

Percent (standard error) of US eighth grade students attending schools offering each type of mathematics course

<i>Course Type</i>	Schools Offering Course
GEOMETRY	6 (1.9)
ALGEBRA I	66.5 (2.8)
PRE-ALGEBRA	37.1 (3.8)
ENRICHED	13.9 (2.2)
REGULAR	80.9 (3.1)
REMEDIAL	13.1 (2.3)

Percent of U.S. Students Enrolled in Each Type of Math Course Using Each Type of Textbook

Course Type	Textbook Type		
	Regular	Pre-Algebra	Algebra
Remedial	91 (8.5)	9.1 (8.5)	
Regular	74 (6.0)	21 (5.1)	4.5 (1.9)
Enriched	74 (15.8)	14 (8.7)	13 (3.8)
Pre-Algebra	30 (8.5)	59 (10.4)	11 (6.8)
Algebra I	25 (9.1)	5.7 (4.0)	70 (9.6)

Variation in the mathematics index of content rigor (IGP) in schools with no tracks

Source	<i>Estimated Variance</i>	<i>Estimated Percentage of Variance</i>
Course Type	.019	4.9
Schools within course type	.066	17.1
Classrooms within schools	.302	78.0
Total across all classrooms	.387	

Variation in the mathematics index of content rigor (IGP) in schools
with tracks

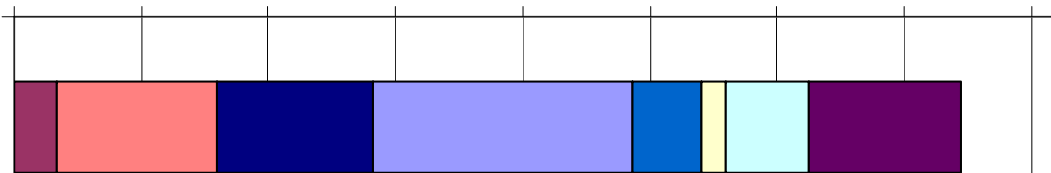
Source	<i>Estimated Variance</i>	<i>Estimated Percentage of variance</i>
Schools	.214	25.2
Tracks within schools	.336	39.5
Classrooms within tracks	.300	35.3
Total across all classrooms	.851	

