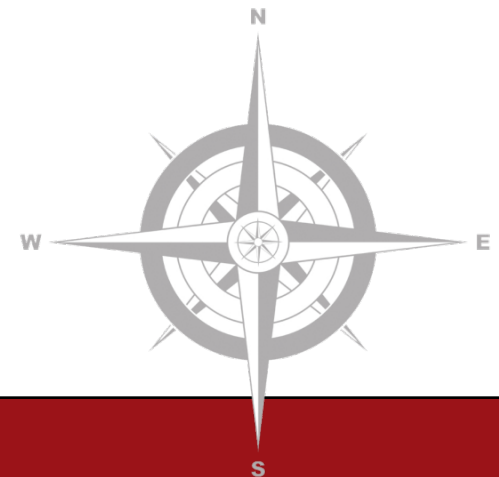


Wellesley Public Schools 2017 MCAS Results

School Committee Presentation

WELLESLEY PUBLIC SCHOOLS

Learning • Caring • Innovating



Presentation Overview

- Introduce Next-Generation MCAS
- Present:
 - District MCAS Spring 2017 Results
 - District MCAS Subgroup Results
 - District WHS OECD (PISA) 2017 Results
- Share next steps



What is the Next-Generation MCAS?

- Updated version of MCAS
- Focused on assessing the Massachusetts Curriculum Frameworks (Standards) through the lens of 21st Century Competencies
- Signals readiness for college & career readiness



What is the Next-Generation MCAS?

Designed as a **computer based test (CBT)**

- Spring 2017
 - Grades 3-8 in ELA & Math
 - CBT grades 4 & 8
 - Grades 5 & 8 Science (no change)
 - High School ELA, Math, Science (no change)
- Spring 2018
 - CBT for grades 4-8 in ELA, Math & Science
 - PBT for grade 3
 - High School ELA, Math, Science (no change)
- Spring 2019 – Fully Implemented
 - CBT for grades 3-10 in ELA, Math & Science



MCAS Achievement Levels: Legacy

- **Advanced:** Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter, and provide sophisticated solutions to complex problems.
- **Proficient:** Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems.
- **Needs Improvement:** Students at this level demonstrate a partial understanding of subject matter and solve some simple problems.
- **Warning/Failing:** Students at this level demonstrate a minimal understanding of subject matter and do not solve simple problems.



MCAS Achievement Levels: *Next-Generation*

- **Exceeding Expectations:** A student who performed at this level exceeded grade-level expectations by demonstrating mastery of the subject matter.
- **Meeting Expectations:** A student who performed at this level met grade-level expectations and is academically on track to succeed in the current grade in this subject.
- **Partially Meeting Expectations:** A student who performed at this level partially met grade-level expectations in this subject.
- **Not Meeting Expectations:** A student who performed at this level did not meet grade-level expectations in this subject.



Interpreting the Results

- Focuses on:
 - Critical thinking abilities
 - Application of knowledge
 - Connections between reading and writing
 - College and career readiness
- Next-Generation MCAS questions are designed to more rigorously assess Massachusetts Curriculum Frameworks (Standards)
- Massachusetts educators set these standards and raised the expectations of what it means to meet or exceed the Standards.



Interpreting the Results (cont.)

- The Next-Generation MCAS measures in a different way (closer alignment with 21st century competencies)
- 2017 is a baseline year for Next-Generation MCAS
 - In some grades and subjects results may be similar (e.g. grade 4 ELA & Math; grade 7 Math)
 - In other grades and subjects results may be lower (e.g. grade 8 ELA)



