

COMMON CORE GEORGIA PERFORMANCE STANDARDS (CCGPS) FOR MATHEMATICS

On June 2, 2010, the final version of the Common Core State Standards (CCSS) for mathematics was released by the Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA). As specified by CCSSO and NGA, the Standards are research- and evidence-based, aligned with college and work expectations, rigorous, and internationally benchmarked. The Standards are intended to be a living work; as new and better evidence emerges, the Standards will be revised accordingly. As a natural outgrowth of meeting the charge to define college and career readiness, the Standards define what students should understand and be able to do in their study of mathematics. At its July 8, 2010 meeting, the State Board of Education adopted the Common Core State Standards to be known in Georgia as the Common Core Georgia Performance Standards (CCGPS). The CCGPS will be implemented in Georgia's schools beginning with the 2012-2013 school year.

UNDERSTANDING MATHEMATICS

One hallmark of mathematical understanding is the ability to justify why a particular mathematics statement is true or where a mathematical rule comes from. There is a world of difference between a student who can summon a mnemonic device to perform algebraic manipulations and a student who can explain where the mnemonic actually comes from. The student who can explain the rule understands the mathematics and has a better chance of solving a less familiar problem. Mathematical understanding and procedural skill are equally important, and both are assessable using mathematical tasks of sufficient richness.

The Common Core State Standards *for Mathematical Practice* describes varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices are as follows:

- Make sense of problems and persevere in solving them;
- Reason abstractly and quantitatively;
- Construct viable arguments and critique the reasoning of others;
- Model with mathematics;
- Use appropriate tools strategically;
- Attend to precision;
- Look for and make use of structure;
- Look for and express regularity in repeated reasoning.

The Common Core State Standards *for Mathematical Content* is a balanced combination of procedure and understanding. A lack of understanding effectively prevents a student from engaging in the mathematical practices. Designers of curriculum, assessment, and professional development should all attend to the need to connect the mathematical practice to mathematical content in mathematics instruction.

IMPACT OF CCSS AND GPS

The GPS for mathematics and the CCSS are comparable in all domains. While there are differences in strand names and grade level expectations, the efficacy of the two sets of standards is evident. The crosswalk of the CCSS and GPS shows how these standards are vertically aligned in each of the domains, and it supports the conclusion that the transition to the CCGPS will necessitate minimal modifications to the current standards and teacher expectations. Professional learning opportunities will be crucial to assist teachers in the understanding of the more specific strand names and in the shifts in grade level expectations. The Georgia Department of Education will incorporate feedback from Georgia educators to determine which components of GPS mathematics will be added to the CCGPS.