



Key Shifts in CCSS Mathematics

Shift 1	Focus	Teachers significantly narrow & deepen the scope of how time and energy is spent in the math classroom. They do so to focus deeply on only the concepts prioritized in the standards so students have strong foundational knowledge & deep conceptual understanding and can transfer mathematical skills and understanding across concepts and grades.
Shift 2	Coherence	Teachers carefully connect learning within and across grades , so, for example, fractions or multiplication spiral across grade levels & students can build new understanding from foundations built in previous years. Teachers can begin to count on students' deep conceptual understanding of core content & build on it. Each standard is not a new event, but an extension of previous learning.
Shift 3	Fluency	Students are expected to have speed & accuracy w/simple calculations; teachers structure class time and/or homework time for students to memorize, through repetition, core functions such as multiplication tables, so they are more able to understand & manipulate more complex concepts.
Shift 4	Deep Understanding	Teachers teach more than how to get the answer and, instead, support students' ability to access concepts from a number of perspectives, so students are able to see math as more than a set of mnemonics or discrete procedures. Students demonstrate deep conceptual understanding of core math concepts by applying them to new situations, as well as writing and speaking about their understanding.
Shift 5	Application	Students are expected to use math and choose appropriate concepts for applications even when they are not prompted to do so. Teachers provide opportunities at all grade levels for students to apply math concepts in "real world" situations. Teachers in content areas outside of math, particularly science, ensure that students are using math, at all grade levels, to make meaning of, and access, content.
Shift 6	Dual Intensity	Students are practicing and understanding . There is more than a balance between these two things in the classroom – both occur with intensity. Teachers create opportunities for students to participate in drills & make use of skills through extended application of math concepts. Amount of time and energy spent practicing & understanding in learning environments is driven by the specific mathematical concept and varies throughout the given school year.

Adapted from: <http://engageny.org/wp-content/uploads/2011/08/common-core-shifts.pdf>

Illinois State Board of Education/SSOS Math Content Specialists Team/Summer Regional Conference 2012