

# Accountability Report

Issued 2016–17

## Gwinnett School of Mathematics, Science, and Technology (GSMST)

IV Bray, Principal

Ed Shaddix, Assistant Superintendent



### Local school improvement connected to district's strategic direction

Gwinnett County Public Schools' accountability system for improving schools is called the Results-Based Evaluation System (RBES). RBES fairly and systematically measures a school's progress, providing a process that clearly communicates expectations; reviews, monitors, and supports school performance; and evaluates that performance. This report reflects achievement data and state data reporting from the 2015–16 school year, as well as consolidated information on the school's effectiveness, based on multiple measures and student characteristics. Based on the data you will find in this report, school administrators, teachers, and parent advisory groups developed

this year's Local School Plans for Improvement (LSPI) which outline our improvement goals and guide the work we will do throughout the 2016–17 school year to support student learning. These improvement plans are connected to the school district's strategic direction and our core business of teaching and learning. Find our school's LSPI on the website. The Gwinnett School of Mathematics, Science, and Technology council and school leaders collaborated on the highlights in this accountability report, which also serves as the school's annual report. **Please review this report to learn more about our improvement efforts and progress.**

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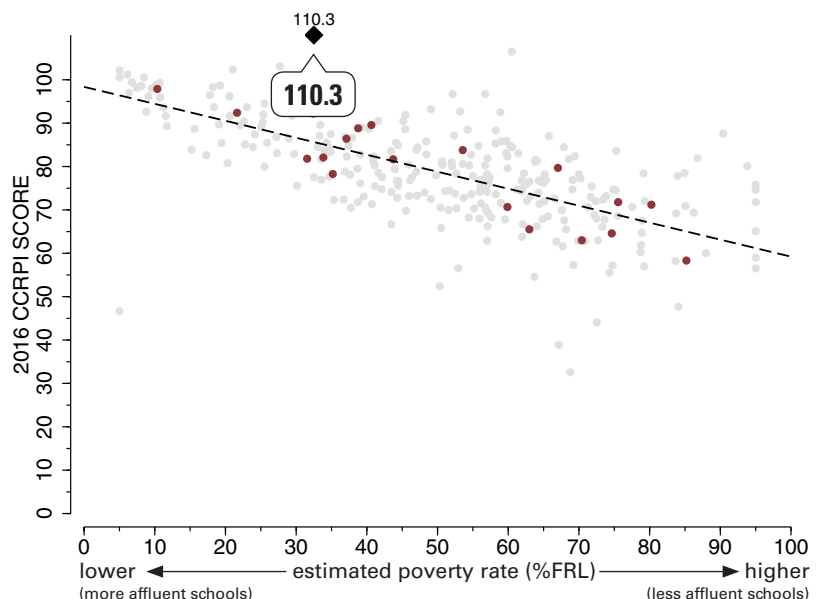
2015–16 Highlights



### The School Effect: Putting GSMST's CCRPI score in context

The “school effect”— the impact of what happens in the classroom— acknowledges the work of our faculty and staff in meeting our students where they are academically, and helping them to make progress, no matter where they start. Schools all strive to add value to a student's education from year-to-year, causing students to make academic gains. One way to measure effectiveness in educating *all* students is to review a school's score on Georgia's College and Career Ready Performance Index (CCRPI), adjusting for the level of economic diversity at the school, to see the school effect on students' academic growth.

This graphic representation plots CCRPI scores for high schools in the state (gray dots) against the percentage of the student population receiving free-and-reduced-lunch (FRL Percentage), a measure of poverty. The plotted points form a trend line representing the typical achievement level of a school in Georgia with its level of student poverty. The graph shows how Gwinnett School of Mathematics, Science, and Technology (represented by a large black diamond) and all GCPS high schools (maroon dots) fare when considering expected performance based on poverty measures. Dots above the line are higher-than-expected scores and dots below the line reflect lower-than-expected scores. *Note: Georgia schools that serve breakfast and lunch to all students at no cost are not included in this comparison.*

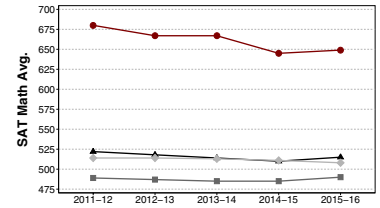
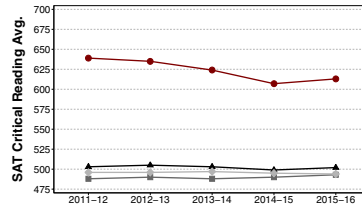
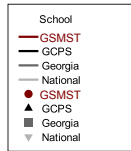


## 2015–16 Results: College-Admissions Tests

The SAT and ACT both assess college-readiness in language arts/reading and mathematics, with a science section on the ACT. The SAT includes a required essay, while the essay is optional on the ACT.

