STUDENT PERFORMANCE REPORT

Irvington Union Free School District

Report to the Board of Education May 2019

1

Monitoring Student Growth

- Standardized test data is only one measure of student achievement and does not necessarily demonstrate growth
- State tests have limits to their value:
 - Represents performance on a given day(s)
 - Cohort sizes hinder direct 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

- 95% of 2018 class received Regents Diplomas
- SAT scores A new format was used in 2018 the categories are:
 - Reading and Writing 17% higher than US average
 - Math 18% higher
 - Total 17% higher
- ACT score 29% higher than national average
- 19 AP Class offerings: 67% passing, 41% of all exam-takers received 4 or 5

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.

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 6 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 93%	English 86%	Earth Science 92%
Algebra II 94%	Global History 87%	Living Environment 94%
Geometry 97%	US History 96%	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

8

2018 English Language Arts Scores



2018 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

Mamaroneck

Irvington

Hastings-on-Hudson

Pleasantville

Dobbs Ferry

• Edgemont

Rye Neck

Mathematics - Grade 3 - 8

2018 Math - Grades 3 & 4





2018 Math - Grades 5 & 6





2018 Math - Grades 7 & 8





English Language Arts - Grade 3 - 8

2018 ELA - Grades 3 & 4





2018 ELA - Grades 5 & 6





2018 ELA - Grades 7 & 8

Grade 7 ELA - 2018 100% 90% 80% 70% 60% 50% % Level 4 40% % Level 3 % Level 2 30% % Level 1 20% 10% 0% Ardsley UFSD Brook-FRE USD Roter HARDON USD DODDS FEM USD EAST OF HUSD INFOOTUSD INTREGOTUSD RATE OF A STREET OF A Rye Neck UFSD

Score Distribution vs Comparison Cohort of Westchester Schools



20

Science - Grades 4 & 8

2018 Science - Grades 4 & 8



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 	614	 Croton-Harmon 	610
 Irvington 	611	 Pleasantville 	609
 Mamaroneck 	611	 Blind Brook 	608
 Hastings 	611	 Dobbs Ferry 	607
 Ardsley 	610	 Rye Neck 	607
 Briarcliff 	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%

2018 Irvington Regents Results





85-100%

80-84%

65-79%

55-64%

0-54%

2018 Common Core Algebra



2018 Common Core Geometry



2018 Science Regents



2018 Chemistry Regents



2018 History Regents





2018 Common Core ELA Comparison

Score Distribution vs Comparison Cohort of Westchester Schools



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 67% passing (3+) at least one exam
- Of the 583 exams taken by students in 2018, 15% resulted in a 5, and 26% resulted in a 4 and 26% resulted in a 3, for overall passing of 67%
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

AP Exam – Participation and Passing Rates

Year	Enrollment	# Taking	# 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

2018 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.



Note: AP Computer Science is offered in alternating years - it was previously offered in the 2015-16 school year and will not be offered again until the 2019-20 school year. AP Music Theory is offered in alternating years – it was offered in the 2016-17 school year and will not be offered again until the 2018-19 school year.







Course	Number of Students						
Year	2014-2015	2015-2016	2016-2017	2017-2018			
Calculus AB	16	27	29	30			
Calculus BC	18	22	19	12			
Computer Science	2	10		7			
Statistics		10	15	4			







Lang: 58% Lit: 47%

Course	Number of Students						
Year	2014-2015	2015-2016	2016-2017	2017-2018			
Language	69	34	72	104			
Literature	46	80	21	35			





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 2020 & 2021 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			
2011	76%	90%	91%	93%	96%	90%			
2012	85%	87%	94%	88%	90%	95%			
2013	61%	66%	62%	68%	60%	68%			
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	82%	76%	82%	71%	74%	59%			

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

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

ELA – Proficient & Advanced									
Year	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8			
2011	82%	90%	79%	83%	81%	79%			
2012	86%	84%	88%	77%	78%	80%			
2013	55%	74%	62%	74%	50%	56%			
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	73%	69%	73%	76%	75%	68%			

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

Historical View: Class of 2022 Performance Grades 3-8



Historical View: Class of 2022 Performance Grades 3-8



Historical View: Class of 2022 – ELA Performance



This chart follows the performance of the class of 2022 through 5 years - vs a cohort of comparison schools' 2022 classes

Historical View: Class of 2022 – Math Performance



This chart follows the performance of the class of 2022 through 5 years – vs a cohort of comparison schools' 2022 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 – *Not sure if this applies*