Sample State Student 2017 MCAS Report

Name: Doe, Jonathan H.
 SASID: 1234567890

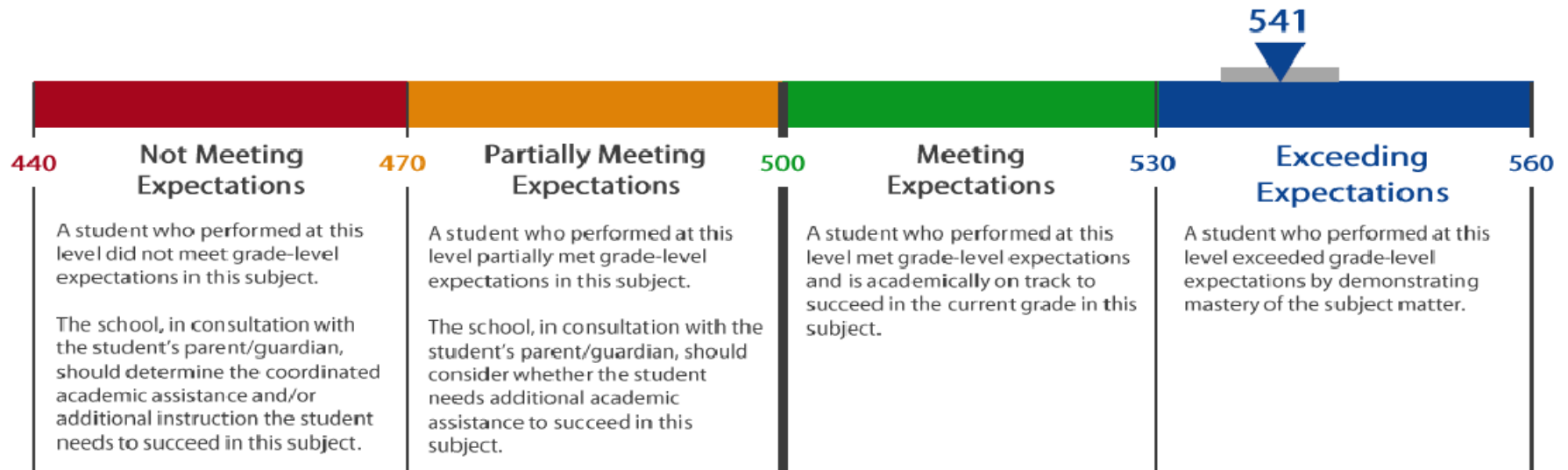
Grade 8
 Spring 2017

Mathematics Results

Computer-based test

Your Child's Achievement Level: **Exceeding Expectations**

Your Child's Score: **541**



In the figure above, the triangle indicates your child's score on the test. The gray bar shows the range of likely scores your child would receive if he or she took the test multiple times.

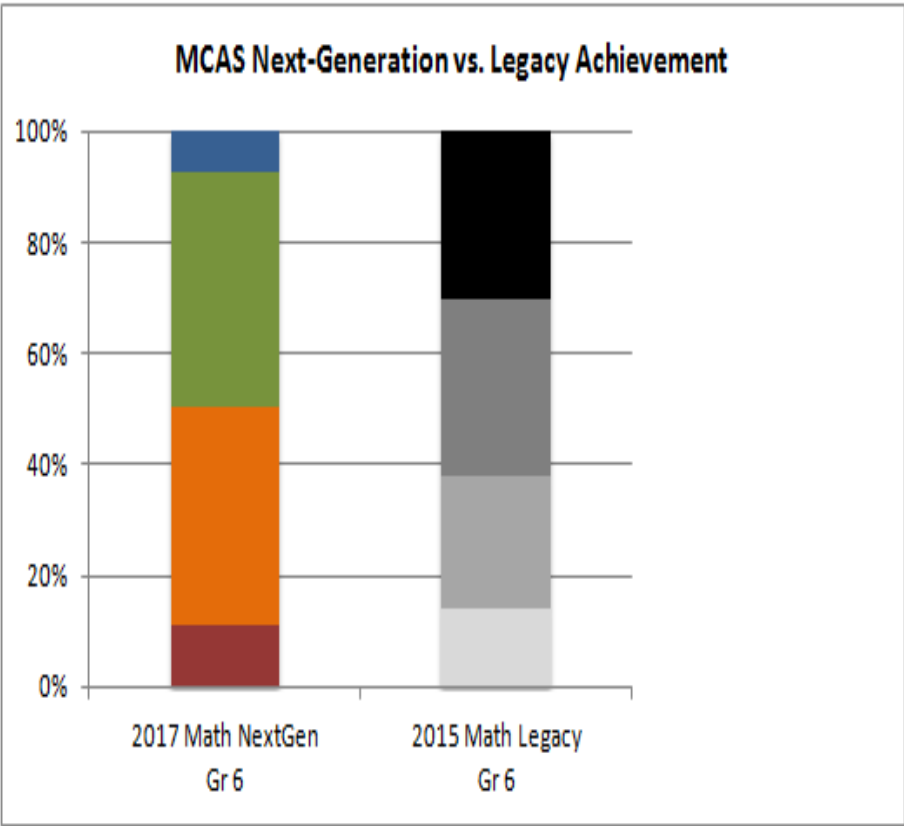
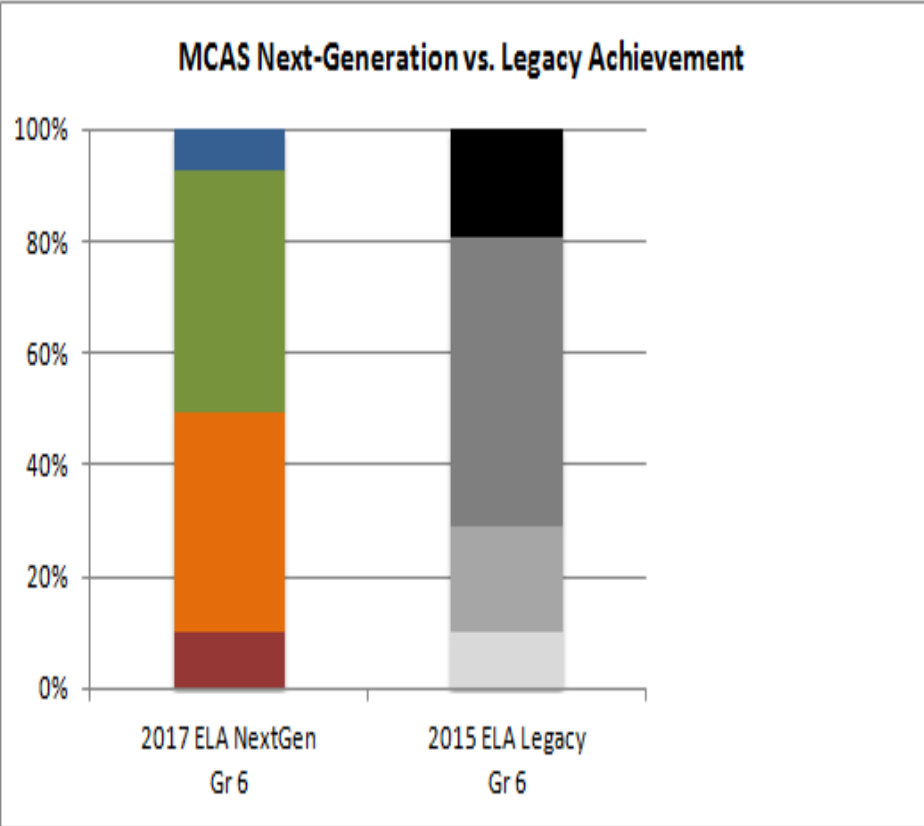
How your child performed compared to the school, district, and state

