STUDENT PERFORMANCE REPORT

Irvington Union Free School District

Report to the Board of Education November 2019

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Monitoring Student Growth

- Standardized test data is one important measure of student achievement and does not necessarily demonstrate growth
- State tests have some limits to their value:
 - Represents performance on a given day(s)
 - Cohort sizes impact comparisons
 - Consistent changes in test models, scale and cut scores & curriculum standards
- The District utilizes multiple means of assessment to measure progress including:
 - Teacher observation
 - Regular, formative assessment
 - Common unit assessments
 - Teacher-made assessments
 - Benchmark assessments, universal screener
 - Student self-reflection
 - Student choice/participation in electives
- Value of dispositional learning: 21st Century Skills & Habits of Mind
- Rich extracurricular opportunities such as arts, music, athletics, and clubs

Executive Summary

Irvington Schools continue to perform at very high levels

- 96% of 2019 class received Regents Diplomas
- SAT scores A new format was used in 2018 the categories are:
 - Reading and Writing 18% higher than US average
 - Math 21% higher
 - Total 19% higher
- ACT score 25% higher than national average
- 20 AP Class offerings: 87% students passed with 3+, 54% of all exam-takers received 4 or 5

A National View of Testing Trends

Stanford University's Educational Opportunity Project

 Utilizing the the Stanford Education Data Archive (SEDA), the Educational Opportunity Project performed analyses of standardized achievement tests in English-Language Arts and Mathematics for 2008-9 - 2015-16

🚹 Average test scores

The educational opportunities available in a community, both in and out of school, are reflected in students' average test scores.

Average test scores are influenced by children's opportunities to learn at home, in neighborhoods, in childcare, preschool, and after-school programs, from peers and friends, and at school. Average test scores therefore reflect the total set of educational opportunities available in a community.

_-- Learning rates

The contribution of schools to educational opportunity is reflected in the growth of test scores while children attend school.

Learning rates measure how much scores improve each year while students are in school. They are a better indicator of school quality than average test scores, which are influenced by a range of experiences outside of school.

📁 Trends in test scores

The change in a community's educational opportunities, both in and out of school, is reflected in average test score gains or losses.

Trends in test scores reflect both changes in school quality and changes in family and community features that provide opportunities for children.

Educational Opportunity

Educational Opportunity Vs. School District Socioeconomic Status

U.S. districts, all students, grades 3 - 8 from 2009 - 2016, sized by number of students



Average Test Scores

Stanford University's Educational Opportunity Project: Average Test Scores

Irvington Union Free School District, New York provides higher than average educational opportunities. Average test scores are 2.50 grade level(s) above the national average. Socioeconomic status is far above the national average. Average scores are 0.44 grade levels higher than those of districts with similar socioeconomic status.

Average scores are influenced by opportunities to learn at home, in neighborhoods, in child-care, preschool, and after-school programs, from peers and friends, and in schools. Because of all these influences, average test scores are not a good way to assess how much children learn in schools. But they are a good way to assess the average set of educational opportunities available to children in a community. Where average scores are low, students have fewer opportunities to learn. Schools are better evaluated using learning rates, which measure how much student scores improve while they are in school.

Data Tells a Story and Informs Goals

By Demographic Group

The bars in this section show Average Test Scores for various demographic groups in Irvington Union Free School District, New York. The middle line in each bar represents the national average for all students; bars to the left of the line show scores below the national average, and bars to the right of the line show scores above the national average.



Stanford University's Educational Opportunity Project: Learning Rates

Irvington Union Free School District, New York provides roughly average educational opportunities while children are in school. Students learn 24% more each grade than the U.S. average. Socioeconomic status is far above the national average. Learning rates are 10.92% higher than those of districts with similar socioeconomic status.

Learning rates measure how much students' scores improve each year while they are in school. This is a better way to assess what children learn in schools than average test scores, which are heavily influenced by factors outside of school. To understand the distinction, think of a hospital: We wouldn't assess a hospital based on the health of its patients; rather, we'd judge it on how much the health of patients improves as a result of their time in the hospital. Similarly, we shouldn't evaluate a school based on the average scores of its students, but rather by how much their test scores improve while in school.

Stanford University's Educational Opportunity Project: Trends in Test Scores

Irvington Union Free School District, New York shows improving educational opportunity. Test scores increased an average of 0.13 grade levels each year from 2009-2016. Socioeconomic status is far above the national average. Average scores have increased by 0.07 grade levels more than those of districts with similar socioeconomic status.

Average student test scores are influenced by home environments, early childhood experiences, community resources, and schools. The trend (or change) in average student test scores from one year to the next indicates whether educational opportunities are improving or declining in a community. Where the trend is positive, students' opportunities to learn are improving. Opportunities may improve over time because of changes in school quality or because of changes in family resources, home environments, early childhood experiences, and/or community resources.

Another Window Into Success Scholar Athlete Recognition

NYS Scholar Athlete = 90 or higher GPA

- 2002-03: 14 Teams Honored, 4 Teams with Top Student Averages in the Group
- 2003-04: 16 Teams Honored, 2 Teams with NYS Highest GPA, 4 League Champions
- 2004-05: 14 Teams Honored, 3 Teams with NYS Highest GPA, 2 League Champions
- 2005-06: 14 Teams Honored
- 2007-08: 20 recognized as NYS Scholar Athlete teams. Boys Bowling and Boys Soccer highest GPA in NYS for their sport
- 2008-09: 24 recognized as NYS Scholar Athlete teams. Boys and Girls Track teams highest GPA in NYS for their sport
- 2009-10: 22 recognized as NYS Scholar Athlete teams. Girls cross country, bowling and softball teams highest GPA in NYS for their sport
- 2010-11: 20 recognized as NYS Scholar Athlete teams. Three teams with highest average GPA in NYS for their sport
- 2011-12: 22 out of 27 Varsity Teams Recognized as NYS Scholar Athlete teams (90 or higher GPA). Two teams with highest average GPA in NYS for their sport
- 2012-13: 22 out of 27 Varsity Teams Recognized as NYS Scholar Athlete teams (90 or higher GPA). Two teams with highest average GPA in NYS for their sport
- 2013-14: 21 out of 27 Varsity Teams Recognized as NYS Scholar Athlete teams (90 or higher GPA). Three teams with highest average GPA in NYS for their sport