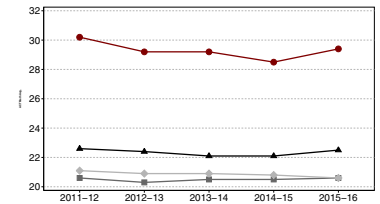
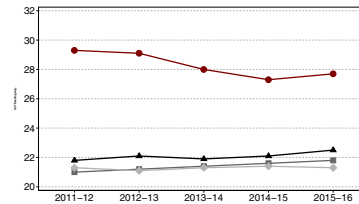
### 2015–16 SAT Averages

	Critical Reading	Math	Writing	Total
GSMST	613	649	608	1870
GCPS	502	515	486	1503
Georgia	493	490	476	1459
National	494	508	482	1484



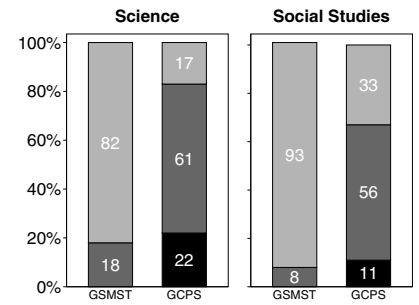
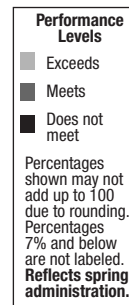
### 2015–16 ACT Averages

	English	Math	Reading	Science	Total	Writing
GSMST	28.8	29.4	27.7	28.2	28.7	28.2
GCPS	21.6	22.5	22.5	22.2	22.3	23.5
Georgia	20.7	20.6	21.8	21.0	21.1	22.6
National	20.1	20.6	21.3	20.8	20.8	18.6



## 2015–16 Results: High School Gateway Assessment

Gwinnett students must pass the school system's High School Gateway Assessment as a requirement for earning a regular diploma. Typically given in the 10th grade, the Gateway measures students' ability to write effectively about 9th and 10th grade science and 10th grade social studies AKS. Students write an essay on each topic, using their own knowledge and document-based information. Students regularly write essays and take assessments in class that mirror the Gateway format. This experience helps develop proficiency in content knowledge and writing skills required for college, career, and citizenship. To assist students, GCPS offers additional resources, tutorials, and practice opportunities. While most students are successful on their first try, those who are not have additional opportunities to take and pass the test.



## 2015–16 Results: Advanced Placement (AP) Exams

Advanced Placement (AP) courses are challenging, college-level classes taught by specially trained high school teachers. Students have the option of taking an AP exam at the end of the school year. Many colleges award credit for passing the exams or allow a student to exempt certain courses. The table below shows the percentage of students who took an AP class at Gwinnett School of Mathematics, Science, and Technology, compared to the county average. The chart also shows the percentage of optional, course-specific AP exams taken, as well as the percentage of test-takers who scored 3 or better on a 5-point scale on one or more AP exams. In 2015–16, 24.5% of courses taken at GSMST were AP courses, compared to 10.4% at all GCPS high schools.

AP Percentages	2013–14		2014–15		2015–16	
	GSMST	GCPS	GSMST	GCPS	GSMST	GCPS
% Students Who Took an AP Course	71.6	33.7	66.5	32.4	71.7	33.3
% AP Exams Taken	88.3	84.1	88.4	87.4	88.5	85.4
% Test-Takers Who Scored 3+	81.4	60.4	90.4	60.3	92.2	61.5

## 2015–16 Graduation Rate Information

The Graduation Rate is calculated using the number of students who begin 9th grade together who graduate within four years with a regular education diploma. Students who take longer than four years to complete high school are not considered on-time graduates for the purpose of graduation rates, but they are not considered dropouts either. Many more students in the cohort will go on to graduate with a full diploma in their 5th year. Data shows that large numbers of students moving in during high school who are behind can have a negative impact on a school's graduation rate, just as having students move who can't be accounted for affects the rate. A number of GCPS initiatives— Credit Recovery, Online Campus courses, 7th period classes at Phoenix High, and summer school— offer students more opportunities to get and stay on pace for on-time graduation. GCPS is working to ensure that all students graduate, even if some students need more time to do so, and that all students are college- and career-ready.

