Department of Education
Dennis M. Walcott, Chancellor

Progress Report 2011-12

The Math & Science Exploratory School

PRINCIPAL: Dawn Faraj

DBN: 15K447
ENROLLMENT: 491
SCHOOL TYPE: Middle
PEER INDEX*: 3.13

*See p. 6 for more details on Peer Index.

PROGRESS REPORT

A

OVERALL SCORE **68.9** out of 100

OVERALL PERCENTILE **80** This school's overall score is greater than or equal to that of 80 percent of middle schools.

For elementary, middle, and K-8 schools, the percent of schools receiving top grades was set in advance. Schools with average English and Math performance in the top third citywide cannot receive a grade lower than a C. Schools in their first year, in phase out, or with fewer than 25 students with progress results receive a report with no grade or score.

Progress Report Grades - Middle

GRADE	SCORE RANGE	% OF SCHOOLS
A	65.5 or higher	25% of schools
B	51.7 - 65.4	35% of schools
C	36.3 - 51.6	32% of schools
D	23.2 - 36.2	6% of schools
F	23.1 or lower	3% of schools

QUALITY REVIEW

WD

Well Developed (2007-08)

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

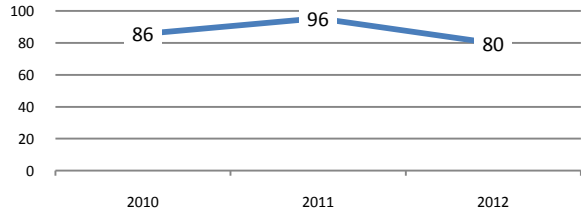
Overview

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	**31.6** out of 60	**B**	Student Progress measures how much individual students improved on state tests in English and Math between 2011 and 2012, compared to other students who started at the same level.
Student Performance	**24.0** out of 25	**A**	Student Performance measures student results on the 2012 state tests in English and Math.
School Environment	**9.6** out of 15	**B**	School Environment measures student attendance and a survey of the school community rating academic expectations, safety and respect, communication, and engagement.
Closing the Achievement Gap	**3.6** (17 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	**68.9** out of 100	**A**	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:



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: **Reward**

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 31.6

(out of 60)

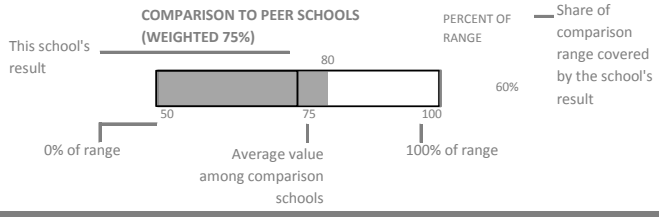
GRADE	SCORE RANGE
A	39.3 or higher
B	31.0 - 39.2
C	21.7 - 30.9
D	13.9 - 21.6
F	13.8 or lower

Student Progress represents 60% of the total score. The grade is based on growth percentiles, a measure of how much individual students improved on state tests in English and Math between 2011 and 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
English							
Median Adjusted Growth Percentile (n=477)	68.0	54.2 – 66.4 – 78.6 (68.0)	56.6%	46.7 – 62.0 – 77.3 (68.0)	69.6%	15.00	8.98
Median Adjusted Growth Percentile for School's Lowest Third (n=183)	73.0	60.1 – 72.2 – 84.3 (73.0)	53.3%	58.2 – 72.4 – 86.6 (73.0)	52.1%	15.00	7.95
Mathematics							
Median Adjusted Growth Percentile (n=478)	62.0	47.8 – 63.7 – 79.6 (62.0)	44.7%	35.6 – 58.3 – 81.0 (62.0)	58.1%	15.00	7.21
Median Adjusted Growth Percentile for School's Lowest Third (n=162)	66.0	50.4 – 66.1 – 81.8 (66.0)	49.7%	46.6 – 65.8 – 85.0 (66.0)	50.5%	15.00	7.49
				TOTAL POINTS		60.00	31.63

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 schools serving the same grade levels citywide. The comparison to peer schools is worth 75% of the points for each metric and the comparison to all schools citywide is worth 25% of the points. The bars represent the range of results for the peer and city comparison schools for 2009-10 and 2010-11 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	15	=	9.75

GRADE **A**

SCORE 24.0 (out of 25)

