Common Core
Georgia Performance Standards
Mathematics

An Overview for School Level and District Level Leadership

We have a choice. We can simply defend what we have…or create what we need.

Sixteen Trends

Their Profound Impact on Our Future

by Gary Marx

Georgia's Mathematics Program
Past, Present, and Future

1986

- Quality Core Curriculum (QCC) Objectives

2005

- Georgia Performance Standards (GPS)

2012

- Common Core Georgia Performance Standards (CCGPS)

Common Core State Standards

The **Common Core State Standards Initiative (CCSSI)** is a state-led effort coordinated by the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO).

www.corestandards.org

Why Common Core Standards

- **Preparation:** The standards are college- and career-ready. They will help prepare students with the knowledge and skills they need to succeed in education and training after high school.
- **Competition:** The standards are internationally benchmarked. Common standards will help ensure our students are globally competitive.
- **Equity:** Expectations are consistent for all – and not dependent on a student's zip code.
- **Clarity:** The standards are focused, coherent, and clear. Clearer standards help students (and parents and teachers) understand what is expected of them.
- **Collaboration:** The standards create a foundation to work collaboratively across states and districts, pooling resources and expertise, to create curricular tools, professional development, common assessments and other materials.

Common Core State Standards

Building on the strength of current state standards, the CCSS are designed to be:

- Anchored in college and career readiness
- Internationally benchmarked
- Focused, coherent, clear and rigorous
- Evidence and research based

Common Core for Mathematics

Standards for Mathematical Content

- K-8 grade-by-grade standards organized by domain
- 9-12 high school standards organized by conceptual categories

Standards for Mathematical Practice

- Describe mathematical "habits of mind"
- Offer standards for mathematical proficiency: reasoning, problem solving, modeling, decision making, and engagement
- Connect with content standards in each grade

K- 8 Mathematics Standards

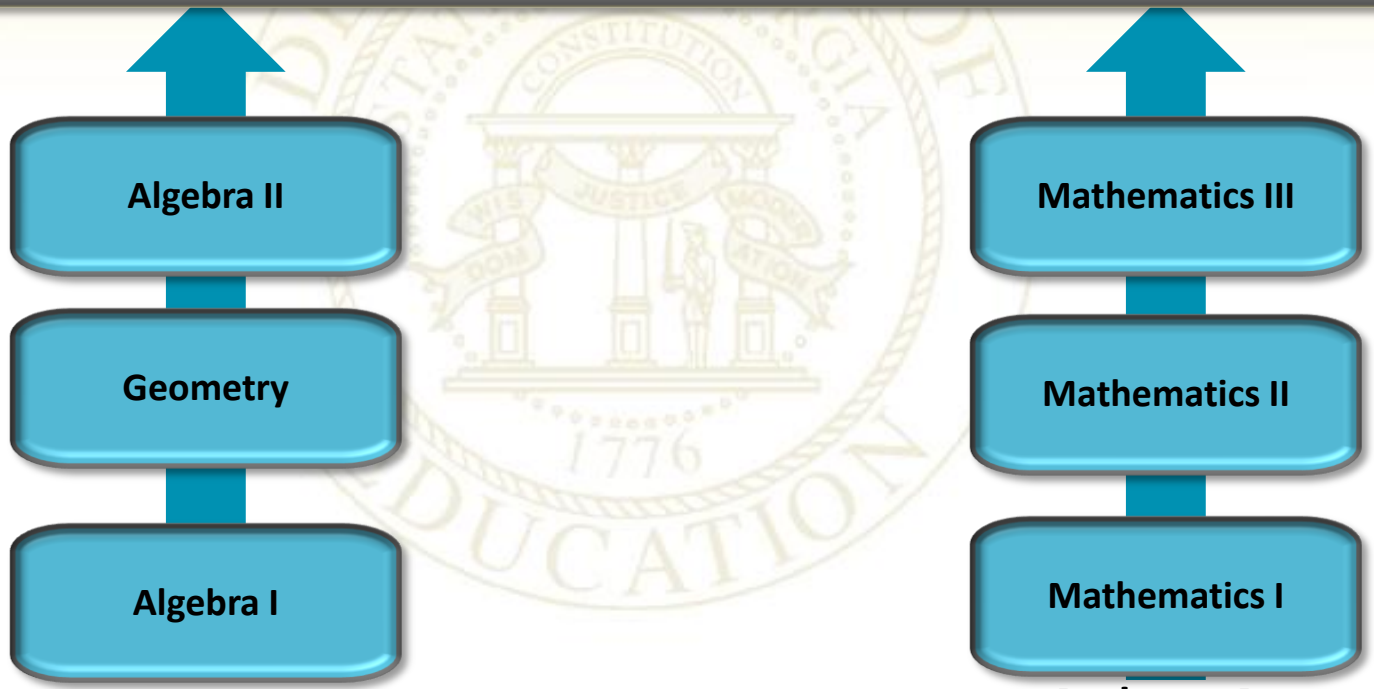
- The K-5 standards provide students with a solid foundation in *whole numbers, addition, subtraction, multiplication, division, fractions and decimals.*
- The 6-8 standards describe robust learning in *geometry*, *algebra*, and *probability and statistics.*
- Modeled after the focus of standards from high-performing nations, the standards for grades 7 and 8 include *significant algebra and geometry content.*
- Students who have completed 7th grade and mastered the content and skills will be *prepared for algebra in 8th grade or after.*