### Graduation Rate (2013 to 2016)

	2013	2014	2015	2016
GSMST	100%	99%	99%	100%
GCPS	73%	75%	78%	80%
Georgia	72%	73%	79%	79%

## 2015–16 Senior Report

	Students Completing HS†	Number Who Enrolled in College or Postsecondary School (Fall 2016)*	Number of Honor Graduates†	Seniors with Dual Enrollment†
GSMST	197	179	102	17
GCPS	10,993	7380	2999	833

\*Based on the National Student Clearinghouse enrollment records

†Reflects system-reported data as of August 2016

## 2015–16 State Results: End of Course assessments (EOC)

The comprehensive Georgia Milestones Assessment System measures how well students have learned the knowledge and skills outlined in the state content standards for English language arts, mathematics, science, and social studies. High school students took an End-of-Course (EOC) assessment for courses designated by the State Board of Education. The higher bar for student proficiency set by Milestones is aimed at better preparing students for college and career and providing a more realistic picture of academic progress. As with any new assessment, we anticipate that scores will initially be lower than they will be in future years as students and teachers become accustomed to the new test.

### Percentage of Milestones tests scored Proficient/Distinguished

Assessment	GSMST	GCPS	Georgia
9th Grade Lit. & Comp.	97.8	50.2	40.1
11th Grade Lit. & Comp.	97.1	51.7	41.2
Algebra	97.3	43.9	35.8
Analytic Geometry	96.7	50.3	36.7
Biology	100.0	51.3	42.4
U.S. History	92.2	51.9	43.7
Economics	98.0	49.1	45.0

*Note. Results reflect a weighted average of winter and spring scores.*

## 2015–16 State Reporting: Georgia’s College and Career Ready Performance Index (CCRPI)

College and Career Ready Performance Index (CCRPI) is Georgia’s state-wide accountability system. CCRPI assesses how well students are prepared for college and careers and ensures that schools are focused on improving achievement among all students.

The index measures progress on accountability indicators such as content mastery, student attendance, and preparation for the next school level or college work. Schools earn CCRPI points based on indicators that vary by grade and school level and align with measures of college- and career-readiness. Schools may earn up to a set number of points in three main categories (achievement, progress, and achievement gap), for a total of 100 possible points, with an additional 10 possible challenge points.

At the high school level, schools earn CCRPI achievement points tied to a number of factors, including the percentages of students meeting or exceeding standards on state assessments, the percentage of students reading at grade level, the percentage of students missing six or fewer days during the school year, the percentage of graduates completing a career pathway, the percentage of college-ready graduates, the percentage of graduates earning college credits, the percentage of students scoring in the Proficient Learner or Distinguished Learner achievement levels on the Georgia Milestones assessments, and the four- and five-year graduation rates.

Progress points are tied to the level of academic progress students make from year to year, while achievement gap points are earned as schools work to close the gaps between student subgroups. Challenge points reflect a school’s participation levels and achievement results for students with economic disadvantages (ED), English learners (EL), and students with disabilities (SWD). Points also may be earned for advanced academic work of a school’s graduates, such as the percentage of seniors earning physics credit, earning three or more credits in the same world language, or completing work-based learning or a capstone project. In addition, schools in which teachers use data for planning individualized instruction and those with STEM certification may earn extra points as well. Innovative practices with demonstrated achievement gains and interventions that result in a positive school climate also may earn challenge points.

The School Climate rating, which awards stars on a five-star scale, takes into account discipline data, attendance, and perceptions of the quality and character of the school and its learning environment. The School Climate Ratings for 2015–16 were not published at the time CCRPI results were released (fall of 2016). Once available, parents can find this rating here: <http://www.gadoe.org/CCRPI/Pages/default.aspx>

GSMST CCRPI Total Score	110.3
Achievement Points	55
Progress Points	40
Achievement Gap Points	10
Challenge Points	5.3
ED/EL/SWD Performance– 3.3	
Exceeding the Bar– 2.0	
<i>CCRPI Total Score is the sum of points in shaded cells.</i>	
School Climate Rating	NA
<i>The 2015–16 School Climate Rating was not available at the time CCRPI was released. Once available, this rating can be found on the GaDOE website in the CCRPI section. Starting in 2017, the state also will release Financial Efficiency Rating for each school.</i>	