Your Child's Score	Average Score		
	School	District	State
541	485	502	515

Statewide 2017 Next-Generation Results for Grade 6 ELA and Math as compared with Legacy MCAS

Grade 6 ELA - Massachusetts

Grade 6 Math - Massachusetts



LEGEND – Achievement Levels:

Next-Generation MCAS	Legacy MCAS
■ Exceeding Expectations	■ Advanced
■ Meeting Expectations	■ Proficient
■ Partially Meeting Expectations	■ Needs Improvement
■ Not Meeting Expectations	■ Warning

WPS Next-Generation MCAS Spring 2017 Results



Wellesley Public Schools ELA MCAS Spring 2017 Results

Subject	Grade Level	% Meeting & Exceeding Expectations	% Partially Meeting Expectations	% Not Meeting Expectations	Standard Score
ELA	3	65	32	3	509.5
ELA	4	78	21	1	514.5
ELA	5	78	20	2	512.1
ELA	6	79	19	2	513
ELA	7	76	22	2	510.9
ELA	8	80	18	2	512.2

Subject	Grade Level	% A&P	NI	F
ELA	10	99	1	1



Wellesley Public Schools MATH MCAS Spring 2017 Results

Subject	Grade Level	% Meeting & Exceeding Expectations	% Partially Meeting Expectations	% Not Meeting Expectations	Standard Score
Math	3	64	31	6	508.3
Math	4	68	28	4	509
Math	5	69	27	4	510.5
Math	6	77	20	3	512.6
Math	7	75	21	4	512.9
Math	8	77	20	3	513

Subject	Grade Level	% A&P	NI	F
Math	10	96	3	1



MCAS Science Context & Timing

2017

- Cumulative assessments 3-5 and 6-8
- Based on overlapping old and new curriculum standards

2018

- Based on overlapping old and new standards
- Will be computer-based grades 5 & 8

2019

- Based on 2016 standards, grade 3-5 and 6-8
- Computer-based with new test design
- Performance standards will be set



2017 WPS Results

Science and Technology/Engineering (Legacy)

Grade	% Advanced and Proficient	% Needs Improvement	% Warning
10 STE	95	5	1
9 - Physics	96	4	0
8	63	32	5
5	62	32	6



MCAS Science - % Advanced & Proficient 2010-2017

Gr.	2010	2011	2012	2013	2014	2015	2016	2017
10 STE	77	79	75	81	82	81	91	95
9P					98	93	96	96
8	44	41	65	55	59	72	70	63
5	64	58	63	55	69	59	70	62

Grade 5 are district results; Grades 8 & 10 are school results.