Examining Data - High School Profile

Graduating Class

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

Advanced Placement Results

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

Mean Test Scores

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

					58	
SAT II Mean Scores	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017	Class of 2018
Biology-Ecology	661	673	735	713	705	653
Biology-Molecular	668	676	715	707	735	714
Chemistry	714	706	733	741	725	714
Chinese w/Listening			720	780	780	
English Literature	580	673	620	653	685	592
French			560	668	665	480
French w/Listening				570		
German				770		400
Japanese w/Listening				635	730	
Latin		718	616	715	695	690
Math Level I	666	685	674	648	594	626
Math Level II	698	710	717	740	732	688
Physics			675	718	570	
Spanish			650	690		642
Spanish w/Listening			590	740		
US History	682		690	666	660	657
World History		703	702	717	750	693

ACT Taken Before 2015

	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017	Class of 2018
ACT Composite	25.8	27.1	26	26.7	27.7	26.9
English			25.9	28.5	31.2	
Math			25.8	27.4	28.8	
Reading			27.1	28.6	27.3	
Science Reasoning			26.5	27.8	29.3	

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

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
Mean GPA			3.37	3.35	3.41	3.59
Median GPA			3.49	3.41	3.54	3.75
Range of GPA's				1.53-4.45	1.82-4.50	1.33-4.51
Number of Students	148	130	158	139	118	137
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 - Middle School ELA

6th Grade ELA Standard	2014	2015	2016	2017	2018
RL.6.2 Determine a theme or central idea from a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments	69.81%	66.94%	67.94%	85.85%	80.5%
RI.6.2. Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments	70.14%	77.50%	78.31%	69.03%	72%
RL.6.3 Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution	79.23%	69.53%	82.74%	80.75%	86.4%
RI.6.3 Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes)	74.91%	68.04%	60.75%	75.24%	64.33%
RL.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone	78.64%	75.00%	79.03%	74.21%	87%
RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings	78.87%	77.08%	62.37%	87.42%	87%
RL.6.5 Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot	78.05%	85.00%	78.43%	84.91%	70%
RI.6.5 Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to its development as a whole	76.06%	79.31%	70.32%	77.04%	58%

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7th Grade ELA Standard	2014	2015	2016	2017	2018
RL.7.2 Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text	56.47%	64.84%	79.81%	73.28%	78.4%
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	58.28%	72.66%	75.28%	79.10%	69.67%
RL.7.3 Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot)	76.57%	65.74%	66.57%	76.49%	78.86%
RI.7.3 Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events)	70.28%	68.49%	75.22%	72.48%	69%
RL.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sound (e.g., alliteration) on a specific verse or stanza of a poem or section of a text	67.13%	66.02%	88.33%	69.11%	88.25%
RI.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone	74.20%	80.21%	92.22%	90.83%	71%
RI.7.5 Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of ideas	63.23%	73.24%	71.48%	60.55%	80.33%
RL.7.6 Analyze how the author develops the points of view of different characters or narrators in a text	71.33%	67.19%	69.72%	72.94%	76%
RI.7.6 Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others	82.75%	81.25%	73.33%	75.00%	78%

8th Grade ELA Standard	2014	2015	2016	2017	2018
RL.8.2 Determine a theme or central idea of a text and analyze its development over the course of a text, including its relationship to the characters, setting, and plot; provide an objective summary of the text	74.17%	72.28%	74.77%	86.79%	82.8%
RI.8.2 Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text	55.56%	82.44%	85.02%	83.61%	77.5%
RL.8.3 Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision	71.83%	74.96%	86.79%	82.67%	72.5%
RI.8.3 Analyze how a text makes connections between individuals, ideas, or events (e.g., through comparisons, analogies, or categories)	78.54%	79.96%	69.19%	69.51%	81%
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	75.67%	71.12%	85.59%	76.22%	80.5%
RI.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts	86.67%	79.20%	83.33%	57.93%	88.5%
RI.8.5 Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept	79.42%	75.19%	81.68%	79.51%	74.25%
RL.8.6 Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor	71.35%	81.68%	87.09%	73.17%	64.67%
RI.8.6 Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints	78.75%	78.88%	95.50%	90.85%	69%

Next Generation Learning Standards (ELA)

Two new guiding principles:

- "Advanced Literacies" = "A set of skills and competencies that enable communication, spoken and written, in increasingly diverse ways and with increasingly diverse audiences" in order to enable "participation in academic, civic, and professional communities"
- "Lifelong Practices of Readers and Writers," including the idea that there should be time for students to write and read for enjoyment, expression, and connection with others (in addition to learning)

Timeline:

