

Manhattan Center for Science and Mathematics

PRINCIPAL: Jose David Jimenez

DBN: 04M435

ENROLLMENT: 1650

SCHOOL TYPE: High School

PEER INDEX*: 3.15

*See p. 7 for more details on Peer Index.

PROGRESS REPORT

B	OVERALL SCORE	out of	OVERALL PERCENTILE	This school's overall score is greater than or equal to that of 39 percent of high schools.
	60.5	100	39	

For high schools, grades are based on cut scores determined prior to the release of the Progress Report. Further, schools with a four year graduation rate in the top third citywide cannot receive a grade lower than a C. Schools in their first year, without a graduating class or in phase out receive a report with no grade or score.

GRADE	SCORE RANGE	% OF SCHOOLS
A	70.0 or higher	35% of schools
B	58.0 - 69.9	37% of schools
C	47.0 - 57.9	20% of schools
D	40.0 - 46.9	5% of schools
F	39.9 or lower	3% of schools

QUALITY REVIEW

WD

Well Developed (2009-10)

The rating is based on three major categories of school performance: instruction that prepares students for college and careers, school organization and management, and quality of the learning environment.

A school that receives a Well Developed rating earned the highest grade for highly effective teaching and learning practice, strategic school management, and an excellent quality learning environment. For more information, see: <http://schools.nyc.gov/Accountability/tools/review>

Overview Each school's Progress Report (1) measures student year-to-year progress, (2) compares the school to peer schools, and (3) rewards success in moving all children forward, especially children with the greatest needs.

CATEGORY	SCORE	GRADE	DESCRIPTION
Student Progress	32.4 out of 55	B	Student Progress measures the annual progress students make toward meeting the state's graduation requirements by earning course credits and passing state Regents exams.
Student Performance	13.2 out of 20	B	Student Performance measures how many students graduated within 4 and 6 years of starting high school, and the types of diplomas they earned.
School Environment	5.9 out of 15	F	School Environment measures student attendance and a survey of the school community rating academic expectations, safety and respect, communication, and engagement.
College and Career Readiness	7.5 out of 10	A	College and Career Readiness measures how well students are prepared for life after high school on the basis of passing advanced courses, meeting English and math standards, and enrolling in a post-secondary institution.
Closing the Achievement Gap	1.5 (16 max)		Schools receive additional credit for exceptional graduation and college/career readiness outcomes of students with disabilities, English Language Learners, and students who enter high school at a low performance level.
Overall Score	60.5 out of 100	B	The overall grade is based on the total of all scores above. Category scores may not add up to total score because of rounding.

Performance Over Time

Percentile rank of this school's overall Progress Report score for the past three years:

Year	Percentile Rank
2010	39
2011	69
2012	39

The Progress Report is a one-year snapshot of a school's performance. The Progress Report methodology has evolved over time in response to school and community feedback, changes in state policy, and higher standards. For a description of methodology changes, visit: <http://schools.nyc.gov/ProgressReport>

Progress Report Implications

Strong Progress Report results are the basis for recognition and potential rewards for school leaders, and poor results are an important factor in determining whether schools require intensive support or intervention. For more information, see: <http://schools.nyc.gov/community/planning/Support+and+Intervention.htm>

State Accountability

The school's current status: **In Good Standing**

This designation is determined by the New York State Department of Education under the Elementary and Secondary Education Act (ESEA) Flexibility Waiver. More information on New York State accountability can be found here: <http://schools.nyc.gov/Accountability/tools/accountability/default.htm>

GRADE **B**
 SCORE **32.4**
 (out of 55)

GRADE	SCORE RANGE
A	38.5 or higher
B	31.9 - 38.4
C	25.8 - 31.8
D	22.0 - 25.7
F	21.9 or lower

Student Progress represents 55% of the total score. The grade is based on the annual progress students make toward meeting the state's graduation requirements by earning course credits in core subjects and passing state Regents exams. Attention is given to all students in the school and particular emphasis is given to the one-third of students who entered high school at the lowest performance level.