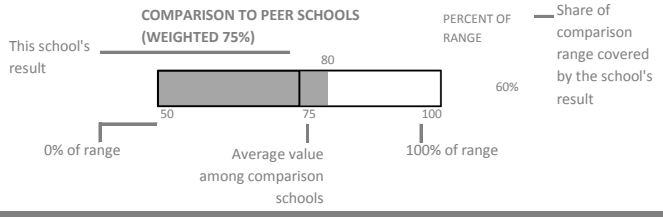
GRADE	SCORE RANGE
A	16.3 or higher
B	12.9 - 16.2
C	9.0 - 12.8
D	5.8 - 8.9
F	5.7 or lower

Student Performance represents 25% of the total score. The Student Performance grade is based on results on the 2012 state tests in English and Math and core course pass rates. State test metrics evaluate the percent of students who reach or exceed proficiency (Level 3 and 4) and students' average proficiency rating. Core course pass rates look at the percent of students in 6th through 8th grade who passed a course in a core subject area.

	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
English							
Percentage of Students at Level 3 or 4 (n=482)	83.0%	39.9% – 61.0% – 82.1% (83.0%)	100.0%	0.0% – 34.3% – 68.6% (83.0%)	100.0%	5.00	5.00
Average Student Proficiency (n=482)	3.31	2.78 – 3.05 – 3.32 (3.31)	98.1%	2.11 – 2.69 – 3.27 (3.31)	100.0%	5.00	4.93
Mathematics							
Percentage of Students at Level 3 or 4 (n=483)	93.0%	56.8% – 76.3% – 95.8% (93.0%)	92.8%	4.0% – 48.9% – 93.8% (93.0%)	99.1%	5.00	4.72
Average Student Proficiency (n=483)	3.79	3.12 – 3.50 – 3.88 (3.79)	88.2%	2.21 – 3.01 – 3.81 (3.79)	98.8%	5.00	4.54
Percent of Students Passing a Core Course							
English (n=483)	99.0%	81.2% – 94.4% – 100.0% (99.0%)	94.7%	69.5% – 88.9% – 100.0% (99.0%)	96.7%	1.25	1.19
Math (n=483)	99.4%	75.7% – 93.7% – 100.0% (99.4%)	97.5%	66.5% – 87.3% – 100.0% (99.4%)	98.2%	1.25	1.22
Science (n=483)	99.4%	73.6% – 93.3% – 100.0% (99.4%)	97.7%	67.7% – 88.4% – 100.0% (99.4%)	98.1%	1.25	1.22
Social Studies (n=483)	99.4%	78.6% – 94.2% – 100.0% (99.4%)	97.2%	68.3% – 88.5% – 100.0% (99.4%)	98.1%	1.25	1.22
					TOTAL POINTS	25.00	24.04

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 schools serving the same grade levels citywide. The comparison to peer schools is worth 75% of the points for each metric and the comparison to all schools citywide is worth 25% of the points. The bars represent the range of results for the peer and city comparison schools for 2009-10 and 2010-11 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 **B**

SCORE 9.6

(out of 15)

GRADE	SCORE RANGE
A	9.8 or higher
B	7.7 - 9.7
C	5.4 - 7.6
D	3.4 - 5.3
F	3.3 or lower

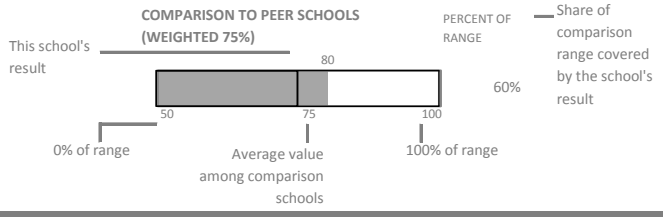
School Environment represents 15% of the total score. The School Environment grade is based on student attendance and results of the NYC School Survey, on which parents and teachers rate academic expectations, safety and respect, communication, and engagement.

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	8.1	8.1 (6.8 – 7.8 – 8.8)	65.0%	8.1 (6.7 – 7.8 – 8.9)	63.6%	2.50	1.62
Communication	7.4	7.4 (5.8 – 6.9 – 8.0)	72.7%	7.4 (5.6 – 6.9 – 8.2)	69.2%	2.50	1.80
Engagement	7.6	7.6 (6.1 – 7.3 – 8.5)	62.5%	7.6 (5.9 – 7.2 – 8.5)	65.4%	2.50	1.58
Safety and Respect	7.8	7.8 (6.5 – 7.6 – 8.7)	59.1%	7.8 (6.0 – 7.4 – 8.8)	64.3%	2.50	1.51
Attendance Rate	95.6%	95.6% (92.6% – 95.3% – 98.0%)	55.6%	95.6% (86.3% – 92.2% – 98.1%)	78.8%	5.00	3.07
					TOTAL POINTS	15.00	9.58