- Full implementation of new standards starting in fall 2020
- Revised grade 3-8 ELA assessments will be given during the 2020-2021 school year
- No timeline yet for HS assessments but it will not be earlier than the 2020-2021 school year

Key Definitions:

- "Text" = printed material, speech, graphics, visual art, digital representations, video, and other visual and audio depictions of ideas, concepts, and experiences
- "Literature" = stories, drama, poetry, fiction, myths, graphic novels, other literary texts
- "Informational texts" = nonfiction; biographies; autobiographies; books; articles about science, art, history, social studies; and information displayed in charts, graphs, or maps, in both print or digital sources

Reading Guidelines:

- There is no required reading list associated with the standards
- Expectation is that teachers:
 - Include a balance of contemporary and classic texts
 - Insure that texts are culturally responsive and that they reflect a diversity of authors, time periods, genres, and cultural perspectives
 - Make texts available in students' home language when possible
 - Expose students to a balance of literary and informational texts
- Expectation is that students:
 - Read and interact with grade level texts
 - Read full-length texts, shorter texts, and excerpts
 - Have opportunities to read independently and to self-select texts based on interest
 - Read for multiple purposes (for learning and for pleasure)

Some Thoughts:

- The review of the benchmark analysis was done at each grade level
- No clear and substantial areas of need were identified based on deficiencies in that analysis.
- However, the work at grade level meetings brought about the desire for subsequent work around articulation and adjustment of expectations across grade levels tied to specific units of study.
- These shifts are being represented in a variety of ways depending on the nature of the change.
 In some cases, tasks and assessments have been adjusted to better reflect the growth in sophistication that is expected as students move.
 - For example, through the process, it became clear that there was a need to engage students in more authentic writing tasks in grade 8. This led to changes in the AWE for two different units.

Examining Data - K-5 Math

2nd Grade Math

3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .

Building Success Rate

- 2015 72%
- 2016 81%
- 2017 no questions on the test
- 2018 91 %

How:

While Grade 2 doesn't have a test, we were not doing well on the basic multiplication standard for grade 3. We think it was because our pacing in grade 2 was not on target to get through Module 6 which is the Foundations of Multiplication and Division module. So a we tightened our pacing so that every class would get through the whole module to develop the idea of area and tiling and rows and columns for arrays.

3rd Grade Math

3.NF.2 Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line.

Building Success Rate 2016 67% 2017 58% 2018 75%

How:

In a learning session we talked about how to partition number lines and what strategies to use with our students. We decided to label 0 as a fraction (0/3 or 0/4) and rename all the one wholes as fractions also (3/3 or 4/4) so that it would be more clear how many equal parts were on the number line and where each fraction should be plotted. Teachers modeled this repeatedly and it became a new expectation for students to label all of their number lines in this way.

4th Grade Math

MD.5A and B An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles. (B) An angle that turns through *n* one-degree angles is said to have an angle measure of *n* degrees.

Building Success Rate 2015 - 69% 2016 - 79% 2017 - 94%

MC 7

We did so well on this question. Way above the rest of the region. WOW! Why? Because we gave the students the interlocking circles and had them create the angles. Hands-on!!

What is the measure of an angle that turns through $\frac{3}{4}$ of a complete circle? A 34° B 43° C 75° D 270° MAIN STREET SCHOOL 2017 Grade 4 Math - MC07 $\frac{4}{3}$.0% 1 0.7% Z 5.2% 122 90.4% 1 0.7%

How:

We decided to go "hands-on" and we made interlocking circles with the students to show the fractional parts. So the students could show 1/4 of a circle and name it as 90 degrees, etc.
5th Grade Math

5.MD.1 Convert among different-sized standard measurement units within a given measurement system and use these conversions in solving multi-step, real world problems.

Last year we changed the way we teach conversions and when we teach conversions based on data analysis

Building Success Rate 2016 - 58% 2017 - 56% 2018 - 78%

How:

In summer work, we pulled all the conversions lessons spread out over 5 modules and we created a 7-day mini-conversion module to really focus on what it means to convert, how to figure out the conversion factor, and to allow for repeated practice in a more concentrated time frame.

Summary Notes

- Again, 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 alterations in state curriculum standards
- District remains committed to developing a local assessment program that is largely performance-based and seeks to have students demonstrate deep thinking skills and complex application of skills and knowledge

Final Thoughts

- Continue to develop and expand local common assessments
- Evolution towards more 'authentic' assessment of student learning
 - Project-based learning/assessment
 - Capstone Projects
- Data will continue to be viewed as one aspect of measuring student achievement
- District to expand data use
 - Summer-based professional learning for key instructional leaders
 - Targeted data objectives for 2019-20

Discussion