THIS SCHOOL'S RESULTS	COMPARISON TO PEER SCHOOLS (WEIGHTED 75%)	PERCENT OF PEER RANGE	COMPARISON TO CITY SCHOOLS (WEIGHTED 25%)	PERCENT OF CITY RANGE	POINTS POSSIBLE	POINTS EARNED
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Credit Accumulation

Pct. of Students Earning 10+ Credits in 1st Year (n=349)	96.3%		79.8%		92.6%	4.17	3.46
Pct. of Students in School's Lowest Third Earning 10+ Credits in 1st Year (n=114)	93.9%		84.5%		92.1%	4.17	3.60
Pct. of Students Earning 10+ Credits in 2nd Year (n=412)	88.6%		47.2%		79.0%	4.17	2.30
Pct. of Students in School's Lowest Third Earning 10+ Credits in 2nd Year (n=135)	74.1%		40.0%		69.2%	4.17	1.97
Pct. of Students Earning 10+ Credits in 3rd Year (n=455)	84.0%		49.2%		72.1%	4.17	2.29
Pct. of Students in School's Lowest Third Earning 10+ Credits in 3rd Year (n=148)	75.7%		49.1%		73.1%	4.17	2.30
Average Completion Rate for Remaining Regents (n=1227)	69.1%		19.3%		72.5%	5.00	1.63

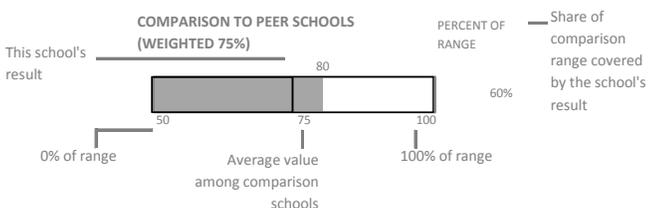
Weighted Regents Pass Rate

English (n=506)	1.25		42.1%		50.9%	5.00	2.22
Mathematics (n=881)	1.65		64.0%		71.0%	5.00	3.29
Science (n=983)	1.66		71.4%		65.7%	5.00	3.50
Global History (n=450)	1.52		60.4%		59.9%	5.00	3.01
United States History (n=391)	1.34		55.7%		60.6%	5.00	2.85

TOTAL POINTS 55.00 32.42

How To Interpret These Charts

To determine the number of points earned, this school's 2011-12 results on each metric are compared to the historical results of peer schools and all high schools citywide. The comparison to peer schools is worth 75% of the points for each metric and the comparison to all high schools citywide is worth 25% of the points. The bars represent the range of results for the peer and city comparison schools for the previous five school years that are within two standard deviations of the average. The percent of the range that is shaded is the school's share of possible points. The share is multiplied by the weight (75% or 25%) and the possible points for the metric to determine the points earned.



Score Calculation Example

FORMULA	(PERCENT OF PEER RANGE x 0.75 + PERCENT OF CITY RANGE x 0.25) x POINTS POSSIBLE	=	POINTS EARNED
EXAMPLE	(60% x 0.75 + 80% x 0.25) x 4.17	=	2.71

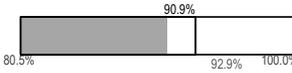
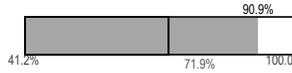
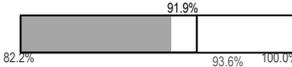
GRADE **B**
 SCORE **13.2**
 (out of 20)

GRADE	SCORE RANGE
A	14.0 or higher
B	11.6 - 13.9
C	9.4 - 11.5
D	8.0 - 9.3
F	7.9 or lower

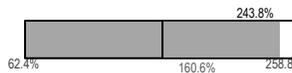
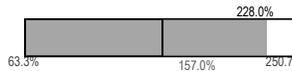
Student Performance represents 20% of the total score. The Student Performance grade is based on how many students graduated within 4 years and 6 years of starting high school, and the types of diplomas these students earned.

