Department of Education
Dennis M. Walcott, Chancellor

Progress Report 2012-13*

The Brooklyn School for Math and Research

PRINCIPAL: Perry Rainey

DBN: 32K168

ENROLLMENT: 129

SCHOOL TYPE: High School

PERCENTILES AND GRADES FOR PREVIOUS YEARS

	2010	2011	2012
PERCENTILE:			
GRADE:			

KEY DEMOGRAPHIC INDICATORS

%BLACK OR HISPANIC	%ELL	%IEP	% OVERAGE
92.2%	10.9%	21.7%	10.1%

PROGRESS REPORT

	OVERALL SCORE		OVERALL PERCENTILE RANK	
NA	NA	out of 100	NA	This school's overall score is greater than or equal to that of percent of HS schools.

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.

Progress Report Grades - High School

GRADE	SCORE RANGE	% OF SCHOOLS
A	or higher	33% of schools
B	-	36% of schools
C	-	21% of schools
D	-	6% of schools
F	or lower	5% of schools

Overview

Each school's Progress Report (1) measures the 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
School Progress	out of 55		Student Progress measures the annual progress students make toward meeting the state's graduation requirements by earning course credits and passing state Regents exams.
School Performance	out of 20		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	out of 15		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	out of 10		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	out of 16		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	out of 100		The overall grade is based on the total of all scores above. Category scores may not add up to total score because of rounding.

*During the 2012-13 school year, New York City public schools were affected by Hurricane Sandy. Adjustments have been made to attendance rates for all schools.

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

http://schools.nyc.gov/ProgressReport

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

SCORE (out of 55)

GRADE	SCORE RANGE
A	or higher
B	
C	
D	
F	or lower

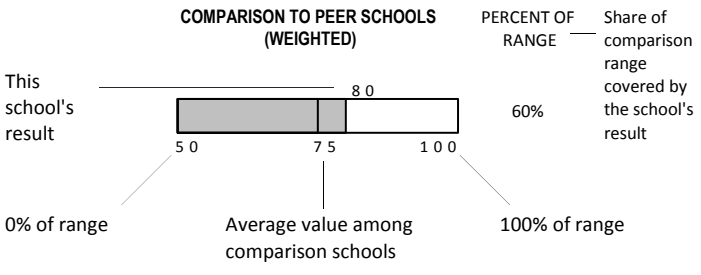
Student Progress represents 55% of the total score. The grade is based on the annual progress students make toward meeting the state's graduation requirements by earning course credits in core subjects and passing state Regents exams. Attention is given to all students in the school and particular emphasis 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
Credit Accumulation							
Pct. of Students Earning 10+ Credits in 1st Year (n=67)	83.6%	83.6% (53.4% – 74.4% – 95.4%)	71.9%	83.6% (54.7% – 79.3% – 100.0%)	63.8%	.	.
Pct. of Students in School's Lowest Third Earning 10+ Credits in 1st Year (n=19)	78.9%	78.9% (24.4% – 56.3% – 88.2%)	85.4%	78.9% (27.5% – 65.1% – 100.0%)	70.9%	.	.
Pct. of Students Earning 10+ Credits in 2nd Year (n=52)	78.8%	78.8% (50.3% – 69.5% – 88.7%)	74.2%	78.8% (48.0% – 74.7% – 100.0%)	59.2%	.	.
Pct. of Students in School's Lowest Third Earning 10+ Credits in 2nd Year (n=15)	60.0%	60.0% (23.9% – 51.5% – 79.1%)	65.4%	60.0% (21.8% – 60.4% – 99.0%)	49.5%	.	.
Pct. of Students Earning 10+ Credits in 3rd Year (n=2)	.		.		.	.	.
Pct. of Students in School's Lowest Third Earning 10+ Credits in 3rd Year (n=1)	.		.		.	.	.
Average Completion Rate for Remaining Regents (n=54)	58.8%	58.8% (27.2% – 48.3% – 69.4%)	74.9%	58.8% (14.1% – 53.9% – 93.7%)	56.2%	.	.
Weighted Regents Pass Rate							
English (n=43)	0.89	0.89 (0.62 – 0.94 – 1.26)	42.2%	0.89 (0.54 – 0.94 – 1.34)	43.8%	.	.
Mathematics (n=65)	1.06	1.06 (0.52 – 0.97 – 1.42)	60.0%	1.06 (0.42 – 1.00 – 1.58)	55.2%	.	.
Science (n=34)	0.98	0.98 (0.49 – 1.00 – 1.51)	48.0%	0.98 (0.20 – 1.14 – 2.08)	41.5%	.	.
Global Studies (n=0)	.		.		.	.	.
United States History (n=43)	1.05	1.05 (0.51 – 0.91 – 1.31)	67.5%	1.05 (0.42 – 0.92 – 1.42)	63.0%	.	.