LIKE DISTRICT COMPARISONS



MCAS 2017 District Comparisons Grades 3-8: % of Students Meeting and Exceeding Expectations

District	Grade 3		Grade 4		Grade 5			Grade 6		Grade 7		Grade 8		
	ELA	Math	ELA	Math	ELA	Math	STE A&P	ELA	Math	ELA	Math	ELA	Math	STE A&P
Concord	77	79	81	77	83	86	77	80	79	84	82	77	71	74
Dover	70	86	63	67	81	72	67	86	82	81	78	87	85	78
Lexington	71	74	76	79	75	72	73	84	87	85	85	83	91	77
Natick	59	62	68	62	55	65	69	63	61	65	61	65	67	59
Needham	61	68	66	66	71	69	67	80	84	78	84	76	76	68
Newton	59	62	67	67	68	66	62	70	72	71	74	71	72	59
Sudbury	62	76	81	78	70	72	75	71	64	74	73	77	61	60
Wayland	62	66	55	62	72	79	71	76	79	80	74	81	83	81
Wellesley	65	64	78	68	78	69	62	79	77	76	75	80	77	63
Weston	78	70	83	80	71	84	80	66	75	81	77	71	78	74
Winchester	67	77	79	81	78	81	81	83	85	76	81	80	73	70

 Highest percentage among comparison group

 Lowest percentage among comparison group

MCAS 2017 District Comparisons Grade 10: % of Students Advanced and Proficient

District	Grade 10		
	ELA	Math	STE
Concord-Carlisle	98	98	96
Dover-Sherborn	99	99	97
Lexington	98	98	94
Lincoln-Sudbury	98	96	91
Natick	95	90	94
Needham	98	94	92
Newton	97	94	91
Wayland	98	95	96
Wellesley	99	96	96
Weston	99	96	92
Westwood	97	95	95
Winchester	97	95	95

 Highest percentage among comparison group

 Lowest percentage among comparison group



District Spring 2017 MCAS Subgroup Results



WPS Grades 3-8 % of Students Meeting and Exceeding Expectations: MCAS 2017 ELA by Subgroup

ELA	%
All	76
High Needs	42
Students w/ Disabilities	34
ELL and Former ELL	51
Economically Disadvantaged	49
African American/Black	49
Hispanic/Latino	49



WPS Grades 3-8 % of Students Meeting and Exceeding Expectations: MCAS 2017 ELA by Subgroup

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10 % A&P
All	65	78	78	79	76	80	99
High Needs	35	43	48	36	45	45	95
Students w/ disabilities	22	37	39	28	32	45	93
ELL and Former ELL	47	NA	NA	NA	NA	NA	NA
Economically Disadvantaged	36	52	57	41	64	45	93
African American/Black	41	50	56	NA	47	46	94
Hispanic/Latino	47	50	48	47	39	64	94



WPS Grades 3-8 % of Students Meeting and Exceeding Expectations: MCAS 2017 Math by Subgroup

Math	%
All	71
High Needs	38
Students w/ Disabilities	30
ELL and Former ELL	49
Economically Disadvantaged	39
African American/Black	29
Hispanic/Latino	42



WPS Grades 3-8 % of Students Meeting and Exceeding Expectations: MCAS 2017 Math by Subgroup

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10 % A&P
All	64	68	69	77	75	77	96
High Needs	34	33	33	28	48	48	86
Students w/ disabilities	30	27	24	21	35	43	84
ELL and Former ELL	40	NA	NA	NA	NA	NA	NA
Economically Disadvantaged	29	28	38	32	60	48	85
African American/Black	24	21	47	NA	35	21	72
Hispanic/Latino	47	25	39	47	33	60	100