Amount of Mathematics Across Grades 7-12

Percent

0 10 20 30 40 50 60 70 80 90 100

Took Alg 1 at 7th/8th Grade



Took Alg 1 at 9th Grade



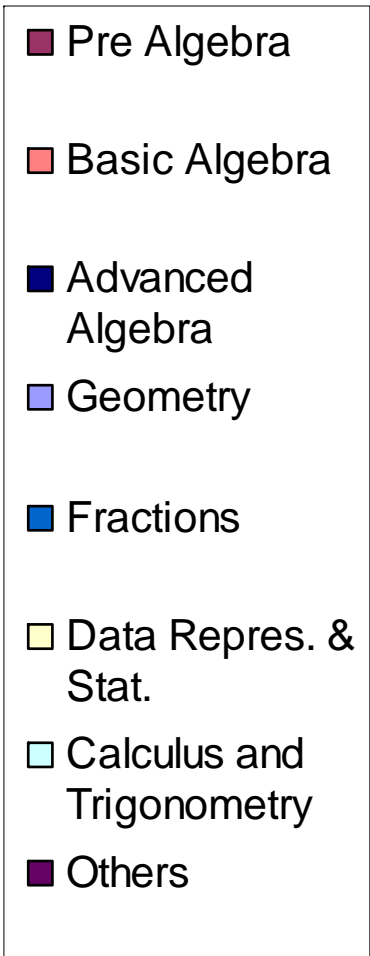
Took Alg 1 at 10th Grade



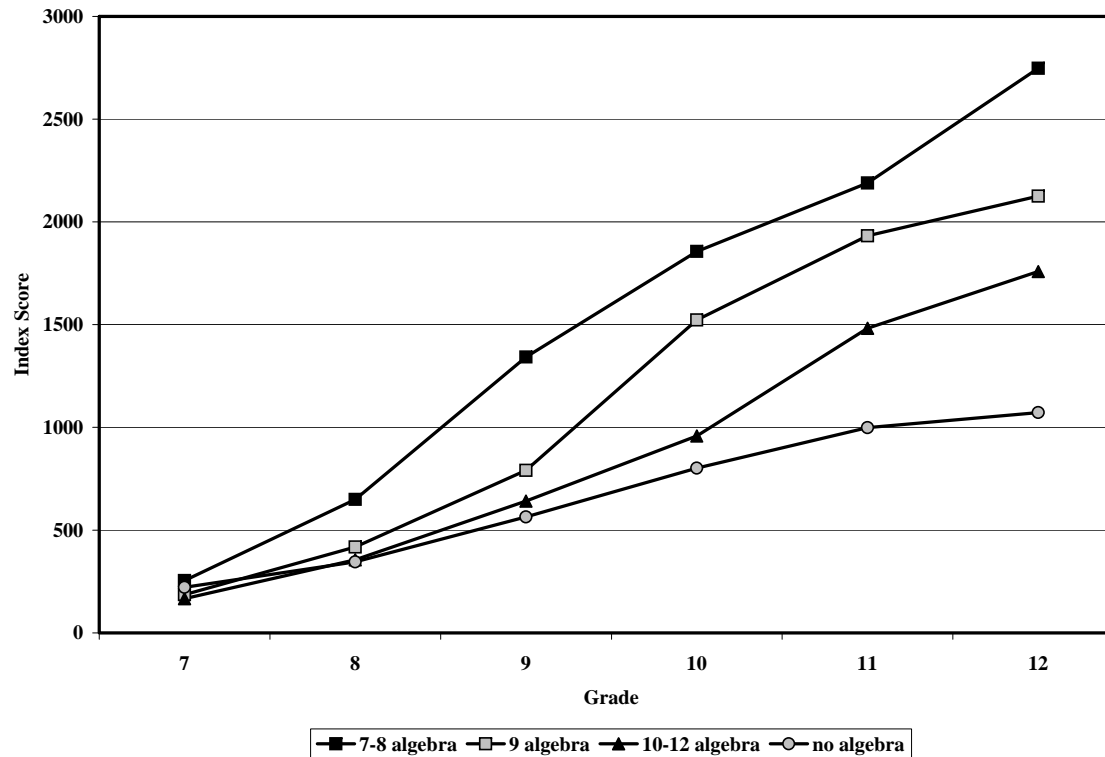
Took Alg 1 at 11th/12th Grade



Did not take Alg 1



Cumulative Exposure (weighted) to Mathematics Concepts, by Track.



Classroom means for four patterns of mathematics tracks, including their appropriate seventh grade feeder class, and eighth grade gain.

<i>Reg 7- Reg 8 Track</i>			<i>Reg 7 – PA8 track</i>			<i>Reg 7 – A8 track</i>			<i>PA7-A8 track</i>		
<i>7th Grade Regular Mean</i>	<i>8th Grade Mean</i>	<i>Gain</i>	<i>7th Grade Regular Mean</i>	<i>8th Grade Mean</i>	<i>Gain</i>	<i>7th Grade Regular Mean</i>	<i>8th Grade Mean</i>	<i>Gain</i>	<i>7th Grade Pre-Algebra Mean</i>	<i>8th Grade Mean</i>	<i>Gain</i>
462	465	3	473	529	56	467	552	85	525	566	41

Variation in the mathematics scaled score in schools having no tracks.

Source	Non-Tracked Schools	
	<i>Score Variance</i>	<i>Score Variance (%)</i>
Course type	0 ^[1]	0
Schools	1594	18.4
Classrooms within schools	2170	25.1
Students within classrooms	4879	56.5
Total across all students	8643	

[1] The unconstrained estimated variance component was negative which was then set to zero. The other estimated variance components are conditional on that value. Additional analyses show the variation across this factor to disappear when adjusting for the other levels in the design.

Variation in the mathematics scaled score in schools having tracks.

Source	Tracked Schools	
	<i>Score Variance</i>	<i>Score Variance (%)</i>
Schools	0 ^v	0
Tracks within schools	3377	39.6
Classrooms within tracks	670	7.9
Students within classrooms	4479	52.5
Total across all students	8526	

^v The unconstrained estimated variance component was negative which was then set to zero. The other estimated variance components are conditional on that value. Additional analyses show the variation across this factor to disappear when adjusting for the other levels in the design.

3-level HLM Analysis of 8th Grade Math Achievement in Tracked Schools

Students-level variables	<i>Estimated Coefficient</i>	<i>SE</i>	
Race: White (D)	2.41	(7.10)	Note: D denotes dichotomous variable. C denotes centered continuous variable. SE denotes standard errors. * p < 0.050. ** p < 0.010. *** p < 0.001.
Race: Black (D)	-26.53***	(7.70)	
Race: Hispanic (D)	-21.01**	(8.02)	
Race: Asian (D)	-2.50	(8.92)	
Socioeconomic Status (SES) (C)	-2.85***	(0.44)	
Classroom-level variables			
7 th grade achievement	1.00*	(0.49)	
Mean classroom SES	20.18***	(2.69)	
Class type: Algebra (D)	62.19***	(6.29)	
Class type: Pre-Algebra (D)	31.05***	(6.97)	
School-level variables			
Mean school SES	-4.97	(3.00)	Appropriate TIMSS sampling weights were used in the analysis.
8 th grade enrollment	0.01	(0.02)	
Minority enrollment (%)	-0.06	(0.11)	
Location: Urban (D)	4.40	(6.06)	
Location: Rural (D)	19.73**	(6.92)	

Distribution of Multi-Tracked Classroom-IGP by Track