THIS SCHOOL'S RESULTS	COMPARISON TO PEER SCHOOLS (WEIGHTED 75%)	PERCENT OF PEER RANGE	COMPARISON TO CITY SCHOOLS (WEIGHTED 25%)	PERCENT OF CITY RANGE	POINTS POSSIBLE	POINTS EARNED
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Graduation Rate

Four Year Graduation Rate (n=408)	90.9%		53.3%		84.5%	5.00	3.06
Six Year Graduation Rate (n=382)	91.9%		54.5%		83.9%	5.00	3.09

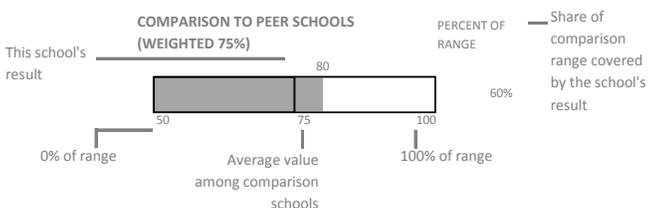
Weighted Diploma Rate

Four Year Weighted Diploma Rate (n=408)	243.8%		64.8%		92.4%	5.00	3.59
Six Year Weighted Diploma Rate (n=382)	228.0%		61.9%		87.9%	5.00	3.42

TOTAL POINTS 20.00 13.16

How To Interpret These Charts

To determine the number of points earned, this school's 2011-12 results on each metric are compared to the historical results of peer schools and all high schools citywide. The comparison to peer schools is worth 75% of the points for each metric and the comparison to all high schools citywide is worth 25% of the points. The bars represent the range of results for the peer and city comparison schools for the previous five school years that are within two standard deviations of the average. The percent of the range that is shaded is the school's share of possible points. The share is multiplied by the weight (75% or 25%) and the possible points for the metric to determine the points earned.



Score Calculation Example

FORMULA	(PERCENT OF PEER RANGE x 0.75 + PERCENT OF CITY RANGE x 0.25) x POINTS POSSIBLE	=	POINTS EARNED
EXAMPLE	(60% x 0.75 + 80% x 0.25) x 5	=	3.25

GRADE **F**
SCORE **5.9**
(out of 15)

GRADE	SCORE RANGE
A	10.5 or higher
B	8.7 - 10.4
C	7.0 - 8.6
D	6.0 - 6.9
F	5.9 or lower

School Environment represents 15% of the total score. The School Environment grade is based on student attendance and results of the NYC School Survey, on which parents, teachers, and students rate academic expectations, safety and respect, communication, and engagement.

THIS SCHOOL'S RESULTS	COMPARISON TO PEER SCHOOLS (WEIGHTED 75%)	PERCENT OF PEER RANGE	COMPARISON TO CITY SCHOOLS (WEIGHTED 25%)	PERCENT OF CITY RANGE	POINTS POSSIBLE	POINTS EARNED
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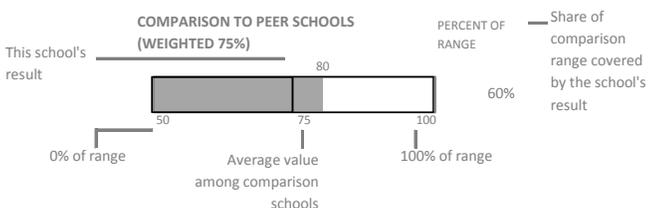
School Survey Results

Academic Expectations	7.1		22.7%		37.5%	2.50	0.66
Communication	6.1		28.6%		34.6%	2.50	0.75
Engagement	6.7		38.5%		50.0%	2.50	1.03
Safety and Respect	7.5		35.0%		60.7%	2.50	1.04
Attendance Rate	92.6%		38.0%		77.6%	5.00	2.40

TOTAL POINTS 15.00 5.88

How To Interpret These Charts

To determine the number of points earned, this school's 2011-12 results on each metric are compared to the historical results of peer schools and all high schools citywide. The comparison to peer schools is worth 75% of the points for each metric and the comparison to all high schools citywide is worth 25% of the points. The bars represent the range of results for the peer and city comparison schools for the previous five school years that are within two standard deviations of the average. The percent of the range that is shaded is the school's share of possible points. The share is multiplied by the weight (75% or 25%) and the possible points for the metric to determine the points earned.