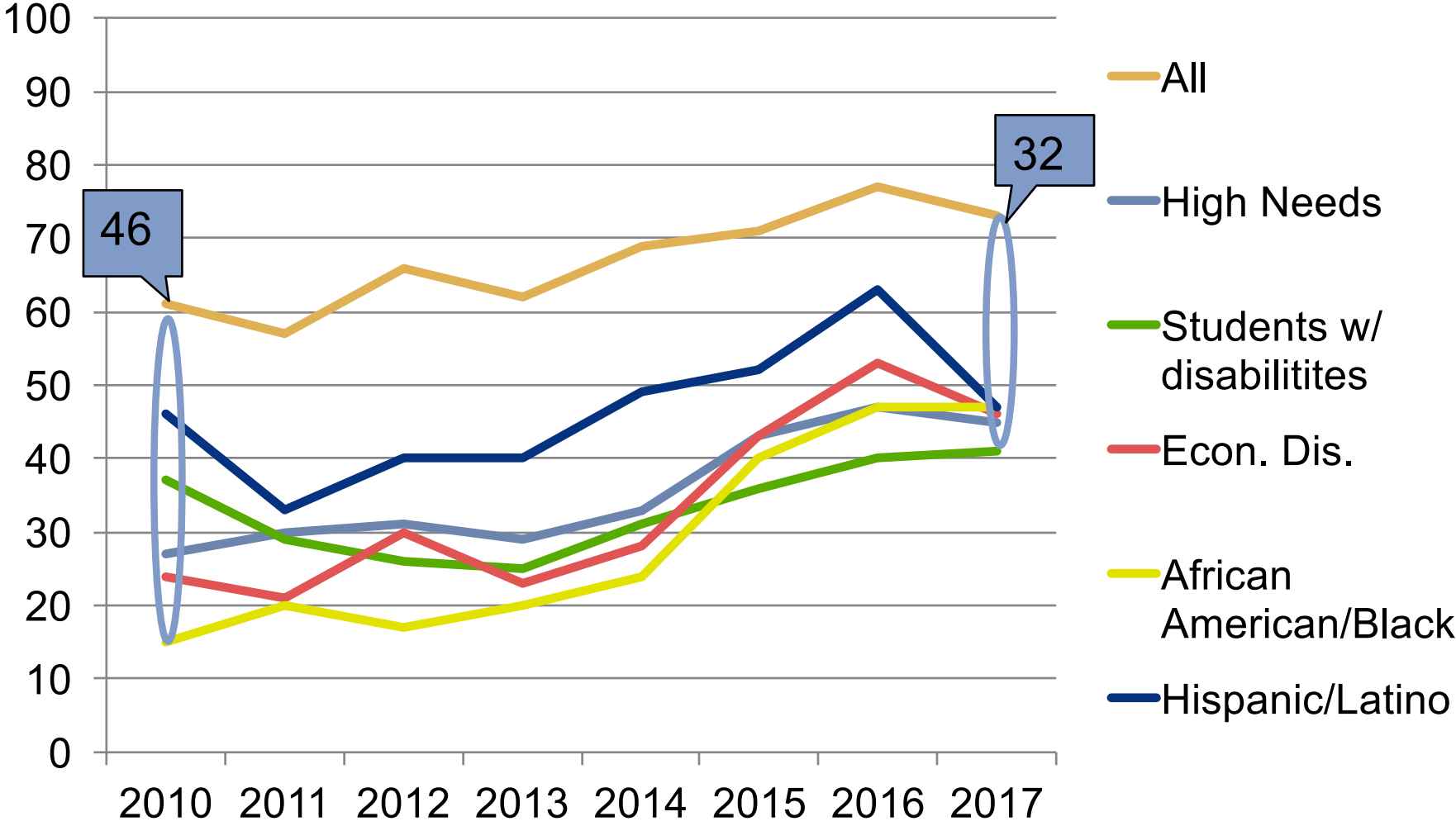
WPS Grades 3-8 % of Students Advanced & Proficient

MCAS 2017 Science by Subgroup

	Grade 5	Grade 8	Grade 9/10
All	62	63	95
High Needs	31	28	79
Students w/ disabilities	24	27	75
ELL and Former ELL	NA	NA	NA
Economically Disadvantaged	33	30	71
African American/Black	29	29	81
Hispanic/Latino	30	40	88



WPS 2010-2017 Science MCAS: Reduction in proficiency gaps



MCAS Student Growth Percentiles



MCAS Student Growth Percentile (SGP) Ranges

<19 th Percentile	Very Low Growth
20 th -40 th Percentile	Low Growth
41 st -59 th Percentile	Typical Growth
60 th -79 th Percentile	High Growth
>80 th Percentile	Very High Growth



2017 MCAS WPS Median SGP by Grade

	ELA SGP	Math SGP
Grade 4	63	54
Grade 5	57	60
Grade 6	55	55
Grade 7	60	73
Grade 8	50	60
Grade 10	56	75

 High Growth (SGP of 60+)



Next Steps

ELA

- Intentional work on writing about reading

Math

- Additional Math specialists at the elementary level
- New curriculum K-12 and supporting teachers with these materials
- New programs to ensure alignment with MA Curriculum Frameworks (Standards)
- Prioritizing grants for Middle School math support

Science

- Still working to align standards
- More coordinated support for elementary science
- Partnering with science consultants, through a WEF Grant, to do a strategic review of WPS elementary science.



WHS OECD (PISA) 2017 Results



OECD (PISA) 2017

- Program for International Student Assessment (PISA), launched by the Organisation of Economic Co-Operation & Development (OECD) in 1997 assesses students ages 15 -16 years old in the areas of Reading, Mathematics, and Science.
- PISA was given in 2015 to students from over 72 countries and economies.
- PISA assesses students' ability to apply their knowledge, not just mastery of content.



OECD (PISA) 2017 (cont.)

- In 2017 WHS, in coordination with Northwest Education Assessment (NWEA®), administered PISA to a random sample of 69 WHS students.
- The assessment places students into 6 performance levels (1-6), with Level 6 being highest.