- 2014-15: 16 varsity teams honored as NYS Scholar Athlete teams (above 90 avg.) and 1 team was a NYS Scholar Athlete Champion as highest GPA's in the state
- 2015-16: 6 varsity teams recognized as NY State Scholar Athlete Team Champions, highest GPA for their sport in the state; 14 varsity teams in all were recognized as State Scholar Athlete teams_with an average GPA of 90 or above.
- 2016-17: 227 varsity students achieved status as NY State Scholar Athletes with a average GPA of 90 or above during their sports season. 21 varsity teams were recognized by NY State as Scholar Athlete Teams. This means that 75% of the entire team roster had a 90 or better average. As a result of having 21 of 24 teams with a 90 average or better, NYSPHSAA recognized Irvington as a School of Excellence for having at least 75% of all varsity teams achieve Scholar Athlete Team status.
- 2017-18: 235 varsity students achieved status as NY State Scholar Athletes with an average GPA of 90 or above during their sports season. 24 teams were recognized by NY State as Scholar Athlete teams. This means that 75 % of the entire roster had a 90 or better average.
- 2018-19: Irvington High School had 26/28 teams recognized as a Scholar-Athlete team. To receive Scholar-Athlete Team Status, the team's average GPA for 75% of the roster must be greater than or equal to 90.00. This qualifies Irvington High School to be a School of Excellence.

Opportunities

- The District continues to use test data as one tool to inform our work
- Data is used to lead meaningful discussions to target cohort needs and inform curriculum design
 - Data use continues to increase across the District
- The District has focused on deepening instruction and aligning curricula this work will continue to enhance student achievement
- The District's focus on Professional Learning has had positive impacts on student growth
- Data usage continues to increase at all levels to help inform instruction

<u>Note</u>:

State test data does not necessarily depict growth but demonstrates achievement on the particular test

Executive Summary – Standardized Tests

- Irvington English Language Arts scores rank among the top 3 in our measured cohort of schools for grades 6-8; we continue to see improvement from our efforts in this area
- For Math standardized tests, our IMS 8th grade scores are impacted by the cohort of students taking the advanced level course (Algebra) as they take the Algebra Regents instead
- Regents Scores (% passing):

Algebra I 94%	English 94%	Earth Science 89%
Algebra II 94%	NF Global History 96% Transition Global History 32%	Living Environment 96%
Geometry 99%	US History 93%	Chemistry 96%

Executive Summary – Standardized Tests

- Teachers utilize released questions to aid in the planning of instruction
- Use data reports to identify which standards posed challenges for individual students
- Informs small group and whole group instruction
- In math, use data at math learning sessions
- Interventionists target support using data
- Team meeting time used to review data

New York State Tests English Language Arts & Mathematics

2019 English Language Arts Scores





2019 Mathematics Scores





Comparative Data Grade 3 - 8 Tests & Regents Exams

Comparison Data

To better understand how Irvington students performed in context of comparative districts, the following slides include data for the following districts:

- Ardsley
- Blind Brook
- Briarcliff Manor
- Croton-Harmon

Pleasantville

Mamaroneck

Irvington

Hastings-on-Hudson

Dobbs Ferry

Rye Neck

Edgemont

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Mathematics - Grade 3 - 8

2019 Math - Grades 3 & 4

Score Distribution vs Comparison Cohort of Westchester Schools



2019 Math - Grades 5 & 6

Score Distribution vs Comparison Cohort of Westchester Schools



2019 Math - Grades 7 & 8

Score Distribution vs Comparison Cohort of Westchester Schools



English Language Arts - Grade 3 - 8

2019 ELA - Grades 3 & 4

Score Distribution vs Comparison Cohort of Westchester Schools



2019 ELA - Grades 5 & 6

Score Distribution vs Comparison Cohort of Westchester Schools



Note: cohort comparisons rank level 3 & 4 proficiency from most proficient to least (left to right)

HUFSD

pse head upso

Dobbs Ferry UFSD

% Level 4

% Level 3

% Level 2

% Level 1

2019 ELA - Grades 7 & 8

Score Distribution vs Comparison Cohort of Westchester Schools





Science - Grades 4 & 8

2019 Science - Grades 4 & 8

2019 Score Distribution vs Comparison Cohort of Westchester Schools



Executive Summary – Grade 3 - 8 Tests

- Longitudinal data allows the District to examine trends in cohorts
- Use of RTI data supporting struggling learners
- Mean score average of MS ELA scores is among the highest of our regional cohorts:

 Edgemont 	615	 Croton-Harmon 	609
 Briarcliff 	614	 Hastings-on-Hudson 	609
 Irvington 	612	 Pleasantville 	609
 Ardsley 	612	Rye Neck	608
 Blind Brook 	610	 Dobbs Ferry 	607
Mamaroneck	610		

 Expanded use of data may introduce additional insights into student needs and curricular enhancements