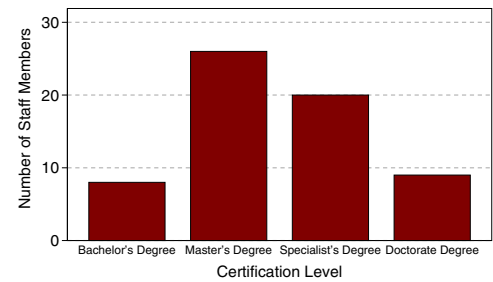
# Gwinnett School of Mathematics, Science, and Technology

## Other 2015–16 Highlights...

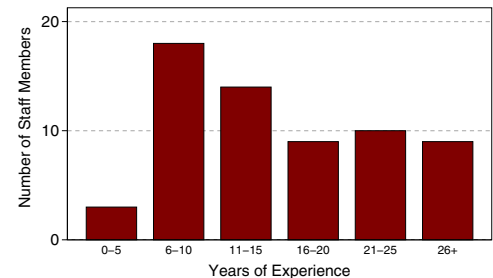
- GSMST was named a 2016 National Blue Ribbon School of Excellence by the U.S. Department of Education.
- GSMST led the state in average scores for SAT and ACT college-admissions tests as well as school's College and Career Ready Performance Index.
- GSMST continued to be ranked the best high school in Georgia by *The Washington Post* and *U.S. News & World Report*.
- Thirteen GSMST students were named National Merit Finalists.
- A total of 63 GSMST students were named National AP Scholars, the highest designation awarded by the College Board for academic excellence, with two students earning perfect scores on Advanced Placement (AP) exams.
- The GSMST Math Team won the UGA High School Math Tournament and the GCTM State Math Tournament.
- Five robotics teams competed in the VEX High School State Championship where one team won the State Excellence Award, our third consecutive state VEX title. Four GSMST teams advanced to the world competition.
- GSMST won the Georgia Economics Challenge, finishing 16th at nationals.
- GSMST received the STEM Outreach Award from the Technology Association of Georgia (TAG).
- Five students received special awards at the Georgia Science and Engineering Fair. Three science fair projects advanced to the Intel International Science Fair. Students won both 1st place awards in the poster contest at the Georgia Junior Science and Humanities Symposium.
- Individual students earned state recognition including Georgia Youth of the Year (Boys & Girls Clubs of America); Georgia high school winner of the Prudential Spirit of Community Award for community service; state winner honored by the National Center for Women and Information Technology; and Georgia Student of the Year Award (American Association of Teachers of Spanish and Portuguese).
- Eleven GSMST students were selected for All-State Orchestra and three were selected for All-State Band.
- GSMST's Student Council served on the Georgia Association of Student Councils' Executive Board and received a Council of Excellence Award.
- GSMST finished 3rd in State TSA Competition, qualifying for 12 world events.
- Two literary magazine features earned Superior ratings from the UGA Scholastic Press Association. *The Infinitas* was rated Excellent by NCTE.
- At the Georgia Model United Nations competition, two students won the Outstanding Delegation Award and one student won Best Position Paper.
- Two GSMST students were among 13 in Georgia selected to take the U.S. National Chemistry Olympiad exam.
- GSMST earned a gold medal and a place on the 2016 Governor's SHAPE Honor Roll. The award recognizes school level efforts in the areas of physical activity, nutrition, and wellness.

## 2015–16 Staff Data

Staff Certification Level



Experience in Education



## Student Data (2013–14 to 2015–16)

	School Year		
	13-14	14-15	15-16
<b>Enrollment</b>	945	976	966
+American Indian/Alaskan Native*	0%	0%	0%
+Asian*	41%	41%	44%
+Black/African American*	25%	26%	23%
+Hispanic or Latino, <i>any race</i>	10%	9%	10%
+Multiracial, <i>two or more races</i> *	3%	3%	3%
+Native Hawaiian/Pacific Islander*	0%	0%	0%
+White*	20%	19%	20%
Special Education	1%	1%	1%
ESOL	1%	1%	1%
Free/Reduced Lunch	36%	35%	33%
Average Attendance	98%	98%	98%

\*Not Hispanic or Latino

## School Safety Perceptions

Based on responses from those with an opinion who responded to the 2015–16 RBES Perception Survey...

- 96.4% of students agreed or strongly agreed that they felt safe at Gwinnett School of Mathematics, Science, and Technology High.
- 100% of parents agreed or strongly agreed that their child's school was safe.

*The mission of Gwinnett County Public Schools is to pursue excellence in academic knowledge, skills, and behavior for each student, resulting in measured improvement against local, national, and world-class standards.*

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