteria supports a sequential review process that reflect the importance of alignment to the standards then consider other high-quality attributes of curriculum as recommended by educators.

For math, our review criteria evaluates materials based on:

Focus and Coherence

- K-8: Do the materials assess grade-level content, give all students extensive work with grade-level problems to meet the full intent of grade-level standards, and are they coherent and consistent with the Standards?
- High School: Do the materials focus on the CCSS high school standards? Do the materials exhibit coherence?

	<p>Rigor and Mathematical Practices</p> <ul style="list-style-type: none">• Do the materials meet the CCSS expectations for rigor and mathematical practices? <p>Instructional Supports and Usability</p> <ul style="list-style-type: none">• Do the materials support teachers to fully utilize the curriculum, understand the skills and learning of their students, and support a range of learners?
Related Mathematics Links and Resources	<p>Why Materials Matter Research and Data</p> <p>EdReports Review Tools</p> <p>OSSE Mathematics</p> <p>OSSE Common Core State Standards</p>