Regents Exams

Executive Summary – Regents Exams

Regents Diploma		Advanced Regents Diploma					
	Examination Requirements						
A student must achieve a score of 65 or higher on five Regents exams:		A student must achieve a score of 65 or higher on nine exams:					
•	English Language Arts (ELA)	•	English Language Arts (ELA)				
•	Any mathematics exam (Algebra I, Geometry, <i>or</i> Algebra II/Trigonometry)	•	Three mathematics exams (Algebra I, Geometry, <i>and</i> Algebra II/Trigonometry)				
•	Any social studies exam (Global History and Geography <i>or</i> U.S. History and Government)	•	Any social studies exam (Global History and Geography <i>or</i> U.S. History and Government)				
•	Any science exam (Living Environment, Chemistry, Earth Science, <i>or</i> Physics)	•	Two science exams (Living Environment <i>and</i> one of the following: Chemistry, Earth Science, or Physics)				
•	Any additional Regents exam or assessment approved by the State for this purpose	•	Any additional Regents exam or assessment approved by the State for this purpose				
		•	Any Languages Other Than English (LOTE) exam				

Irvington High School Regents Diplomas Awarded

Year	Students	Graduates	Regents Diplomas
2003	94	91	82%
2004	124	123	95%
2005	138	134	97%
2006	122	119	96%
2007	141	138	92%
2008	157	145	93%
2009	172	169	99%
2010	149	146	95%
2011	155	151	96%
2012	142	142	96%
2013	150	146	97%
2014	148	146	95%
2015	134	130	95%
2016	150	146	97%
2017	130	128	95%
2018	127	124	95%
2019	137	136	96%

2019 Irvington Regents Results







2019 Algebra Regents

Score Distribution vs Comparison Cohort of Westchester Schools



2019 Geometry Regents

Score Distribution vs Comparison Cohort of Westchester Schools


2019 Science Regents



2019 Chemistry Regents



2019 U.S. History Regents



2019 Global History Regents



2019 English Regents



Executive Summary – Regents Exams

Consideration of the value/need to continue to pursue the advanced Regents Diploma

- Few colleges consider aside from NYS public institutions
- Cohort results vary, for all school districts, due to numerous factors
- Cohort size and course selection of electives impacts participation
- Departments can utilize data to inform instruction and reflect on past experiences

Advanced Placement (AP) Exams

Executive Summary - Advanced Placement

- IHS maintains open-enrollment for AP courses which increased access for all students
- The addition of numerous electives has impacted student enrollment in AP courses
- Overall, Irvington students performed well, with 87% passing (3+) at least one exam
- Of the 630 exams taken by students in 2019, 24% resulted in a 5, and 25% resulted in a 4 and 28% resulted in a 3, for overall passing of 77%

Number of AP Courses Offered

Year	# of Courses
2003	15
2004	15
2005	18
2006	17
2007	19
2008	18
2009	17
2010	17
2011	17
2012	19
2013	19
2014	17
2015	18
2016	20
2017	21
2018	21
2019	20

AP Exam – Participation and Passing Rates

Year	Enrollment	# of Exams Taken	# Passing
2003	480	231	160
2004	530	394	296
2005	550	416	291
2006	597	384	272
2007	600	410	266
2008	608	457	289
2009	611	536	329
2010	607	524	302
2011	612	505	344
2012	608	554	381
2013	594	589	368
2014	559	559	367
2015	530	525	405
2016	569	558	383
2017	540	527	377
2018	535	583	389
2019	538	630	492

2019 AP Exam Scores

Enrollment in AP classes varies significantly by program, which impacts score distribution. We continue to review programs to identify areas for improvement as well as to find new course opportunities.





Course	Number of Students						
Year	2015-2016	2016-2017	2017-2018	2018-2019			
Macro	62	49	45	54			
Micro	42	35	27	39			
Psychology	30	41	42	37			
US History	80	65	95	94			
World History	14	30	22	28			



Course	Number of Students						
Year	2015-2016	2016-2017	2017-2018	2018-2019			
Calculus AB	27	29	30	30			
Calculus BC	22	19	12	16			
Computer Science Principles				11			
Statistics	10	15	4	8			



National Passing
% 2019

Bio: 64% Chem: 54% Envir: 49%

> Red box indicates performance below National average

Course	Number of Students						
Year	2015-2016	2016-2017	2017-2018	2018-2019			
Biology	13	16	33	20			
Chemistry	36	26	33	46			
Environmental	38	26	30	28			
Physics		13	11	N/A			

90%		9	AP English				N	ational Pas	ssing	
80%					/			% 2019		
70% —	~	\searrow			/	2		Lang: 549	%	
60%			1	/	/			Litt. 4370		
50% —				\checkmark						
40%										
30%										
20% —										
10% —						2				
0%	2015	2016	2017	2019	2019					
	English L	anguage and Compo	sition — Engl	ish Literature and Co	mposition					
						Course		Number o	f Students	
						Year	2015-2016	2016-2017	2017-2018	2018-2019
						Language	34	72	104	74
						Literature	80	21	35	53





National Passing % 2019

Portfolio: 91% Music Aural: 63% Music Non-Aural: 64% Music Theory: 63%

Red box indicates performance below National average

Course	Number of Students						
Year	2015-2016	2016-2017	2017-2018	2018-2019			
2-D Design	6	1	2	N/A			
Drawing Portfolio	5	4	10				
Music Aural		2		1			
Music Non-Aural		8		6			
Music Theory		8		6			

Executive Summary – AP Exams

- Consideration of how to gain more/deeper data on AP exams & courses to better understand shifts in scores
- Future contemplation of correlation between course experiences and AP test scores
- Departments can utilize data to inform instruction and reflect on past experiences

HISTORICAL DATA

The following slides depict examples of the class of 2023 as they progressed through the Irvington Schools

Grades 3 - 8 Mathematics - Levels 3 & 4

Math – Proficient & Advanced									
Year	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8			
2014	67%	76%	75%	73%	71%	61%			
2015	63%	73%	76%	73%	64%	62%			
2016	81%	69%	72%	82%	73%	55%			
2017	77%	80%	71%	76%	75%	56%			
2018	83%	76%	82%	71%	74%	59%			
2019	80%	75%	76%	84%	77%	79%			