High School Mathematics Standards

- Call on students to practice *applying mathematical ways of thinking* to real world issues and challenges
- Require students to develop a *depth of understanding and ability to apply mathematics to novel situations*, as college students and employees regularly are called to do
- Emphasize *mathematical modeling*, the use of mathematics and statistics to *analyze empirical situations*, understand them better, and improve decisions
- Identify the mathematics that all students should study in order to be *college and career ready*.

Model Course Pathways for Mathematics

Courses in higher level mathematics: Precalculus, Calculus (upon completion of Precalculus), Advanced Statistics, Discrete Mathematics, Advanced Quantitative Reasoning, or other courses to be designed at a later date, such as additional career technical courses.



Pathway A

Traditional in U.S.

Pathway B

Integrated approach

Why are the Common Core State Standards for Mathematics right for Georgia?

- Previous work with the GPS has prepared Georgia for the implementation of the CCSS.
- Prior teacher and administrator GPS training ensures a smooth transition.
- Although some content may be in different grade levels in the CCSS, all of the standards are addressed in the GPS.
- CCSS expectations are consistent with a single/high-rigor diploma requirement for all students.

Thomas Fordham Institute
GPS and CCSS in 2010

Georgia: Grade A-

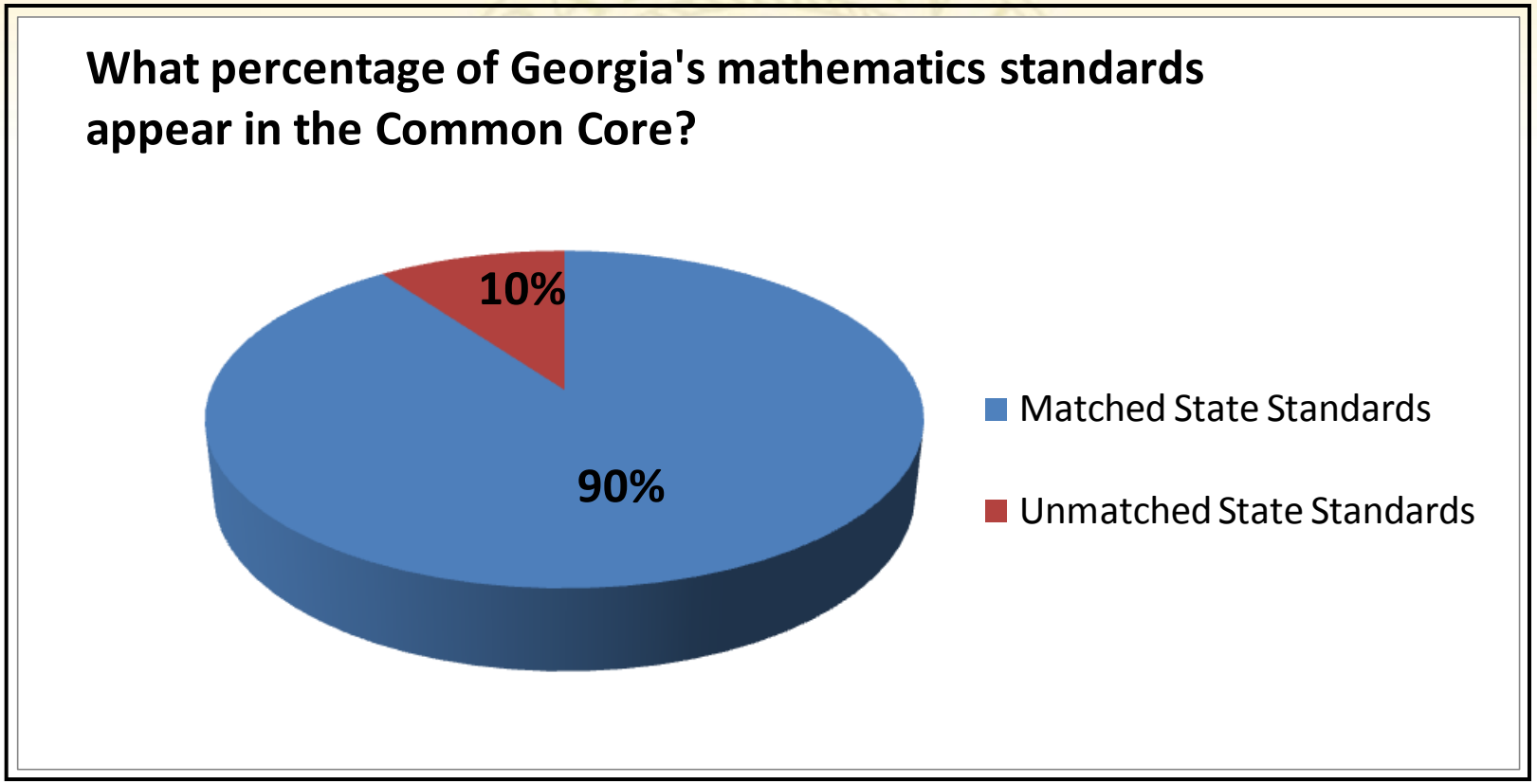
Clarity and Specificity	3/3
Content and Rigor	6/7
Total GPS Score	**9/10**

Georgia is one of eight states receiving at least 9/10 points.

CCSS: Grade A-