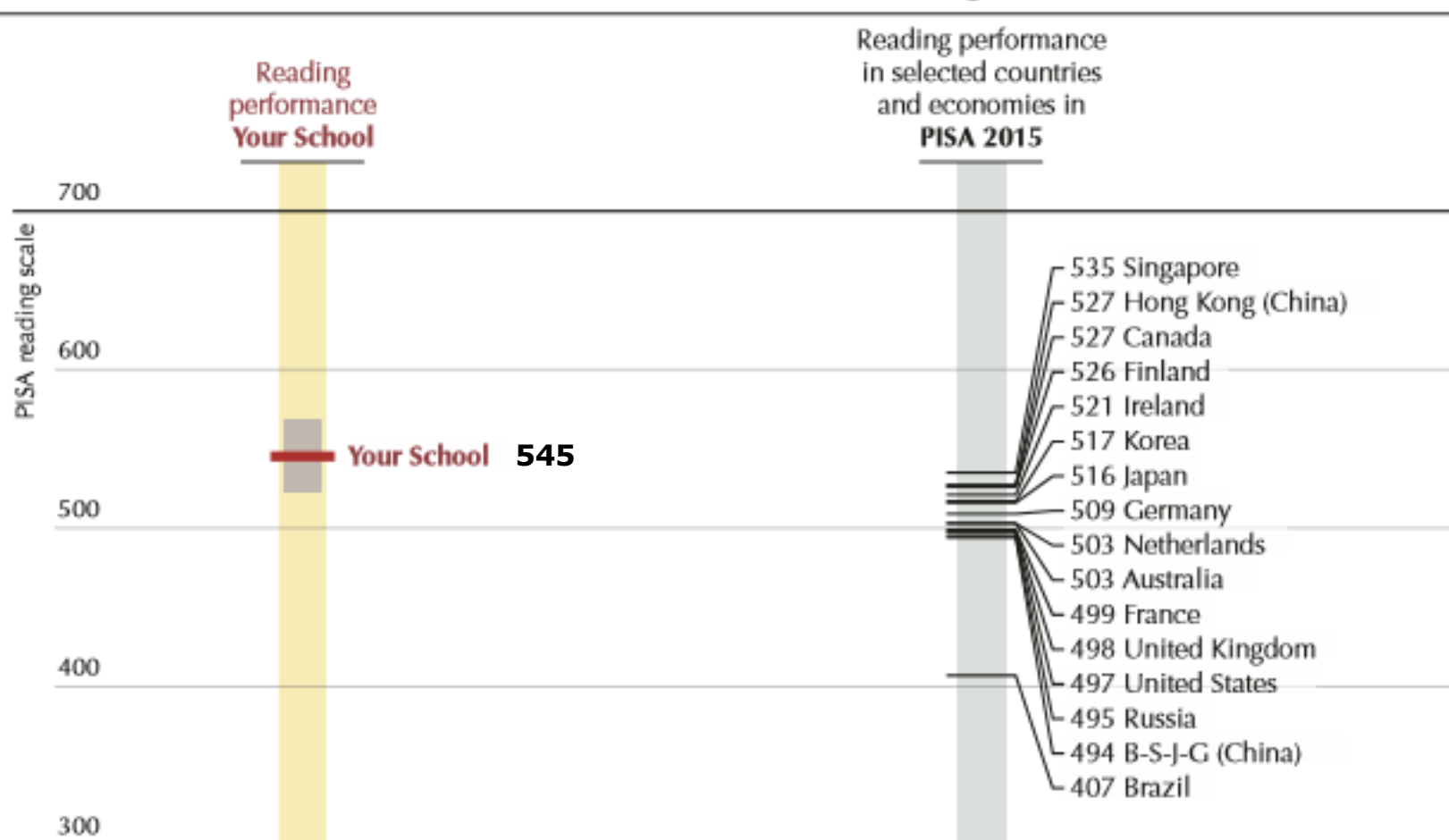
WHS OECD (PISA) 2017 Mean Scores vs. 2015 United States & International

	Reading	Mathematics	Science
WHS	545	574	570
United States	497	470	496
OECD	493	490	493



OECD (PISA) Performance of WHS Students vs. International - Reading

Figure 4.1 ■ How students at your school compare with the average of students from selected countries and economies in reading in PISA 2015