Historical View: Class of 2023 Performance Grades 3-8



Grades 3 - 8 English Language Arts - Levels 3 & 4

ELA – Proficient & Advanced									
Year	Grade 3	ade 3 Grade 4 Grade 5 Grade 6 Grade 7 Grade							
2014	63%	64%	67%	60%	63%	57%			
2015	52%	68%	63%	66%	59%	76%			
2016	78%	66%	63%	68%	73%	75%			
2017	66%	74%	64%	69%	82%	73%			
2018	72%	69%	73%	76%	75%	68%			
2019	76%	72%	60%	79%	67%	85%			

2013 & 2014 represent new cut scores and scale scoring for Grades 3-8

Historical View: Class of 2023 Performance Grades 3-8



Historical View: Class of 2023 – ELA Performance



This chart follows the performance of the class of 2023 through 5 years – vs a cohort of comparison schools' 2023 classes

Historical View: Class of 2023 – Math Performance



This chart follows the performance of the class of 2023 through 5 years – vs a cohort of comparison schools' 2023 classes

Critical note: in 2014 IUFSD 8th graders taking Algebra stopped taking the 8th grade NYS test. Thus, the data does not accurately reflect the 8th grade achievement

Examining Data - High School Profile

Graduating Class

	2013	2014	2015	2016	2017	2018	2019
Graduates	152	148	130	146	133	127	136
College-Bound Students	94%	94%	95%	95%	91%	96%	96%
4-Year Colleges			85%	85%	85%	82%	88%
2-Year Colleges			10%	10%	6%	14%	8%

Advanced Placement Results

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
# of Students	260	215	212	202	212	234
# of Exams	590	525	555	511	582	630
Score of 3 or Higher	71%	77%	69%	71%	67%	87%
AP Scholars	25	39	43	36	50	49
National AP Scholars	5	4	6	9	1	10
AP Scholars with Distinction	23	35	39	30	21	43
AP Scholars with Honor	26	24	19	13	30	34
Equity and Excellence	43%	53%	57%	59%	48%	73%

Mean Test Scores

	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017	Class of 2018	Class of 2019
ACT Composite	25.8	27.1	26	26.7	27.7	26.9	29.5
SAT I	2400					1600	1600
Critical Reading	571	606	606	613	619		
Math	583	624	608	627	625	620	643
Writing	573	617	609	608	612		
Evidenced Based Reading and Writing						640	631

SAT II Mean Scores	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017	Class of 2018	Class of 2019
Biology-Ecology	661	673	735	713	705	653	719
Biology-Molecular	668	676	715	707	735	714	740
Chemistry	714	706	733	741	725	714	735
Chinese w/Listening			720	780	780		
English Literature	580	673	620	653	685	592	619
French			560	668	665	480	630
French w/Listening				570			
German				770		400	720
Japanese w/Listening				635	730		745
Latin		718	616	715	695	690	672
Math Level I	666	685	674	648	594	626	670
Math Level II	698	710	717	740	732	688	731
Physics			675	718	570		600
Spanish			650	690		642	540
Spanish w/Listening			590	740			
US History	682		690	666	660	657	614
World History		703	702	717	750	693	714

	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017	Class of 2018	Class of 2019
ACT Composite	25.8	27.1	26.7	26.7	27.8	26.9	29.3
ELA				22.7	25.4	22.6	24.8
English				26.4	27.9	27.5	29.9
Math				26.2	27.1	26.0	27.6
Reading				27.3	29.0	28.3	31.0
Science				26.7	28.1	27.1	29.5
STEM				26.7	27.6	26.6	28.6
Writing				19.5	21.2	8.1	7.7

An **average score** on the current **ACT Writing** Exam is a little below a 7. For highly selective colleges, you'll want a **score** of 8 or higher. **Scores** of 10, 11, and 12 truly stand out and highlight strong **writing** skills

Grade Distribution through Junior Year

	Class of 2014	Class of 2015	Class of 2016	Class of 2017	Class of 2018	Class of 2019	Class of 2020
Mean GPA			3.37	3.35	3.41	3.59	3.50
Median GPA			3.49	3.41	3.54	3.75	3.76
Range of GPA's				1.53-4.45	1.82-4.50	1.33-4.51	1.01-4.54
Number of Students	148	130	158	139	118	137	135
1st Decile	4.48-4.14	4.41-4.00	4.54-4.20				
2nd Decile	4.13-3.95	3.99-3.81	4.19-3.96				
3rd Decile	3.94-3.79	3.80-3.66					
4th Decile	3.78-3.65	3.65-3.47					

Examining Data - Dows Lane

MC 03 RL.3.3 Describe characters in a story (e.g., their traits,

motivations, or feelings) and explain how their actions contribute to the sequence of events.



by Valerie Hunter

12 The skates were a little big, but when Riley stuffed newspaper in the toes, they fit. Craig couldn't stop smiling. He didn't want to take them off, but he had to so he could walk to the lake.

3	Wha	at does paragraph 12 help t	he reader understand about C	craig?										
	Α	Craig is too young to lear	n how to skate.											
	В	Craig is very excited about	it learning to skate.											
	С	Craig is unable to take th	e skates off by himself.											
	D	Craig is worried that his	Craig is worried that his Student Answer Summary:			A		в		С		D	NO R	ESPONSE
					#	%	#	%	#	%	#	%	#	%
			DOWS LANE ELEMENTARY SCHOOL	2019 Grade 3 ELA - MC03	2	1.6%	<u>123</u>	95.3%	1	0.8%	2	1.6%	1	0.8%

<u>CR 28</u> RL.3.3 Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.

28

In "Excerpt from *Just the Right Gift*," what do the details in paragraphs 17 through 21 show about the mother? Use **two** details from the story to support your response.