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 schools serving the same grade levels citywide. The comparison to peer schools is worth 75% of the points for each metric and the comparison to all schools citywide is worth 25% of the points. The bars represent the range of results for the peer and city comparison schools for 2009-10 and 2010-11 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	2.5	=	1.63

Schools receive additional credit for exceptional gains by students with disabilities, English Language Learners, and students starting with the lowest proficiency citywide. 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. Elementary schools are eligible for points on 16 additional credit metrics while middle and K-8 schools are eligible for points on up to 17 metrics, each of which is worth up to one point. (In the table below, "." in "This School's Results" indicates that a school has fewer than 5 eligible students in one of the categories.)

CATEGORY	THIS SCHOOL'S RESULTS	POPULATION PERCENTAGE	FIXED POINT VALUE	POINTS POSSIBLE	POINTS EARNED
Percent at Level 3 or 4					
English					
Self-Contained (n=4)	.	.	0.326	0.00	.
Integrated Co-Teaching (ICT) (n=72)	44.4%	14.9%	0.113	1.00	0.75
Special Education Teacher Support Services (SETSS) (n=16)	50.0%	3.3%	0.174	1.00	0.29
Mathematics					
Self-Contained (n=4)	.	.	0.119	0.00	.
Integrated Co-Teaching (ICT) (n=72)	72.2%	14.9%	0.065	1.00	0.70
Special Education Teacher Support Services (SETSS) (n=16)	81.3%	3.3%	0.103	1.00	0.28
Percent at 75th Growth Percentile or Higher					
English					
English Language Learners (n=13)	61.5%	2.7%	0.021	1.00	0.04
Lowest Third Citywide (n=25)	60.0%	5.2%	0.013	1.00	0.04
Self-Contained/ICT/SETSS (n=92)	51.1%	19.3%	0.022	1.00	0.22
Black and Hispanic Males in Lowest Third Citywide (n=11)	63.6%	2.3%	0.026	1.00	0.04
Mathematics					
English Language Learners (n=13)	38.5%	2.7%	0.019	1.00	0.02
Lowest Third Citywide (n=32)	68.8%	6.7%	0.016	1.00	0.07
Self-Contained/ICT/SETSS (n=92)	58.7%	19.2%	0.028	1.00	0.32
Black and Hispanic Males in Lowest Third Citywide (n=13)	69.2%	2.7%	0.035	1.00	0.07
Movement from SC/ICT/SETSS to Less Restrictive Environments (n=88)	0.22	17.9%	0.040	1.00	0.16
English Language Learner Progress (n=4)	.	.	0.039	0.00	.

	THIS SCHOOL'S RESULTS	COMPARISON TO PEER SCHOOLS (WEIGHTED 75%)	PERCENT OF PEER RANGE	COMPARISON TO CITY SCHOOLS (WEIGHTED 25%)	PERCENT OF CITY RANGE		
Percent of 8th Graders Earning High School Credit (n=160)	39.4%	0.0% 38.7% 39.4% 77.4%	50.9%	0.0% 22.3% 39.4% 44.6%	88.3%	1.00	0.60

TOTAL POINTS 3.6

SPECIAL RECOGNITION

Green School Award

PEER INDEX CALCULATION

The Peer Index sorts schools according to incoming proficiency and demographics. A lower Peer Index indicates a higher need population. The Peer Index operates on a 1.0 to 4.5 scale and is calculated using the following formula:

FORMULA	(	Average 4th grade English and Math proficiency	)	-	(	2	x	% students with disabilities	)	=	PEER INDEX
FOR THIS SCHOOL	(	3.56	)	-	(	2	x	21.4%	)	=	3.13