Clarity and Specificity	2/3
Content and Rigor	7/7
Total CCSS Score	**9/10**

What about the alignment of CCSS with GPS?



What does the adoption of CCSS mean to us in Georgia?

- Georgia *adopted* CCSS when our the standards authorizing body – the State Board of Education -took formal action in July, 2010, to adopt and implement the Common Core State Standards
- 100% of the Common Core K-12 mathematics standards must be implemented in Georgia within 3 years.
- We are allowed to add up to an additional 15% to the Common Core.
- We have flexibility as to how we communicate adoption relative to state standards - CCGPS.

CCGPS

Common Core Georgia Performance Standards

What are the non-negotiables?

- 100% of the CCSS must be delivered in our curriculum.
- CCSS must be addressed at the grade level where they are assessed.

How are we preparing for CCGPS implementation?

- **State Mathematics Team** drafted initial alignment documents for each grade level; webinars and face-to-face sessions focused on the alignment; **Educators** across the state submitted feedback regarding the alignment
- **Precision Review Teams** were convened to review feedback and make recommendations regarding alignment issues
- The recommendations of the precision review teams were vetted by the **RESA Mathematics Mentors** and the **K-12 Advisory Council** for final approval
- **District and School Level Leaders** will be apprised of the decisions in spring/summer of 2011
- Professional learning for **all Mathematics Educators** will be the number one priority in school year 2011-2012.
- All **K-12 Mathematics Classrooms** will implement CCGPS in 2012-2013.

