



Photo Credit: [Carrol Daniel Construction](#)

Gwinnett School of Math, Science, & Technology (GSMST): Answers & Analysis

Executive Summary

- U.S. News & World Report’s single-year enrollment numbers do not reflect retention at Gwinnett School, but a growing and evolving academically ambitious new magnet school.
- Student retention at GSMST swiftly increased once Algebra 1 was required for admissions. Freshman to Sophomore retention is now 89% in spite of the extremely challenging course load.
- GSMST’s freshman course load exceeds that of TJ, explaining attrition.
- GSMST closely matches racial/economic demographics of Gwinnett County, GA.
- GSMST is strongly committed to its lottery system and is still expanding support for its student body.

This chart of student enrollment, presented along with GSMST’s 2020 U.S. News & World Report ranking, actually shows data from the 2017-2018 school year. This same data was also featured in a recent FCAG report, and by itself does not explain the full situation at this very new school.

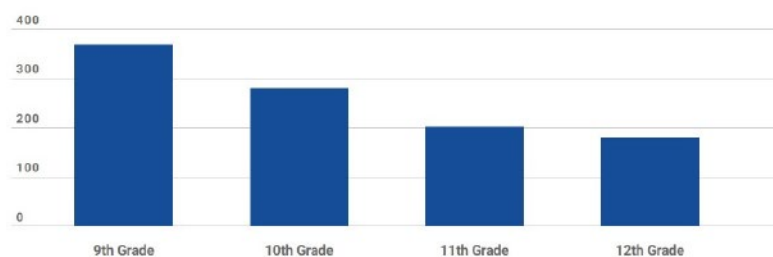
(Data are based on the 2017-2018 school year.)

Students/Teachers at Gwinnett School of Mathematics, Science and Technology

These counts and percentages of students and teachers are from data reported by schools to the government.