Score Calculation Example

FORMULA $(\text{PERCENT OF PEER RANGE} \times 0.75 + \text{PERCENT OF CITY RANGE} \times 0.25) \times \text{POINTS POSSIBLE} = \text{POINTS EARNED}$

EXAMPLE $(60\% \times 0.75 + 80\% \times 0.25) \times 2.5 = 1.63$

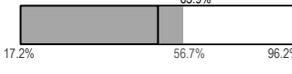
GRADE	A	GRADE	SCORE RANGE
		A	7.0 or higher
		B	5.8 - 6.9
		C	4.5 - 5.7
SCORE		D	3.7 - 4.4
		F	3.6 or lower

7.5
(out of 10)

College and Career Readiness represents 10% of the total score. The College and Career Readiness section measures how well students are prepared for life after high school on the basis of passing advanced courses, meeting English and math standards, and enrolling in a post-secondary institution. Please see the Additional Information page for further details on these measures.

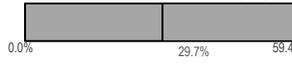
College Readiness Index

These metrics measure the percentage of students in the 2010 and 2012 cohorts (all students who entered high school four years earlier) who graduated and met the Regents exam, SAT, and/or course standards for passing out of remedial coursework at the City University of New York (CUNY), by August 2012.

	THIS SCHOOL'S RESULTS	COMPARISON TO PEER SCHOOLS (WEIGHTED 75%)	PERCENT OF PEER RANGE	COMPARISON TO CITY SCHOOLS (WEIGHTED 25%)	PERCENT OF CITY RANGE	POINTS POSSIBLE	POINTS EARNED
College Readiness Index - 4 Yrs. (n=408)	70.6%		64.5%		100.0%	1.67	1.23
College Readiness Index - 6 Yrs. (n=382)	63.9%		59.1%		100.0%	1.67	1.16

Postsecondary Enrollment Rate

These metrics measure the percentage of students in the 2010 and 2011 cohorts (all students who entered high school four years earlier) who graduated and enrolled in public service, a vocational program, or a degree program at a two- or four-year college by December 31, 2011.

	THIS SCHOOL'S RESULTS	COMPARISON TO PEER SCHOOLS (WEIGHTED 75%)	PERCENT OF PEER RANGE	COMPARISON TO CITY SCHOOLS (WEIGHTED 25%)	PERCENT OF CITY RANGE	POINTS POSSIBLE	POINTS EARNED
Postsecondary Enrollment Rate - 6 Mth. (n=388)	74.2%		42.8%		82.5%	1.67	0.88
Postsecondary Enrollment Rate - 18 Mth. (n=382)	82.5%		100.0%		100.0%	1.67	1.67

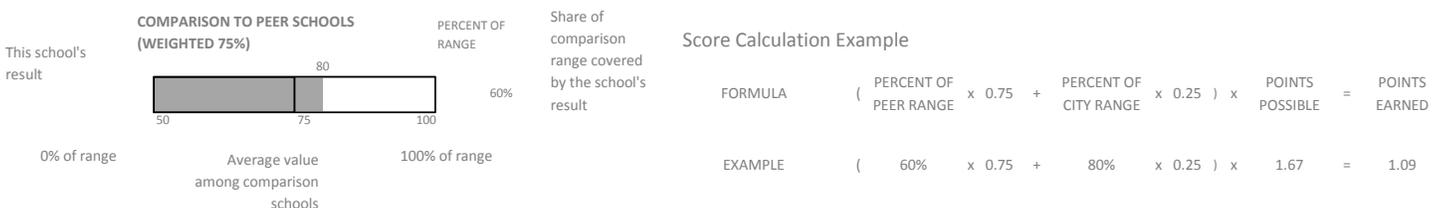
College and Career Preparatory Course Index

This metric measures the percentage of students in the 2012 cohort (all students who entered high school four years earlier) who have successfully completed approved rigorous courses and assessments (please see the Additional Information page for more information on this index).