- 17 The next morning, Aiden and I pulled Mom from her bedroom into the kitchen, where we had set out her favorite breakfast: yogurt with cereal and bananas. Mom put her hand over her heart. "I forgot it was Mother's Day."
- 18 "We have presents," Aiden said, handing her the card he'd made out of bright red construction paper with pictures of pink flowers scattered across it.
- 19 I waved a stack of index cards in the air. "And look, Mom. Every card has a riddle on it with the answer on the back. You used to love riddles."
- 20 When Aiden saw tears rolling down Mom's cheeks, he yelled, "I knew this was a bad idea!" and flung himself onto the floor.
- 21 "Aiden!" Mom pulled him to his feet and kissed him. "I love your presents. Your Mother's Day card is beautiful. You know I love pink flowers." She pulled me into a hug, too. "And I'll love reading the riddles. I'm crying because you've made me so happy."

Student Answer Summary:								
	1	0	1		2		NO RE	SPONSE
	#	%	#	%	#	%	#	%
DOWS LANE ELEMENTARY SCHOOL 2019 Grade 3 ELA - 28	6	4.7%	51	39.5%	71	55.0%	1	0.8%



8

Which two fractions should be plotted at the same location on a number line?

- A $\frac{3}{4}$ and $\frac{4}{8}$
- **B** $\frac{1}{4}$ and $\frac{2}{8}$
- C $\frac{2}{4}$ and $\frac{4}{6}$
- **D** $\frac{1}{2}$ and $\frac{2}{6}$

Ctudant Anowar Summary

		A		В		С		D		NO RESPONSE	
		#	%	#	%	#	%	#	%	#	%
DOWS LANE ELEMENTARY SCHOOL	2019 Grade 3 Math - MC08	<u>14</u>	10.7%	<u>90</u>	68.7%	<u>17</u>	13.0%	2	6.9%	1	0.8%
Closing Thoughts...

It is hard for us to change the way we think about teaching fractions. For grade 3 it is about understanding the concept, not about computation. Try to instill the ideas of benchmarks for our students so they can identify fractions that are:

- Close to one whole
- More than one whole
- Close to $\frac{1}{2}$ (know how to create fractions equivalent to $\frac{1}{2}$)
- Close to 0 and recognize unit fractions with 1 in the numerator

Examining 4th Grade Data - Main Street

<u>CR 25</u> RL.4.3 Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).

The Day I Rescued Einstein's Compass

by Shulamith Levey Oppenheim

RL.4.3 Describe in depth a	20% (5)	Reading- Literature	MC01	93%	8%
character, setting, or event in a story			MC02	94%	1%
or drama, drawing on specific details			MC23	71%	17%
in the text (e.g., a character's			MC24	69%	20%
words, or actions).			25	87%	15%

25 In the story, how does Einstein feel about the compass his father gave him? Use **two** details from the story to support your response.

			0		1		2
		#	%	#	%	#	%
MAIN STREET SCHOOL	2019 Grade 4 ELA - 25	2	1.5%	30	23.1%	98	75.4%

MC 37 95% for us!!

37

The model below is shaded to represent a fraction.



C

Which fraction model is shaded to represent an equivalent fraction?





в			



		В		С	D		NO RE	SPONSE
	#	%	#	%	#	%	#	%
7	5	3.8%	2	1.5%	125	94.0%	1	0.8%

89 % Regional Success Rate

CR 39 (2 points) Number and Operations--Fractions

88% Building Success Rate

78% Regional Success Rate



The shaded part of the model below represents the fraction of a candy bar that Jill ate.



Tom has the same size candy bar. He eats 2 times the amount that Jill ate. What fraction of the candy bar does Tom eat?

Show your work. Answer ______ of the candy bar

Examining 5th Grade Data - Main Street

<u>CR 38</u> RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

Excerpt from Wackiest White House Pets

by Gibbs Davis

RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.	32% (9)	Reading-	MC12	69%	11%
		Informational	MC13	91%	18%
		TCAL	MC14	62%	6%
			MC29	80%	3%
			MC31	66%	12%
			MC32	66%	7%
			MC35	79%	11%
			37	81%	4%
			38	51%	7%

8	According to "Excerpt from Wackiest White House Pets," why was the late twentieth century a
-	"glorious time for White House pets" (paragraph 12)? Use two details from the article to
	support your response.

2.0						
Student Answer S	ummary:					
		0		1		2
		#	% 7	# %	#	%
MAIN STREET SCHOO	DL 2019 Grade 5 ELA - 38	<u>40</u> 31	.5% 4	5 35.4%	<u>42</u>	33.1%

Standard to Standard Growth Over Time on Constructed Response Questions

Class 2027	Class of 2027
RI .4.2 53%	RI.5.2 80%
RI .4.3 58%	RI.5.3 66%
RL.4.4 60%	RL.5.4 82%

9	Success Rate 2018	Success Rate 2019				
	Short Response Q	uestions (2	points)			
RI.4.2	53%	RI.5.2	80%			
RI.4.3	55%	RI.5.3	51%			
RI.4.3	60%	RI.5.3	81%			
RL.4.2	59%	RL.5.3	94%			
RL.4.4	60%	RL.5.4	82%			
RL.4.6	42%	RL.5.5	43%			

MC 13 - 5th

13

A

В

С

D

 $32\frac{6}{20}$

What is the area, in square feet, of the rectangle shown below?



D

%

35.2%

MC 20 (conversions unit)



Which measurement is equivalent to 4,000 centimeters?

- A 4 meters
- B 40 meters
- C 400 meters
- D 40,000 meters

Regional Score 53% We are over by 10%

Student Answer Summary:

		A		В		С		D	
		#	%	#	%	#	%	#	%
MAIN STREET SCHOOL	2019 Grade 5 Math - MC33	26	20.3%	<u>81</u>	63.3%	<u>18</u>	14.1%	3	2.3%

Examining Data - Middle School - ELA

RL.8.4: Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts

Building Success Rate	Regional LVL3 CUTPT	Question Gap
50%	39%	10%

In paragraph 1, what does the phrase "clattering nerve center of the restaurant" suggest?