TOTAL POINTS 55.00

How To Interpret These Charts

To determine the number of points earned, this school's 2012-13 results on each metric are compared to the 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 from historical results 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 3.75 = 2.44

GRADE

SCORE

(out of 20)

GRADE	SCORE RANGE
A	or higher
B	
C	
D	
F	or lower

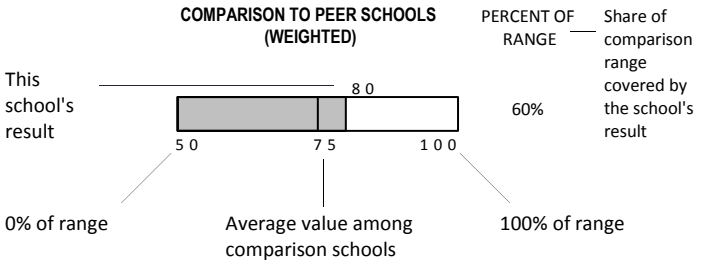
Student Performance represents 20% of the total score. The Student Performance grade is based on how many students graduated within 4 years and 6 years of starting high school, and the types of diplomas these students earned.

	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
Graduation Rate							
Four Year Graduation Rate (n=0)	.		.		.	.	.
Six Year Graduation Rate (n=0)	.		.		.	.	.
Weighted Diploma Rate							
Four Year Weighted Diploma Rate (n=0)	.		.		.	.	.
Six Year Weighted Diploma Rate (n=0)	.		.		.	.	.

TOTAL POINTS 20.00

How To Interpret These Charts

To determine the number of points earned, this school's 2012-13 results on each metric are compared to the 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 from historical results 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 3.75 = 2.44

GRADE

SCORE

(out of 15)

GRADE	SCORE RANGE
A	or higher
B	
C	
D	
F	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.

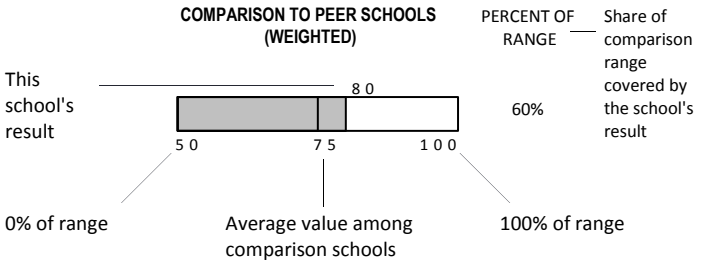
School Survey Results

	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
Academic Expectations	8.4	6.4 – 7.5 – 8.6 (8.4)	90.9%	6.5 – 7.6 – 8.7 (8.4)	86.4%	.	.
Communication	8.7	5.2 – 6.6 – 8.0 (8.7)	100.0%	5.4 – 6.7 – 8.0 (8.7)	100.0%	.	.
Engagement	8.0	5.5 – 6.8 – 8.1 (8.0)	96.2%	5.7 – 6.9 – 8.1 (8.0)	95.8%	.	.
Safety and Respect	8.0	5.6 – 6.9 – 8.2 (8.0)	92.3%	5.8 – 7.2 – 8.6 (8.0)	78.6%	.	.
Attendance Rate	84.9%	78.7% – 85.0% – 91.3% (84.9%)	49.2%	76.2% – 87.0% – 97.8% (84.9%)	40.3%	.	.

TOTAL POINTS	15.00

How To Interpret These Charts

To determine the number of points earned, this school's 2012-13 results on each metric are compared to the 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 from historical results 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 3.75 = 2.44

GRADE

SCORE

(out of 10)

GRADE	SCORE RANGE
A	or higher
B	
C	
D	
F	or lower

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

These metrics measure the percentage of students in the 2011 and 2013 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 2013. Students from the 2011 cohort also count positively if they enroll and persist in college through the beginning of their third semester.

	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
Four-Year Non-Remediation Index (n = 0)	.	0.0% 14.9% 29.8%	.	0.0% 23.3% 46.6%	.	.	.
College Readiness Rate (including persistence) (n = 0)	.	25.9% 43.8% 61.7%	.	9.6% 50.4% 91.2%	.	.	.

Postsecondary Enrollment Rate

These metrics measure the percentage of students in the 2011 and 2013 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, 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
Postsecondary Enrollment Rate - 6 Months (n = 0)	.	28.0% 47.7% 67.4%	.	16.6% 54.2% 91.8%	.	.	.
Postsecondary Enrollment Rate - 18 Months (n = 0)	.	37.8% 57.2% 76.6%	.	29.8% 62.4% 95.0%	.	.	.