Mathematics CCGPS Timeline

DATE	EVENT
July 8, 2010	CCSS Adoption by Georgia Board of Education
SY 2010 – 2011	CCGPS Standard Alignment / CCGPS Administrator Professional Learning
September 23, 2010	CCGPS Precision Review Webinar: Grades K – 4 (3:00 p.m.)
September 27, 2010	CCGPS Precision Review Webinar: Grades 5 – 12 (4:00 p.m.)
September 29, 2010	CCGPS Precision Review Webinar: Grades K – 4 (3:00 p.m.)
September 30, 2010	CCGPS Precision Review Webinar: Grades 5 -12 (8:00 a.m.)
October 14-15, 2010	CCGPS Precision Review Sessions at GCTM
November 8, 2010	CCGPS Precision Review Webinar: Grades K – 4 (3:00 p.m.)
November 9, 2010	CCGPS Precision Review Webinar: Grades 5 – 12 (4:00 p.m.)
January 6-26, 2011	CCGPS Precision Review Mathematics Educator Teams
January-March, 2011	Vetting of CCGPS Review Team Recommendations by RESA Mathematics Mentors and K-12 Mathematics Advisory Council
March-June, 2011	CCGPS Professional Learning for Administrators developed by DOE and delivered by RESA
March-June, 2011	Vertical Mapping of CCGPS Standards
Summer, 2011	Inventory of GaDOE Resources/ Development of Needed Resources
SY 2011 – 2012	CCGPS Teacher Professional Learning /Information Sessions
SY 2012 – 2013	CCGPS Mathematics K-12 Year 1 Implementation/Transition
SY 2013 – 2014	CCGPS Mathematics K-12 Year 2 Implementation/Field Test
SY 2014 – 2015	CCGPS Mathematics K-12 Year 3 Implementation/Common Assessment Administered

SAMPLE: CCSS + GPS = CCGPS

CC.6.RP.3d Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

- Students will consider relationships between varying quantities:
- Use proportional reasoning (a/b=c/d and y = kx) to solve problems
- Students will convert from one unit to another within one system of measurement (customary or metric) by using proportional relationships

How are we preparing for CCGPS assessment?

- Curriculum has been invited to the initial meetings of the design and development of the CCSS assessments through the PARCC Consortium – Georgia is a governing member of the 26 state collaborative.
- We have been assured by our assessment division that curriculum will continue to drive assessment.

CCGPS Precision Review Status Report

- School year 2011-2012 will be focused on professional learning for K-12 mathematics educators.
- The mathematics team has coordinated with IT division representatives to develop the professional learning blueprint for both initial and ongoing professional learning opportunities.
- Race to the Top and Gates grants will target sustained and technology-enhanced professional learning and will provide the needed funding.
- Data analysis will direct decisions regarding the specific focus for professional learning.

Secondary CCGPS Roll Out Plan

	Ninth Graders	Tenth Graders	Eleventh Graders	Twelfth Graders
2011 / 2012	GPS Course w/EOCT	GPS Course w/EOCT	GPS Course	GPS Course
2012 / 2013	CCGPS Course w/EOCT	GPS Course w/EOCT	GPS Course	GPS Course
2013 / 2014	CCGPS Course w/EOCT	CCGPS Course w/EOCT	GPS Course	GPS Course
2014 / 2015	CCGPS Course w/Common Core Assessment	CCGPS Course w/Common Core Assessment	CCGPS Course w/Common Core Assessment	GPS Course

Leader Actions

CCGPS Mathematics Implementation Support 2011-2012 School Year

- Include a CCGPS Overview in your Pre-Planning Agenda
- Include a CCGPS Overview in your Parent, PTA, and community meetings
- Ensure that 100% of your mathematics teachers participate in the GaDOE and RESA facilitated professional learning sessions
- Make CCGPS the focus of your district level and school level professional learning

Thank you for your participation!

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