PEER GROUP FOR: The Math & Science Exploratory School

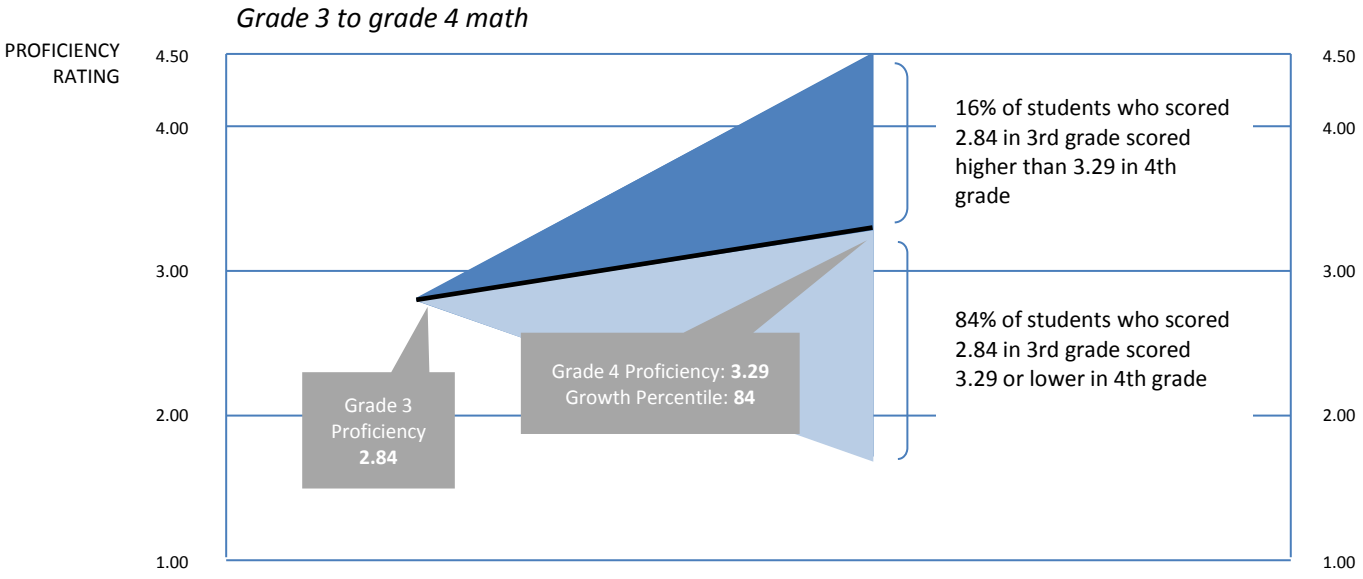
Each school's performance is compared to the performance of schools in its peer group. Peer schools are those New York City public schools with a student population most like this school's population, according to the Peer Index. Each elementary and middle school has up to 40 peer schools and each K-8 school has up to 30 peer schools.

DBN	SCHOOL	PEER INDEX	AVERAGE ENGLISH AND MATH PROFICIENCY	% STUDENTS WITH DISABILITIES
25Q237	I.S. 237	2.96	3.21	12.3%
25Q294	BELL Academy	2.96	3.36	19.9%
31R024	I.S. 024 Myra S. Barnes	2.99	3.37	19.0%
31R034	I.S. 034 Tottenville	3.00	3.39	19.4%
27Q137	M.S. 137 America's School of Heroes	3.00	3.21	10.3%
23K522	Mott Hall IV	3.00	3.15	7.3%
20K030	I.S. 30 Mary White Ovington	3.01	3.22	10.3%
25Q189	J.H.S. 189 Daniel Carter Beard	3.01	3.24	11.4%
03M862	Mott Hall II	3.02	3.36	16.7%
28Q896	Young Women's Leadership School, Queens	3.04	3.18	7.3%
02M104	J.H.S. 104 Simon Baruch	3.06	3.39	16.5%
30Q227	I.S. 227 Louis Armstrong	3.06	3.34	14.2%
24Q119	I.S. 119 The Glendale	3.07	3.41	17.1%
28Q284	York Early College Academy	3.07	3.33	13.0%
25Q252	Queens School of Inquiry, The	3.08	3.37	14.4%
14K318	I.S. 318 Eugenio Maria De Hostos	3.08	3.31	11.4%
02M167	J.H.S. 167 Robert F. Wagner	3.08	3.39	15.4%
19K452	Frederick Douglass Academy VIII Middle School	3.09	3.22	6.3%
03M245	M.S. M245 The Computer School	3.11	3.40	14.2%
31R007	I.S. 007 Elias Bernstein	3.12	3.41	14.2%
15K447	**The Math & Science Exploratory School**	**3.13**	**3.56**	**21.4%**
25Q185	J.H.S. 185 Edward Bleeker	3.13	3.38	12.3%
02M413	School of the Future High School	3.14	3.44	15.4%
25Q025	I.S. 025 Adrien Block	3.14	3.46	15.8%
25Q194	J.H.S. 194 William Carr	3.15	3.40	12.5%
20K201	J.H.S. 201 The Dyker Heights	3.16	3.38	10.9%
30Q286	Young Women's Leadership School, Astoria	3.16	3.28	5.8%
02M289	I.S. 289	3.20	3.54	17.1%
25Q281	East-West School of International Studies	3.22	3.42	10.2%
08X101	M.S. X101 Edward R. Byrne	3.23	3.48	12.1%
22K555	Brooklyn College Academy	3.24	3.30	3.3%
04M610	Young Women's Leadership School	3.25	3.39	6.8%
26Q172	Irwin Altman Middle School 172	3.26	3.53	13.5%
19K409	East New York Family Academy	3.26	3.32	2.8%
17K543	Science, Technology and Research Early College High School at Er	3.29	3.33	2.4%
04M224	M.S. 224 Manhattan East School for Arts & Academics	3.29	3.46	8.5%
26Q216	J.H.S. 216 George J. Ryan	3.30	3.51	10.7%
26Q158	M.S. 158 Marie Curie	3.36	3.60	11.8%
17K340	I.S. 340	3.38	3.53	7.4%
15K051	M.S. 51 William Alexander	3.40	3.62	10.8%
26Q074	J.H.S. 074 Nathaniel Hawthorne	3.42	3.70	14.0%
	PEER GROUP AVERAGES	3.14	3.38	12.1%