	THIS SCHOOL'S RESULTS	COMPARISON TO PEER SCHOOLS (WEIGHTED 75%)	PERCENT OF PEER RANGE	COMPARISON TO CITY SCHOOLS (WEIGHTED 25%)	PERCENT OF CITY RANGE	POINTS POSSIBLE	POINTS EARNED
College and Career Preparatory Course Index (n=408)	79.7%		68.1%		100.0%	3.33	2.53
TOTAL POINTS						10.00	7.47

How To Interpret These Charts

To determine the number of points earned, this school's 2011-12 results on each metric are compared to the historical results of peer schools and all high schools citywide. The comparison to peer schools is worth 75% of the points for each metric and the comparison to all high schools citywide is worth 25% of the points. The bars represent the range of results for the peer and city comparison schools for the previous five school years that are within two standard deviations of the average. The percent of the range that is shaded is the school's share of possible points. The share is multiplied by the weight (75% or 25%) and the possible points for the metric to determine the points earned.



A school earns additional credit when each high-need student meets the success criteria for an eligible metric. The number of points will depend on the percentage of the school's population that is in the high-need group, the percentage of that group that is successful, and a "fixed point value" based on how difficult it is to achieve the success criteria. Additional Credit can only improve a school's Progress Report score. It cannot lower a school's score. High schools are eligible for points on 7 additional credit metrics, each of which is worth up to 2 points. (In the table below, "." in "This School's Results" indicates that a school has fewer than five eligible students in one of the categories.)

CATEGORY	THIS SCHOOL'S RESULTS	POPULATION PERCENTAGE	FIXED POINT VALUE	POINTS POSSIBLE	POINTS EARNED
Four Year Weighted Diploma Rate					
English Language Learners (n=36)	216.7%	8.8%	0.018	2.00	0.34
Self-Contained/ICT/SETSS (n=22)	222.7%	5.4%	0.020	2.00	0.24
All Students in the Lowest Third Citywide (n=25)	142.0%	6.1%	0.013	2.00	0.11
Black/Hispanic Males in the Lowest Third Citywide (n=13)	207.7%	3.2%	0.028	2.00	0.19
College and Career Readiness					
Students in the Lowest Third Citywide, CCPCI* (n=25)	12.0%	6.1%	0.151	2.00	0.11
Students in the Lowest Third Citywide, Four-year CRI** (n=25)	4.0%	6.1%	0.501	2.00	0.12
Students in the Lowest Third Citywide, PER† by Six Months After High School (n=39)	30.8%	10.1%	0.049	2.00	0.15
Movement from SC/ICT/SETSS to Less Restrictive Environments (n=91)	0.80	5.5%	0.062	2.00	0.27

*CCPCI = College and Career Preparatory Course Index

**CRI = College Readiness Index

†PER = Postsecondary Enrollment Rate

TOTAL POINTS	1.53
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PEER INDEX CALCULATION

The Peer Index is used to sort schools on the basis of student population. A lower Peer Index indicates a higher need population. The Peer Index operates on a 1.00-4.50 scale and is calculated using the following formula.

$$\text{FORMULA} \quad \left(\text{Average 8th grade English and Math proficiency} \right) - \left(2 \times \% \text{ students with disabilities} \right) - \left(2 \times \% \text{ in self-contained settings} \right) - \left(\% \text{ students overage} \right) = \text{PEER INDEX}$$

$$\text{FOR THIS SCHOOL} \quad \left(3.36 \right) - \left(2 \times 6.9\% \right) - \left(2 \times 3.2\% \right) - \left(1.5\% \right) = 3.15$$

PEER GROUP FOR: **Manhattan Center for Science and Mathematics**

Each school's performance is compared to the performance of schools in its peer group. Peer schools are those New York City public schools with a student population most like this school's population, according to the Peer Index. Each high school has up to 40 peer schools.