- Integrate the Bard "Pointing" technique (utilized as part of writing instruction) into reading instruction. This strategy will focus students on closely analyzing phrases/sentences.
- Teach students how to annotate for tone (writer's craft) by focusing on word choice.

A	messiness, chaos	1 "Homework?" My mother mouths the word exaggeratedly, eyebrows raised, and I
		roll my eyes. Frowning, she points with her chin to the side door that leads to the stairs.
В	energy, core	I roll my eyes again, mouthing, Okay, okay, not needing her to pantomime further what she wants me to do. I hate the thought of leaving the clattering nerve center of the
С	tension, anxiety	restaurant to wrestle with my trigonometry homework in my mother's quiet office downstairs.

D greatness, stability

А	в	С	D
34 students	55 students	15 students	17 students

RI. 7.2 Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.

10 Could life exist in such an extreme environment? It certainly seems unlikely. As with the discovery of Lake Vostok, the clues for scientists seeking life pointed in "unlikely" directions. Most life on Earth depends on sunlight. How could sunlight penetrate an ice cover thousands of feet deep? Living things also depend on nutrients to grow. Where would these come from? Scientists wondered how nutrients could enter a system that has been cut off from the world above for millions of years. What's more, they knew that any kind of life in this extreme environment would have to survive tons and tons of pressure from the ice above.

How does paragraph 10 develop a central idea in the article?

- A It explains how life in an extreme environment could be possible.
- **B** It describes scientific research on the possibility of life in an extreme environment.
- **C** It provides clues to the possible existence of life in an extreme environment.
- D It presents questions to be answered about the possibility of life in an extreme environment.

A	В	С	D
23 students	19 students	13 students	64 students

- Expose students to a wide range of texts, not just high interest texts, especially with nonfiction.
- Teach students to see the connections between the parts of the text and the text as a whole.
- Broaden student thinking around the central idea(s) of a text to also include *how* the writer develops the central idea. One strategy will be guiding students to focus on the author's craft.

Building Success Rate	Regional LVL3 CUTPT	Question Gap
54%	48%	6% ₈₆

RI.6.2: Determine a central idea of a text and how it is conveyed through particular details; provide a summary distinct from personal opinions or judgments

Building Success Rate	Regional LVL3 CUTPT	Question Gap
59%	56%	3%

Which sentence **best** expresses a central idea of the article?

- A "Our family owned only an encyclopedia and a well-used dictionary." (paragraph 2)
- B "The presence of a mother and child was a sign that the expedition was a peaceful one and helped keep it safe from Indian attack." (paragraph 5)
- C "My father said he didn't know, but he'd wondered himself if we had a common ancestor." (paragraph 9)
- D "We explored tiny libraries on American Indian reservations." (paragraph 10)

А	В	С	D
4 students	34 students	79 students	16 students

- Utilize the Bard strategy of "Parts to Whole" to teach students how to annotate the text - dividing it into sections, writing about the work each section is "doing"
- Teach students to see the connections between the parts of the text and the text as a whole. One strategy will be asking students to think, How does this part contribute to the whole?
- Teach students to recognize text structure as a way to
 chunk a text and monitor and revise their thinking across a text

What are we thinking and wondering?

- What is the real purpose of annotation, and how do we help students see annotation as a readerly/writerly practice and not just a "school thing"? Can students annotate for different purposes/in different ways, i.e., if they are reading for tone?
- How do we help students attend to the text as a whole and not just in part (especially since the assessment directs them to just a small part)?
- Teaching students to annotate for different purposes depending on what we are reading for.
- Thinking as a result of poetry question . . . that teaching is more like a web . . . we need to go back into the curriculum and see where we can revisit and measure transfer

Examining Data - Middle School - Math

6th Grade Math Assessment

The volume, V, of any cube with a side length, s, can be determined using the formula $V = s^3$. What is the volume, in cubic centimeters, of a cube with a side length of 2.3 centimeters?

Building Success Rate	Regional LVL3 CUTPT	Question Gap
55%	39%	16%

A 5.29

B	6.9			
		Question & Results	Likely Reasons for Error	Adjustments in Instruction
С	8.027	$v = s^3$; s=2.3 a. 5.29 19 b. 6.9 25	 Volume formula for cube wasn't as recognizable for students. Exponent applied incorrectly (b) 	 Include specialized formulas (cube relative to Rectangular Prism, square relative to rectangle)
D	12.167	c. 8.027 15 d. 12.167 72	 Only squared (a) (c) was probably just a guess or poor estimation 	 Include more parts of whole when practicing use of formulas
				90

7th Grade Math Assessment

Domain: Ratios and Proportional Relationships

Standard: 7.RP.A.1--Compute unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units

On average, Shawnte drinks $\frac{1}{2}$ of a 6-ounce glass of water in $\frac{2}{3}$ hour. How much water

does she drink in an hour?

Building Success Rate	Regional LVL3 CUTPT	Question Gap
63%	56%	7%

- A 0.75 ounce
- B 2 ounces

Building Success Rate: 63%

Answer Breakdown (Correct answer is bolded):

- C 4.5 ounces
- D 9 ounces

Answer Choice	# of students who selected it
1	27
2	10
3	76
4	7

- 23% chose 0.75 ounces because they just divided ½ by ⅔ .
- The next step is to focus on a greater number of problems with more varied types of numbers.
- This helped to create recognition that we've focused disproportionately on unit rate problems with whole numbers or a single fraction..

