

Key Shifts in the Ohio Learning Standards for Mathematics

Shift 1: Focus	The Ohio Learning Standards call for a greater focus on grade level/course mathematics. They focus deeply on the critical areas of each grade/course so that students can gain strong foundations: solid conceptual understanding, a high degree of procedural skill and fluency, and the ability to apply the math they know to solve problems inside and outside the math classroom.
Shift 2: Coherence	Thinking across grades: The Ohio Learning Standards are designed around coherent progressions from grade to grade and course to course. Educators carefully connect the learning across grades and courses so that students can build new understanding on foundations built in previous years. Educators can begin to count on a deep conceptual understanding of core content and build on it. Each standard is not a new event but an extension of previous learning.
Shift 3: Rigor	<p>Rigor refers to the deep, authentic command of mathematical concepts, not making math harder or introducing topics at earlier grades. To help students meet the standards, educators need to pursue, with equal intensity, three aspects of rigor in each grade: conceptual understanding, procedural skills, and fluency and application.</p> <p>Conceptual understanding: The Ohio Learning Standards call for conceptual understanding of key concepts. Teachers support students’ ability to access concepts from several perspectives so that students can see math as more than a set of mnemonics or discrete procedures.</p> <p>Procedural skill and fluency: The Ohio Learning Standards call for accuracy in calculations. Educators embed a variety of opportunities for students to build upon their conceptual understandings to develop procedural skills and fluencies.</p> <p>Application: The Ohio Learning Standards call for students to use math flexibly through a variety of applications. Educators provide an abundance of opportunities for students to apply math in meaningful student contexts, including in other content areas and real-world situations.</p>

Adapted from [Student Achievement Partners](#)