DBN	SCHOOL	PEER INDEX	AVERAGE PROFICIENCY	% IEP	% SELF-CONTAINED	% OVERAGE
84K888	Achievement First HS	2.86	3.13	10.9%	0.5%	4.2%
17K546	High School for Public Service: Heroes of Tomorrow	2.87	3.05	7.0%	0.5%	3.1%
02M439	Manhattan Village Academy	2.87	3.11	10.3%	1.2%	1.4%
04M610	Young Women's Leadership School	2.88	3.11	11.5%	0.0%	0.3%
84M350	Democracy Preparatory Charter School	2.90	3.15	8.9%	0.8%	6.5%
19K409	East New York Family Academy	2.93	3.06	5.2%	0.7%	1.4%
30Q575	Academy of American Studies	2.93	3.21	10.8%	2.0%	2.3%
02M376	NYC iSchool	2.96	3.27	13.9%	1.2%	1.4%
24Q610	Aviation Career & Technical Education High School	2.97	3.18	7.2%	2.7%	1.6%
25Q252	Queens School of Inquiry, The	2.99	3.24	11.3%	0.3%	2.3%
02M412	N.Y.C. Lab School for Collaborative Studies	2.99	3.45	18.3%	4.5%	0.5%
13K595	Bedford Academy High School	3.01	3.16	6.0%	0.3%	2.5%
28Q284	York Early College Academy	3.03	3.20	6.8%	1.3%	1.7%
02M414	N.Y.C. Museum School	3.05	3.30	12.2%	0.0%	0.7%
30Q286	Young Women's Leadership School, Astoria	3.07	3.20	5.9%	0.0%	1.3%
17K543	Science, Technology and Research Early College High School at Er	3.09	3.18	3.8%	0.0%	1.3%
22K405	Midwood High School	3.09	3.30	7.0%	2.7%	1.4%
27Q650	High School for Construction Trades, Engineering and Architectur	3.09	3.27	7.6%	0.1%	1.9%
02M519	Talent Unlimited High School	3.10	3.21	4.9%	0.2%	1.0%
02M545	High School for Dual Language and Asian Studies	3.13	3.29	4.2%	0.0%	7.1%
04M435	Manhattan Center for Science and Mathematics	3.15	3.36	6.9%	3.2%	1.5%
02M408	Professional Performing Arts High School	3.16	3.31	7.0%	0.2%	1.0%
15K684	Millennium Brooklyn HS	3.17	3.40	10.3%	0.9%	0.9%
13K670	Benjamin Banneker Academy	3.19	3.32	4.1%	1.1%	1.9%
84M888	Harlem Village Academy HS	3.21	3.46	9.5%	0.0%	6.0%
22K555	Brooklyn College Academy	3.24	3.32	3.3%	0.0%	1.2%
17K590	Medgar Evers College Preparatory School	3.26	3.33	2.7%	0.0%	1.5%
03M541	Manhattan / Hunter Science High School	3.27	3.39	5.1%	0.2%	1.5%
02M418	Millennium High School	3.27	3.50	11.0%	0.3%	0.3%
02M411	Baruch College Campus High School	3.36	3.44	3.9%	0.0%	0.7%
84K999	Uncommon Charter HS	3.38	3.56	6.8%	0.7%	3.4%
05M362	Columbia Secondary School	3.39	3.50	4.8%	0.5%	1.1%
30Q501	Frank Sinatra School of the Arts High School	3.41	3.49	3.8%	0.0%	0.1%
22K535	Leon M. Goldstein High School for the Sciences	3.41	3.61	9.2%	0.6%	0.0%
28Q680	Queens Gateway to Health Sciences Secondary School	3.47	3.49	0.8%	0.0%	0.4%
03M479	Beacon High School	3.49	3.62	5.9%	0.1%	0.5%
01M539	New Explorations into Science, Technology and Math High School	3.52	3.60	3.3%	0.4%	0.2%
02M416	Eleanor Roosevelt High School	3.60	3.67	3.0%	0.2%	0.4%
03M485	Fiorello H. LaGuardia High School of Music & Art and Performing	3.62	3.67	2.3%	0.0%	0.2%
30Q580	Baccalaureate School for Global Education	3.62	3.64	0.8%	0.0%	0.4%
14K449	Brooklyn Latin School, The	3.63	3.68	2.4%	0.0%	0.4%
PEER GROUP AVERAGES		3.19	3.35	6.8%	0.7%	1.6%