8th Grade 2019 NYS Math Assessment--Multiple Choice Item Analysis

Question 7

Domain: Functions

Standard: Interpret the equation y = mx + b as defining a linear function, whose graph is a straight line; give examples of functions that are not linear

Which equation represents a function of x that is **not** linear?

$$A \qquad y = 4(x+3)$$

$$\mathbf{B} \qquad y = 4^2 + 3x$$

$$\mathbf{C} \qquad y = 4x + 3x^2$$

D		4 + x
U	y =	3

Building Success Rate	Regional LVL3 CUTPT	Question Gap
69%	63%	6%

- I can see students choosing b b/c of the squared term.
- The focus on teaching would be to stress that the exponent must be over the variable for the equation not to be linear.
- One strategy we could use to help students with this is to have them sort equations into linear and non-linear, with a reason for each.

Building Success Rate: 69%

Answer Breakdown (Correct answer is bolded):

Answer Choice	# of students who selected it
1	1
2	10
3	40
4	7

Examining Data - High School

Science Department: Living Environment Regents

Base your answers to questions 58 through 60 on the illustration and information below and on your knowledge of biology.



Source: http://knatolee.blogspot.com/2011/09/not-ducklings.html

The illustration is of a species commonly called the little brown bat. It has 38 teeth and usually lives near bodies of water. The animal is considered beneficial by many people because it eats mosquitoes and many types of garden pests. They feed at night, detecting their prey by echolocation—a form of sonar similar to what is used on ships. They can determine the location and size of their prey by listening to the return echo.

60 Coevolution occurs when the evolution of an adaptation by one species affects the evolution of an adaptation in a second species. Some species of moths have evolved the ability to emit high frequency sounds that can block the little brown bat's echolocation. Based on the information provided, explain how this relationship between moths and bats is an example of coevolution. [1]

2019 LE Regents

District Pass Rate: 96% Regional Pass Rate: 84%

Question 60

District Success Rate: 59% Regional Success Rate: 66%

As we examine open-ended questions such as this on the Regents, we will ask: Are students struggling with the content needed to answer this question correctly, or with the scientific practice of constructing an explanation? Or both?

What do we know and what are we thinking?

- Through work with Dr. Helen Pashley, our consultant, as well as our own understanding of the New York State Science Learning Standards (NYSSLS), we know that students will be engaging in more writing in the classroom in the form of explanations and arguments based on evidence.
- Looking at data from the past 3 years of LE Regents, we noted that while we often outperform the region, there are some exceptions in some of the open-ended questions.
- By pulling these questions and studying them (as well as student responses), we hope to gain a better understanding of how students use writing to communicate their understanding of science as well as continue to build in meaningful opportunities for students to use these practices in the classroom on a regular basis.
- We will also be able to assess how students are doing with multi-dimensional questions (questions that involve both content knowledge and a scientific practice/skill in order to be successful in answering them). As we move towards full implementation and the new science assessments, we know that all questions will be 3D (disciplinary core ideas/content, scientific practices— there are 8 of them and with open-ended questions the focus is constructing explanations and arguing from evidence, and cross cutting concepts), also incorporating cross-cutting concepts

Next Steps:

- Based on having graded these assessments in previous years, there is an indication that students are struggling more with the practice of writing an explanation than with content--but we'd like to confirm this
- As a starting point, we plan on working during upcoming PLRD time to examine constructed response questions where students performed, on average, more poorly than the region
- Whether the complication for students with a given question was content- or practice-based (or both), we will examine our curriculum (as a team and with our consultant Dr. Helen Pashley) for opportunities for revision and ways to incorporate more meaningful 3D activities and assessments.
- Looking forward, we will use the 2020 LE Regents to perform similar analysis

ACTFL World Readiness Standard for COMMUNICATION:

Interpersonal Communication: Learners interact and negotiate meaning in <u>spoken</u>, signed, or written conversations to share information, reactions, feelings, and opinions.

Intermediate Mid: Students can maintain conversations about themselves and their lives. They express their own thoughts and get things they need. They can connect some sentences together. They can ask and answer a variety of questions.

10th Grade AAPPL Results for Interpersonal Listening/Speaking (Year 3 class)						
Interpersonal Speaking Proficiency Target = Intermediate Mid						
2017	2018 2019					
57/74 < target (77%)	23/77 < target (30%)	12/77 < target (15%)				
17/74 = target (23%)	34/77 = target (44%)	29/77 = target (38%)				
0/74 > target (0%)	20/77 > target (26%)	36/77 > target (47%)				
23% are at or above target	70% are at or above target	84% are at or above target				

10th Grade AAPPL Results for Interpersonal Listening/Speaking (Year 3 class)

FRENCH: Interpersonal Speaking Proficiency Target = Intermediate Mid

2017	2018	2019
34/36 < target (94%)	15/33 < target (45%)	5/26 < target (19%)
2/36 = target (6%)	14/33 = target (42%)	11/26 = target (43%)
0/36 > target (0%)	4/33 > target (12%)	10/26 > target (38%)
6% are at or above target	54% are at or above target	81% are at or above target

What have we done to yield these results?

- The teacher remains in the target language 90% of the time.
- The teacher sets the stage for daily learning by (1) announcing the day's learning target(s) in the form of Can Do statements, (2) posting the target(s) for the day and (3) briefly going over the activities that will comprise the lesson.
- The teacher conducts one-to-one feedback sessions for students at regular intervals.
- The classroom environment provides support for students to produce language (e.g., word walls, frequently-used classroom expressions, transition words, words that refine and stretch language, grammar walls).
- Proficiency targets have been set for every grade level for all 4 skills (listening, speaking, reading and writing).
- Assessments focus on what students can do with the language rather than what they know about it.