Total Enrollment 1,031

Student Enrollment by Grade

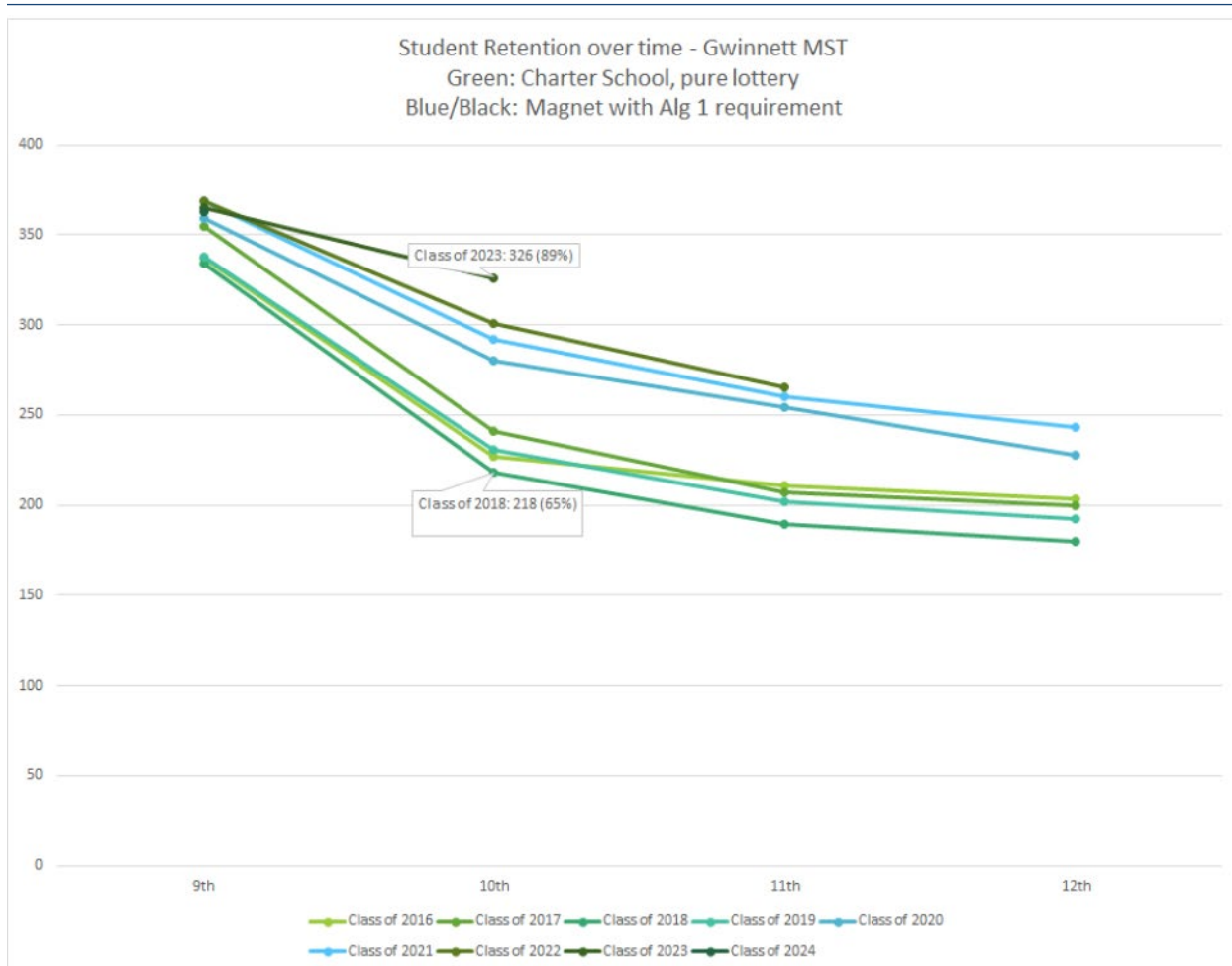


The following details come from a TJAAG interview with GSMST Principal IV Bray on December 9, 2020.

Before 2016, Gwinnett was a new, rigorous charter school that many students were struggling in. Without providing busing and school counseling, they were finding their way and finding their appropriate student body. Students were required to take advanced math courses, including AP Calculus but without a starting baseline due to the state mandate that Georgia charter schools cannot have admissions requirements. The logistics and math deficiencies led to high attrition during this period.

In 2016, Gwinnett converted from a charter school to a magnet school, allowing them to require Algebra 1 for lottery participation. Since then, they have also strengthened and focused their programs for incoming students to better prepare them for the rigors of the school including a week in mandatory intense summer school prior to 9th grade. They also raised the incoming class size to 375 students.

GSMST’s strong dropout rates in the freshman year can be explained due to lower barriers for admission than both TJ admissions proposals (Only Gwinnett County residency and Algebra 1 enrollment in 8th grade), but a higher front load of



courses (Students take 2 engineering courses, 10th grade chemistry, and 11th grade physics all in 9th grade). This course load is far stricter than TJ’s course load for the same time period.

etc.) are already existing and well-supported at TJ. The Principal is focused on retention and has significantly cut 9th-to-10th grade attrition (to 11% down from 35%) over the past five years.

GSMST is only in its 5th year as a magnet school, compared to 35 years for TJ. Many of the support systems it has had to design and implement (summer courses, upperclassmen involvement, curriculum introduction nights,

Principal Bray noted that the primary goal of GSMST admissions is for equal opportunity for all eligible students in Gwinnett County, and GSMST’s programs for incoming freshmen have helped boost retention. ▪

GSMST Student Enrollment ¹	9th	10th	11th	12th	9 -> 10 Retention
Class of 2016	337	227	211	203	67%
Class of 2017	355	241	207	200	68%
Class of 2018	334	218	189	180	65%
Class of 2019	338	231	202	192	68%
Class of 2020	359	280	254	228	78%
Class of 2021	369	292	260	243	79%
Class of 2022	369	301	265		82%
Class of 2023	365	326			89%
Class of 2024	363				

GSMST Accolades

- #1 high school in Georgia since 2013²
- #12 high school in the U.S. in 2020³
- 2016 U.S. Department of Education Blue Ribbon Award⁴

Race	Gwinnett County Public Schools 2020 Student Demographics ²	GSMST Demographics ³		
		16-17	17-18	18-19
White (non-Hispanic)	20%	20%	19%	18%
Black	32%	23%	22%	22%
Latinx	33%	10%	10%	10%
Asian	11%	44%	44%	46%
Multiracial	4%	3%	4%	4%
Economic Status				
	Free/Reduced Lunch (GSMST)	34%	32%	31%
	Free/Reduced Lunch (Gwinnett County) ⁴	54.71%	55.06%	53.44%

¹ Georgia Department of Education, https://app3.doe.k12.ga.us/ows-bin/owa/fte_pack_ethnicsex.entry_form

² GSMST home page, <https://www.gcpsk12.org/site/Default.aspx?PageID=14018>

³ U.S. News & World Report https://www.usnews.com/education/best-high-schools?int=top_nav_High_Schools

⁴ U.S. Dept. of Ed https://nationalblueribbonsschools.ed.gov/awardwinners/winning/16ga218pu_the_gwinnett_school_of_mathematics_science_and_technology_%5Bgsmst%5D.html

⁵ Gwinnett County Public Schools: By The Numbers: <http://publish.gwinnett.k12.ga.us/gcps/wcm/connect/280e3b29-ecd3-4750-819c-9c919b-704d10/2020-21-GCPS-By-the-Numbers.eq.pdf?MOD=AJPERES&CVID=nixbllk>

⁶ GSMST Accountability Report '19-'20 school year <https://publish.gwinnett.k12.ga.us/gcps/wcm/connect/d905285e-55cb-4281-bb1e-9b9175f-d67ef/GSMST.pdf?MOD=AJPERES>

⁷ Georgia Department of Education, https://oraapp.doe.k12.ga.us/ows-bin/owa/fte_pack_frl001_public.entry_form