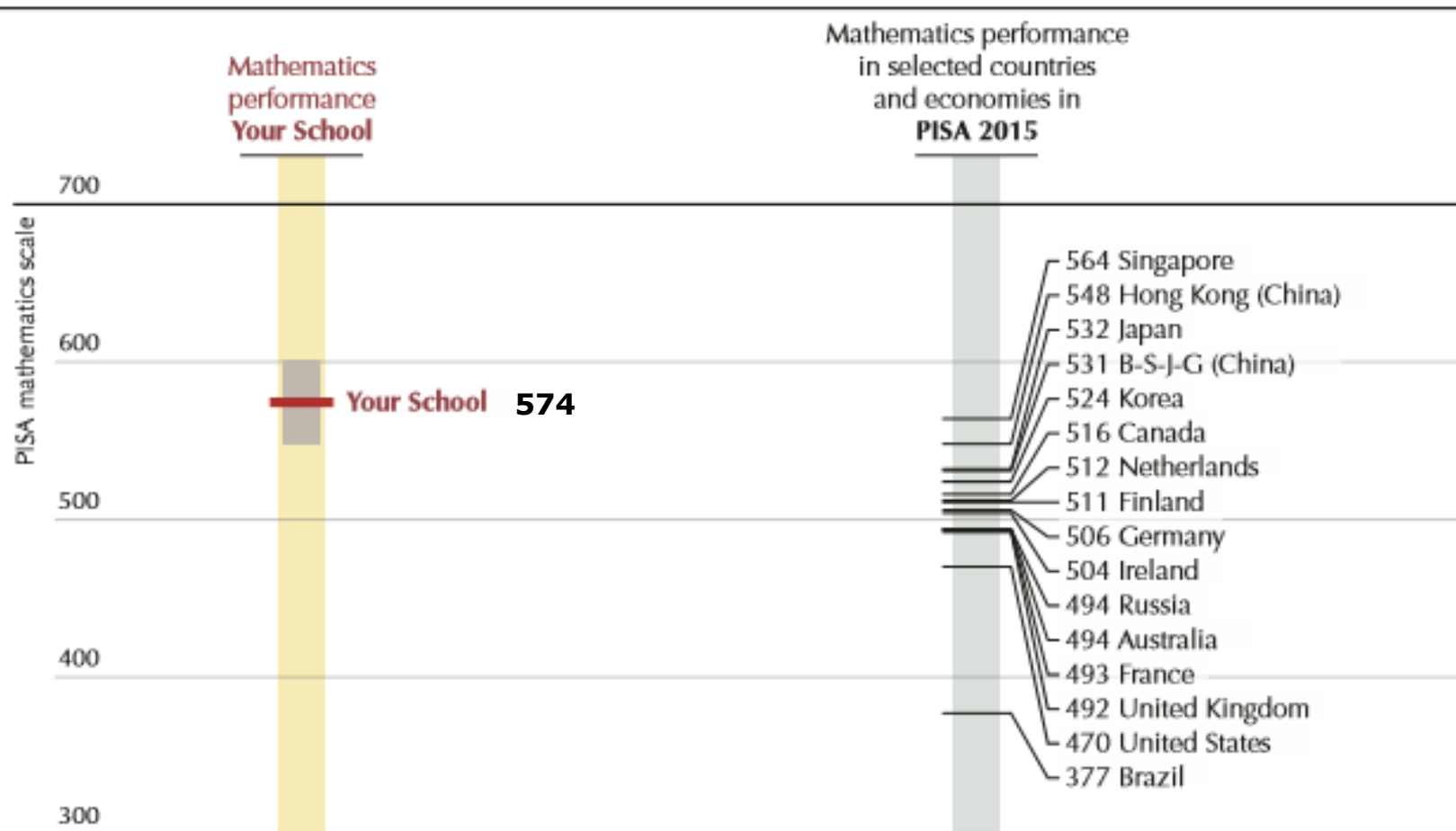


Note: Shaded bars above and below the mean scores represent a 95% confidence interval. In other words, in the case of the results for your school, we are 95% confident that if your school were to administer the test several times, your mean performance scores would fall within this confidence interval.