Math: Geometry Regents Item Analysis

Geometry 2019

- **24** Which information is *not* sufficient to prove that a parallelogram is a square?
 - (1) The diagonals are both congruent and perpendicular.
 - (2) The diagonals are congruent and one pair of adjacent sides are congruent.
 - (3) The diagonals are perpendicular and one pair of adjacent sides are congruent.
 - (4) The diagonals are perpendicular and one pair of adjacent sides are perpendicular.

Answer Choice	# of students who selected it
1	6
2	17
3	68
4	28

When we look at questions on the three math Regents where Irvington students did not have a high rate of success (<65%), we want to know:

- 1) What might have led students to select other possible responses?
- 2) What mathematical misconceptions or misunderstandings might this reveal?
- 3) What shifts can we make to our teaching to address this?

What do we know and what are we thinking?

- The math department is looking at other questions from this Regents as well as from Algebra I and Algebra II.
- We are selecting questions that proved to be the most problematic for students (under 65% success rate) to use in order to answer the questions we have identified on the slide.
- The plan going forward will be to continue this work (of selecting questions based on data from most recent Regents exams and looking at each question we select through the lens of the 3 guiding questions) each year after data from the exams are released, to be the stimulus for planning conversations at each grade level.

New Framework - Global History and Geography 2019

Score Levels	# of students in Irvington schools reaching score level	% of population in Irvington schools reaching score level
100-85	82*	65%
84-79	26	20%
78-65	15	12%
64-55	4*	3%

* New Framework scoring has been re-aligned by NYSED to raise the numbers of students scoring above a 65 and make the number of students scoring 85 or above more difficult.

Open-Ended Questions (CRQ- Constructed Response results)

Score 7/7 (# of students/percentage)	Score 7/7 (# of students/percentage)Score 6/7 (# of students/percentage)		Score 4/7 or below (# of students/ percentage)	
104 / 82%	16 / 13%	3 / 2%	4/3%	

Open-Ended Questions (Enduring Issue Essay)

Number of students	Number of students	Number of students	Number of students
scoring at least one 5 score	scoring at least one 4 score	scoring at least one 3 score	scoring at least one 2 score
from 2 raters (5= Highly	from 2 raters (4 = Limited	from 2 raters (3= Mostly	from 2 raters (2= Limited descriptive)
Analytical)	Analysis)	descriptive)	
12 / 9%	36 / 28%	59 / 46%	15 / 19%

Implications of data: Difficulty to move responsibly around new test when results show real strengths overall- one great standout is the targeting new Enduring Issue essay.

→ 2016: NYSED 6-12 socials studies framework imbedding practice and skills becomes PD focus of department. (New framework essay imbeds disciplinary practices and skills into each task).

Targets for data use:

- → The SS Department pulled Irvington students anchor papers from 2019 essays across all performance levels
 - Uses include: potential models for teacher analysis in 2020
 - Identify social studies practice implications from each performance level
 - Teachers working with BOCES consultants designing student-centered activities targeting disciplinary practices and skills.
 - Dept. meetings utilize student results for sharing and discussion considering next steps for growth and implications across grade levels and performance levels.

Building Level Performance Data: English CCLS Regents Examination

Literary	Informational	L/I	2019	2018	2017`
RL.2: Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and	RI.2: Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and	RL	83%	82%	84%
build on one another to produce a complex account; provide an objective summary of the text	build on one another to provide a complex analysis; provide an objective summary of the text	RI	91%*	81%	92%
RL.3: Analyze the impact of the author's choices regarding how to develop and relate elements of a story	RI.3: Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events	RL	87%	74%	76%
how the action is ordered, how the characters are introduced and developed)	the text	RI	95%	73%	83%

Literary	Informational	L/I	2019	2018	2017`
RL.4: Determine the meaning of words and phrases as they are used in the text, including figurative and connotative	RI.4: Determine the meaning of words/phrases as they are used in a text, including figurative, connotative, and	RL	<u>88%*</u>	<u>87%</u>	<u>81%</u>
meanings; analyze the impact of specific word choices in meaning and tone, including words with multiple meanings or language that is	uses and refines the meaning of a key term or term over the course of a text (e.g., how Madison)	RI	<u>90%</u>	<u>86%</u>	<u>92%</u>
RL.5: Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a	RI.5: Analyze and evaluate the effectiveness of the structure an author uses in his/her exposition or argument, including whether the structure makes	RL	<u>87%</u>	<u>74%</u>	<u>84%*</u>
comedic or tragic resolution) contribute to its overall structure and meaning as well	points clear, convincing, and engaging	RI	<u>94%</u>	<u>85%</u>	<u>87%</u>
RL.6: Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is	RI.6: Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style	RL	<u>80%</u>	<u>65%</u>	<u>78%</u>
really meant (e.g., satire, sarcasm, irony, or understatement)	and content contribute to the power, persuasiveness, or beauty of the text	RI	<u>N/A</u>	<u>73%</u>	<u>N/A</u>

English--So What?

Our reframing of English 9 & 10 into thematic units has allowed us to incorporate texts of multiple genres, including informational/ expository text, which correlates to students success rates when reading and interpreting informational/ expository texts.

Next Steps:

- Acknowledging the difference in student performance regarding literary and informational reading skills, the department will move to develop a revised vertical alignment of skills taught and examine student work.
- The department will use assessment data and CCLS/ NextGen standards to identify skills still in need of development, to revise 11th and 12th grade curricula and to assure continued focus on text analysis.
- In English 9 & 10, department will continue to identify and integrate skills & instructional practices necessary to move more students to a mastery in literary response.
- The MTSS committee will partner with the English department to use data to identify students in need of enhanced support.

Summary Notes

- Test data gives the District a window into how students perform on a specific test on a specific date(s)
- Information can be useful, but is also limited due to numerous factors such as the consistent changes in testing models, shifts in cut scores, and on-going alterations in state curriculum standards
- Expanded use of data continues to be a critical resource that informs instruction and planning

Discussion