College and Career Prepatory Course Index

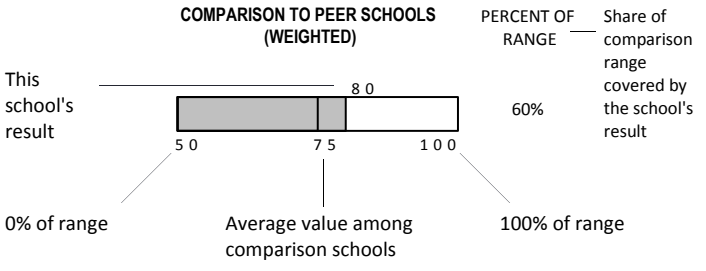
This metric measures the percentage of students in the 2013 cohort (all students who entered high school four years earlier) who have successfully completed approved rigorous courses and assessments (please see the Additional Information page for more information on this index).

	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 = 0)	.	0.0% 27.2% 54.4%	.	0.0% 38.3% 76.6%	.	.	.

TOTAL POINTS 10.00

How To Interpret These Charts

To determine the number of points earned, this school's 2012-13 results on each metric are compared to the 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 from historical results 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 PEER RANGE X 0.25) X POINTS POSSIBLE = POINTS EARNED

EXAMPLE (60% X 0.75 + 80% X 0.25) X 3.75 = 2.44

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 eight 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=)	.	.	0.018	.	.
Self-Contained / ICT / SETSS (n=)	.	.	0.020	.	.
All Students in the Lowest Third Citywide (n=)	.	.	0.013	.	.
Black / Hispanic Males in the Lowest Third Citywide (n=)	.	.	0.028	.	.
College and Career Readiness					
Students in the Lowest Third Citywide, CCPCI* (n=)	.	.	0.151	.	.
Students in the Lowest Third Citywide, Four-year CRI** (n=)	.	.	0.501	.	.
Students in the Lowest Third Citywide, PER† by Six Months After High School (n=)	.	.	0.049	.	.
Movement from SC / ICT / SETSS to Less Restrictive Environments (n=20)	2.10	15.5%	0.062	.	.

*CCPCI = College and Career Preparatory Course Index
**CRI = College Readiness Index
†PER = Postsecondary Enrollment Rate

TOTAL POINTS

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. Each high school has up to 40 peer schools.

PEER GROUP CALCULATION

Peer groupings are created using a "nearest neighbor" matching methodology. This methodology examines the mathematical difference between a school and all potential peers on a given set of characteristics. Schools with the smallest difference across all the characteristics are peered together.

PEER GROUP FOR: **The Brooklyn School for Math and Research**

DBN	SCHOOL	AVERAGE ENGLISH PROFICIENCY	AVERAGE MATH PROFICIENCY	%STUDENTS WITH DISABILITIES	%SELF-CONTAINED	%OVERAGE
32K168	**The Brooklyn School for Math and Research**	**2.64**	**2.99**	**21.7%**	**10.1%**	**10.1%**
02M296	High School of Hospitality Management	2.64	2.88	19.5%	10.0%	7.5%
02M300	Urban Assembly School of Design and Construction, The	2.67	2.87	22.7%	8.1%	7.4%
02M399	The High School for Language and Diplomacy	2.67	3.01	19.7%	9.0%	6.3%
02M425	Leadership and Public Service High School	2.68	2.80	20.8%	11.3%	10.8%
02M520	Murry Bergtraum High School for Business Careers	2.68	2.82	17.3%	8.6%	10.4%
02M533	Union Square Academy for Health Sciences	2.77	3.11	20.2%	9.7%	8.9%
02M580	Richard R. Green High School of Teaching	2.65	2.80	25.8%	7.8%	9.3%
02M655	Life Sciences Secondary School	2.68	2.91	19.4%	6.8%	7.0%
03M403	The Global Learning Collaborative	2.63	2.77	23.5%	8.8%	8.5%
03M492	High School for Law, Advocacy and Community Justice	2.68	2.83	17.7%	8.8%	10.6%
03M494	High School of Arts and Technology	2.65	2.87	22.7%	8.8%	10.6%
08X269	Bronx Studio School for Writers and Artists	2.66	2.76	22.4%	8.3%	12.5%
08X367	Archimedes Academy for Math, Science and Technology Applicati	2.59	2.78	22.6%	12.3%	9.9%
09X250	Eximius College Preparatory Academy: A College Board School	2.66	2.84	22.1%	9.9%	8.1%
09X252	Mott Hall Bronx High School	2.62	2.90	21.3%	12.5%	6.3%
09X263	Validus Preparatory Academy: An Expeditionary Learning School	2.55	2.78	20.2%	9.2%	8.4%
10X237	The Marie Curie School for Medicine, Nursing, and Health Professi	2.69	2.90	19.6%	8.5%	8.1%
10X284	Bronx School of Law and Finance	2.62	2.79	22.6%	11.5%	13.2%
10X374	Knowledge and Power Preparatory Academy International High Sc	2.67	2.91	17.6%	7.5%	8.9%
10X437	Fordham High School for The Arts	2.67	2.83	23.4%	11.2%	7.0%
10X546	Bronx Theatre High School	2.63	2.70	20.6%	9.6%	8.9%
11X275	High School of Computers and Technology	2.57	2.84	23.6%	9.4%	8.5%
11X299	Astor Collegiate Academy	2.68	2.85	24.6%	11.4%	6.1%
11X508	Bronxdale High School	2.63	2.79	20.3%	9.5%	7.2%
12X242	Mott Hall V	2.67	3.12	23.2%	8.1%	6.6%
12X267	Bronx Latin	2.60	2.86	25.4%	11.3%	12.1%
13K350	Urban Assembly High School of Music and Art	2.62	2.71	22.6%	9.7%	11.8%
13K499	ACORN Community High School	2.59	2.71	21.9%	11.4%	10.7%
13K605	George Westinghouse Career and Technical Education High School	2.66	2.78	19.2%	9.3%	7.1%
14K558	Williamsburg High School for Architecture and Design	2.66	2.90	22.3%	7.3%	5.6%
15K463	Secondary School for Journalism	2.63	2.73	19.5%	10.3%	8.2%
19K615	Transit Tech Career and Technical Education High School	2.60	2.81	20.2%	10.1%	6.6%
20K445	New Utrecht High School	2.66	3.01	18.5%	8.5%	10.4%
21K559	Life Academy High School for Film and Music	2.65	2.75	19.7%	8.3%	10.2%
23K697	Teachers Preparatory High School	2.69	2.80	18.9%	11.2%	8.5%
24Q485	Grover Cleveland High School	2.65	2.88	16.0%	8.0%	9.3%
27Q475	Richmond Hill High School	2.62	2.79	17.9%	8.0%	9.4%
30Q450	Long Island City High School	2.70	2.97	17.0%	8.6%	8.7%
31R450	Curtis High School	2.73	2.82	19.7%	10.7%	6.6%
84X553	New Visions Charter High School for The Humanities	2.62	2.74	23.8%	9.6%	7.1%
	PEER GROUP AVERAGES	2.65	2.85	20.9%	9.5%	8.8%

