

Points of Emphasis

- ❑ In CCGPS mathematics, content is divided into clusters of standards and addressed in unit size pieces.
- ❑ In CCGPS mathematics, not all grade level clusters of standards are emphasized equally, but none of the clusters can be neglected or ignored without negative consequences to the learning progression.
- ❑ In CCGPS mathematics, grade level content is not a new event, but rather an extension of previous learning and a prelude to future learning.
- ❑ In CCGPS K-5 mathematics, less attention is given to data and statistics than in GPS.
- ❑ In CCGPS 6-8, expressions, equations, and the number system are emphasized.
- ❑ In CCGPS 9-12, modeling has been added to the list of traditional high school strands.
- ❑ In CCGPS 9-12, there is a decided shift from Euclidean geometry to transformational geometry, as transformational geometry is more closely and transparently related to algebra and functions and is the geometry actually used in real world situations.

Starting Points

The framework for change is best viewed through the lenses of focus, coherence, and rigor. Mathematics educators are encouraged to focus strongly where the standards focus and to be mindful of the connections between previous and future learning. The three facets of rigor, which are conceptual understanding, fluency, and application, must be pursued with equal intensity.

Educators are encouraged to plan for CCGPS instruction at the unit level, with an emphasis on the mathematics they want students to walk away with at the end of the unit. In CCGPS, it's not about what standard the teacher is teaching today, but rather what cluster of standards the students will have mastered at the conclusion of the unit.

Educators will find benefit in the CCGPS Mathematics Teaching Guides which further articulate the Standards for Mathematical Practice and describe the CCGPS in the familiar language of GPS.

CCGPS Standards for Mathematical Practice



1. Make sense of problems and persevere in solving them

6. Attend to precision

2. Reason abstractly and quantitatively

3. Construct viable arguments and critique the reasoning of others

4. Model with mathematics

5. Use appropriate tools strategically

7. Look for and make use of structure

8. Look for and express regularity in repeated reasoning

 **Reasoning and explaining**

 **Modeling and using tools**

 **Seeing structure and generalizing**

 **Overarching habits of mind of a productive mathematical thinker**

The **Standards for Mathematical Practice** represent the habits and attitudes of mathematical thinkers and are integral to the superstructure of CCGPS mathematics. The practice standards define the way knowledge comes together and gets used by students. Administrators are encouraged to focus on the practice standards when evaluating the teaching and learning process.