This Additional Information page provides context to view how a school's metrics were calculated on the previous pages of this report. Certain Progress Report metrics require that students reach one of many thresholds, or reach multiple thresholds in tandem to earn credit for their school. While all information on this page is not scored, the Additional Information page meaningfully illuminates or adds context to how a school received its metric values in the 2011-12 school year.

Regents Exams

Includes all students in the high school who took the respective exams in January, June or August 2012.

		Average Score	% passing	% at college-ready threshold for exam
Mathematics:	Integrated Algebra (n = 243)	78	91%	49%
	Geometry (n = 448)	74	82%	40%
	Algebra 2/Trigonometry (n = 404)	68	58%	32%
ELA:	Comprehensive English (n = 576)	77	89%	68%
Social Studies:	U.S. History (n = 389)	85	96%	
	Global History (n = 454)	79	86%	
Science:	Chemistry (n = 368)	73	79%	
	Physics (n = 239)	73	75%	
	Earth Science (n = 185)	72	81%	
	Living Environment (n = 312)	83	95%	
Languages:	Languages Other Than English (n = 283)	80	87%	

College Exams

Calculated as highest result for the 2012 four-year graduation cohort anytime during their high school career.

		Average Score	% of 4-year Cohort Taking
SAT:	Mathematics (n = 361)	528	88.5%
	Critical Reading (n = 361)	473	88.5%
	Writing (n = 361)	473	88.5%
ACT:	Mathematics (n = 34)	22	8.3%
	English (n = 34)	19	8.3%
	Reading (n = 34)	20	8.3%
	Science (n = 34)	20	8.3%
CUNY:	Math 1 (n = 74)	57	18.1%
	Math 2 (n = 77)	45	18.9%
	Reading (n = 48)	76	11.8%
	Writing (n = 49)	56	12.0%

College and Career Readiness Metrics Disaggregated

	6 Months After Graduating	18 Months After Graduating
Post-secondary Enrollment Rate		
2-Year or 4-Year College	74.2%	82.5%
CUNY	39.2%	42.1%
NYS Public	14.4%	17.0%
NYS Private	12.9%	13.1%
Out-of-State	7.7%	10.5%
Public Service	0.0%	0.0%
Vocational Program	0.0%	0.0%
	% of 4-year Cohort	% of 6-year Cohort
College Readiness Index (counting positively requires ALL thresholds)	70.6%	63.9%
% attaining Regents Diploma	90.2%	87.7%
% attaining Math College Readiness Standard	74.3%	74.9%
% attaining English College Readiness Standard	84.1%	72.8%
	% of 4-year Cohort	
College and Career Preparatory Course Index	79.7%	
% scoring 65+ on the Algebra II, Math B, Chemistry or Physics Regents Exam	79.2%	
% scoring 3+ on any Advanced Placement (AP) Exam	27.0%	
% scoring 4+ on any International Baccalaureate (IB) Exam	0.0%	
% earning a diploma with a Career and Technical Education (CTE) Endorsement	0.0%	
% passing an industry-recognized technical assessment	0.2%	
% earning a diploma with an Arts endorsement	0.0%	
% earning a grade of "C" or higher in a course for college credit	5.1%	
% passing another course certified by the DOE as college- and career-ready	0.0%	