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 2012-13 school year.

Regents Exams

Includes all students in the high school who took the respective exams in January, June or August 2013.

		Average Score	% passing	% at College Ready Threshold for Exam
Mathematics:	Integrated Algebra (n = 57)	69	70%	21%
	Geometry (n = 21)	76	100%	29%
	Algebra 2/Trigonometry (n = 15)	71	60%	33%
ELA:	Comprehensive English (n = 43)	71	81%	40%
	U.S. History (n = 43)	78	88%	.
Social Studies:	Global History (n = 0)	.	.	.
	Chemistry (n = 0)	.	.	.
Science:	Physics (n = 9)	.	.	.
	Earth Science (n = 0)	.	.	.
	Living Environment (n = 27)	74	82%	.
Languages:	Languages Other Than English (n = 0)	.	.	.

College Exams

Calculated as highest result for the 2013 four-year graduation cohort anytime during their high school career.

		Average Score	% of 4-year Cohort Taking	% at College Ready Threshold for Exam
SAT:	Mathematics (n = 0)	.	.	.
	Critical Reading (n = 0)	.	.	.
	Writing (n = 0)	.	.	.
ACT:	Mathematics (n = 0)	.	.	.
	English (n = 0)	.	.	.
	Reading (n = 0)	.	.	.
	Science (n = 0)	.	.	.
CUNY:	Math 1 (n = 0)	.	.	.
	Math 2 (n = 0)	.	.	.
	Reading (n = 0)	.	.	.
	Writing (n = 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	.	.
CUNY	.	.
NYS Public	.	.
NYS Private	.	.
Out-of-State	.	.
Public Service	.	.
Vocational Program	.	.

	% of 4-year Cohort	% of 6-year Cohort
College Readiness Index (counting positively requires ALL thresholds)	.	.
% attaining Regents Diploma	.	.
% attaining Math College Readiness Standard	.	.
% attaining English College Readiness Standard	.	.

	% of 4-year Cohort
College and Career Preparatory Course Index	.
% scoring 65+ on the Algebra II, Math B, Chemistry or Physics Regents Exam	.
% scoring 3+ on any Advanced Placement (AP) Exam	.
% scoring 4+ on any International Baccalaureate (IB) Exam	.
% earning a diploma with a Career and Technical Education (CTE) Endorsement	.
% passing an industry-recognized technical assessment	.
% earning a diploma with an Arts endorsement	.
% earning a grade of "C" or higher in a course for college credit	.
% passing another course certified by the DOE as college- and career-ready	.