The Progress Report for elementary and middle schools focuses on students' growth to proficiency and beyond, regardless of their starting point. The Progress Report measures individual students' growth on state English and Math tests using growth percentiles.

1 GROWTH PERCENTILES

A student's growth percentile compares his or her growth to the growth of all students in the City who started at the same level of proficiency the year before. It is a number between 0 and 100 which represents the percentage of students with the same score on last year's test who scored the same or lower than the student on this year's test. For example, a student with a growth percentile of 84 earned a score on this year's test that was the same or higher than 84 percent of the students in the City who had the same score as he did last year.



2 ADJUSTED GROWTH PERCENTILES

To evaluate a school on its students' growth percentiles, the Progress Report uses an adjusted growth percentile. Growth percentile adjustments are based on students' demographic characteristics and reflect average differences in growth compared to students with the same starting proficiency level. The adjustments are made to students' ending proficiency rating as follows:

CATEGORY	ADJUSTMENT
Students with Disabilities (Self-contained)	+0.25
Students with Disabilities (ICT)	+0.15
Students with Disabilities (SETSS)	+0.10
Economic Need Index (per 0.10)	+0.005

Note: "Students with Disabilities" for purposes of adjustments is based on the most restrictive setting of students over the last four school years.

3 MEDIAN ADJUSTED GROWTH PERCENTILES

The Progress Report evaluates a school based on its median adjusted growth percentile, the adjusted growth percentile of the middle student when all the students' adjusted growth percentiles are listed from lowest to highest.

This page provides more granular data on students' state exam scores and the percent of 8th grade students earning high school credit. It disaggregates these scores by grade and subject for 2011-12 and deconstructs the high school credit metric. While the numbers here do not individually count for points, the detailed deconstruction should provide deeper insight into 2011-12 student performance.

State Exam Scores by Grade	AVERAGE STUDENT PROFICIENCY	PERCENTAGE OF STUDENTS AT LEVEL 3 OR LEVEL 4	MEDIAN ADJUSTED GROWTH PERCENTILE
Mathematics			
6th Grade (n = 160)	3.78	90.6%	66.0
7th Grade (n = 163)	3.88	94.5%	73.5
8th Grade (n = 160)	3.72	93.8%	42.0
English			
6th Grade (n = 160)	3.31	84.4%	71.0
7th Grade (n = 162)	3.32	84.6%	66.0
8th Grade (n = 160)	3.29	80.0%	68.0
Science			
8th Grade (n = 158)	3.78	91.8%	.

Incoming Proficiencies by Subject	AVERAGE MATHEMATICS STUDENT PROFICIENCY	AVERAGE ENGLISH STUDENT PROFICIENCY	AVERAGE SCIENCE STUDENT PROFICIENCY
Current Students While In 4th Grade	3.86	3.45	3.97

High School Readiness Indicators

% of 8th Graders Earning High School Credit

FORMULA:	(	% taking accelerated courses	) × (	% taking accelerated courses who passed	)	=	% EARNING HIGH SCHOOL CREDIT
ALL SUBJECTS:	(	39.4%	) × (	100.0%	)	=	39.4%
MATHEMATICS:	(	35.0%	) × (	100.0%	)	=	35.0%
SCIENCE:	(	0.0%	) × (	.	)	=	0.0%
LANGUAGE OTHER THAN ENGLISH:	(	2.5%	) × (	.	)	=	2.5%

	THIS SCHOOL'S RESULTS	PEER AVERAGE	CITY AVERAGE
Phase-In Metric			
9th Grade Credit Accumulation of Former 8th Graders (n = 154)	95.0%	90.0%	78.0%