OECD (PISA) Performance of WHS Students vs. International – Mathematics

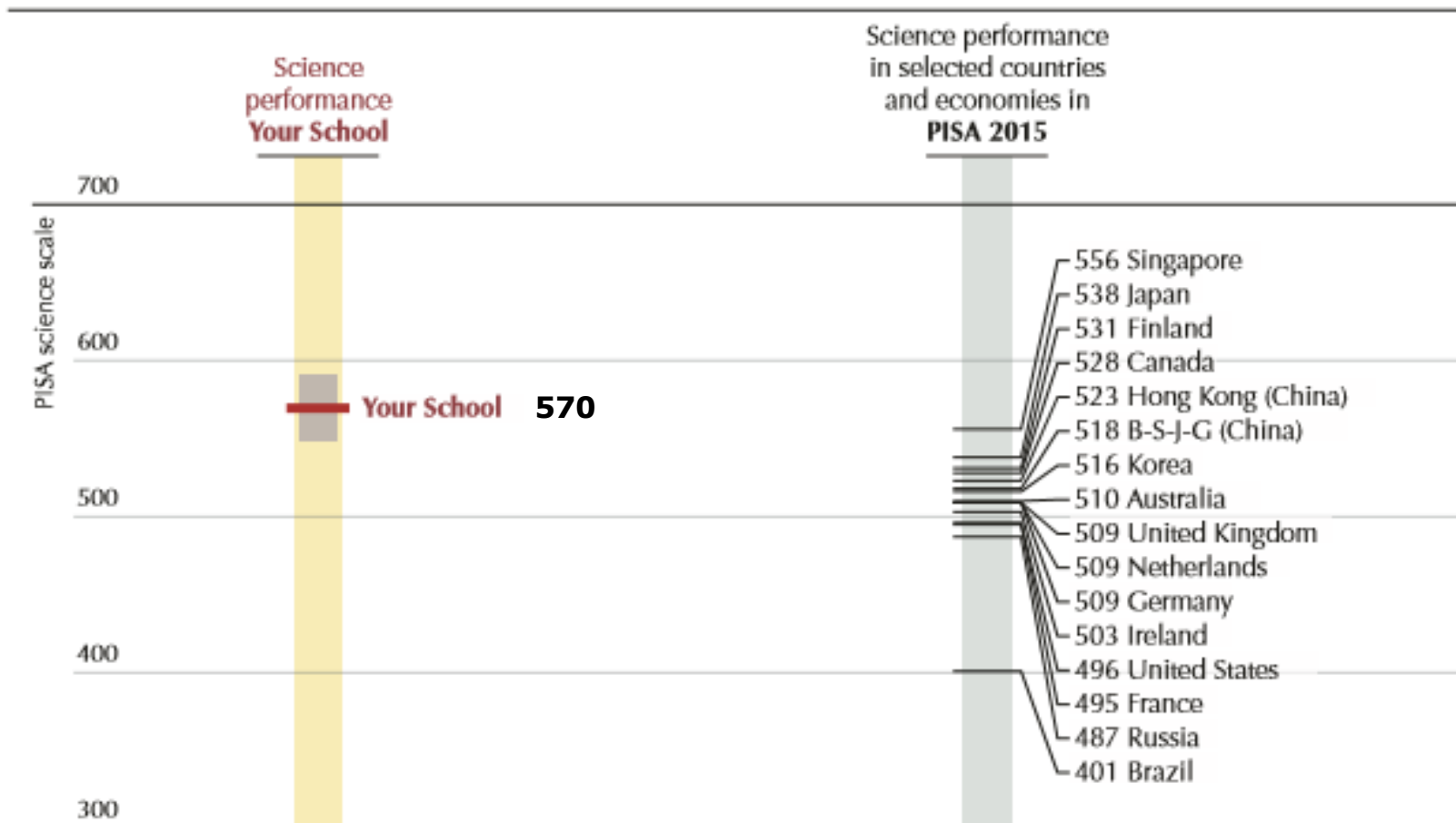
Figure 4.5 ■ How students at your school compare with selected countries and economies in mathematics in PISA 2015



Note: Shaded bars above and below the mean scores represent a 95% confidence interval. In other words, in the case of the results for your school, we are 95% confident that if your school were to administer the test several times, your mean performance scores would fall within this confidence interval.

OECD (PISA) Performance of WHS Students vs. International - Science

Figure 4.9 ■ How students at your school compare with selected countries and economies in science in PISA 2015



Note: Shaded bars above and below the mean scores represent a 95% confidence interval. In other words, in the case of the results for your school, we are 95% confident that if your school were to administer the test several times, your mean performance scores would fall within this confidence interval.

OECD (PISA) Student Questionnaire

- Students are given a questionnaire at the end of the assessment to gather information about the following:
 - Student's family and home
 - School's climate
 - Student's strategies , attitudes, and dispositions towards learning



Key OECD (PISA) Take-aways

- High performing in all areas: Reading, Mathematics, and Science
 - WHS is performing below where expected in reading and science as compared to students with similar socio-economic backgrounds.
- WHS students are deep and highly restricted readers versus deep and wide readers
- Similar to previous data sources (Challenge Success)
 - 70% of students agree that “Mathematics is an important subject for me because I need it for what I want to study later on.”
 - 78% of students agree that “Most teachers listen to what I have to say.”



Questions?



Parent Resources

www.doe.mass.edu/mcas/parents

- Parent Guide to the MCAS (available in several languages)
- Annotated Parent/Guardian Reports (PPT)
- Frequently Asked Questions (FAQs)
- What are the Achievement Level Descriptors?
- Item Descriptions for Grades 3-8 ELA and Mathematics
- Parent/guardian report templates and translations