

MCAS Results

Spring 2022

School Committee Presentation
November 1, 2022



Wellesley Public Schools

Learning • Caring • Innovating

Presentation Overview

- MCAS Overview
- Accountability
- WPS Achievement and Growth
 - ELA
 - Math
 - Science
- Peer District Comparison
- Summary
- Next Action Steps



MCAS Test Administration 2019–2022

2022 school year was the first full MCAS administration for grades 3–8 since 2019.
Grade 10 students in 2022 had not taken an MCAS test since 2019 (grade 7).

Year	Grades 3-8	Grade 10
2019	Full test administration	Full test administration
2020	No tests administered	No tests administered
2021	Half-test administered	Full test administered
2022	Full test administered	Full test administered

MCAS Scores and Achievement Levels

Table 2: Next Generation MCAS Achievement Levels and MCAS-Alt Scaled Scores

Next Generation MCAS Achievement Level	Next Generation MCAS Scaled Score Range	MCAS-Alt Achievement Level	MCAS-Alt Scaled Score
Exceeding Expectations	530-560		
Meeting Expectations	500-529	Progressing	500
Partially Meeting Expectations	470-499	Emerging	485
		Awareness	470
Not Meeting Expectations	440-469	Portfolio Incomplete	455



Student Growth

- Availability of data allows for return to cohort model for student growth percentile calculations
- Should not be compared to 2021
- Old standards for understanding the means are applicable
 - Mean SGP of 1-19 = Very low growth
 - Mean SGP of 20-39 = Low growth
 - Mean SGP of 40-59 = Typical growth
 - Mean SGP of 60-79 = High growth
 - Mean SGP of 80-99 = Very high growth

MCAS Student Growth Percentile

- Student Growth Percentiles (SGP) are used to measure how a group of students' achievement has grown or changed over time
- Growth is distinct from achievement
 - A student can achieve at a low level but grow quickly, and vice versa
- Students are compared only to their statewide academic peers
 - Others with a similar test score history
 - All students can potentially grow at the 1st or the 99th percentile
- Growth is subject-, grade-, and year-specific
 - Students have different academic peers for each subject, grade, and year
 - Same change in scaled score can yield different SGPs
- Percentile is calculated on the change in achievement



Student Reporting Groups

- Low income (starting 2021-22 school year)
 - Identified as participating in a state public assistance program, including Supplemental Nutrition Assistance Program, Transitional Aid to Families with Dependent Children, MassHealth, and foster care; or
 - Certified as low income through the new supplemental data collection process, or
 - Reported by a district as homeless
- High needs - an unduplicated count of students who are
 - Low income students
 - Students with disabilities
 - Current and former English learners



2021-22 WPS Subgroups

Enrollment by Race/Ethnicity (2021-22)

Race	% of District	% of State
African American	3.8	9.3
Asian	15.8	7.2
Hispanic	5.8	23.1
Native American	0.0	0.2
White	67.1	55.7
Native Hawaiian, Pacific Islander	0.0	0.1
Multi-Race, Non-Hispanic	7.6	4.3

Title	% of District	% of State
First Language not English	7.6	23.9
English Language Learner	1.8	11.0
Low-income	7.4	43.8
Students With Disabilities	17.1	18.9
High Needs	25.6	55.6



2022 Accountability

2022 WPS School Accountability

School	School Accountability Percentile
Ernest F Upham	88
Hunnewell	97
John D Hardy	95
Joseph E Fiske	94
Katherine Lee Bates	96
Schofield	92
Sprague	96
Wellesley Middle	90
Wellesley Sr High	95



2022 Accountability Percentile Calculation

Measures	Year 1 (40%)	Year 2 (60%)
ELA, math, & science achievement	2019	2022
ELA & math SGP	2019	2022
Four-year cohort graduation rate	2020	2021
Extended engagement rate	2019	2020
Annual dropout rate	2020	2021
Progress made by students towards attaining English language proficiency	2020	2022
Chronic absenteeism	2019	2022
Advanced coursework completion	2021	2022



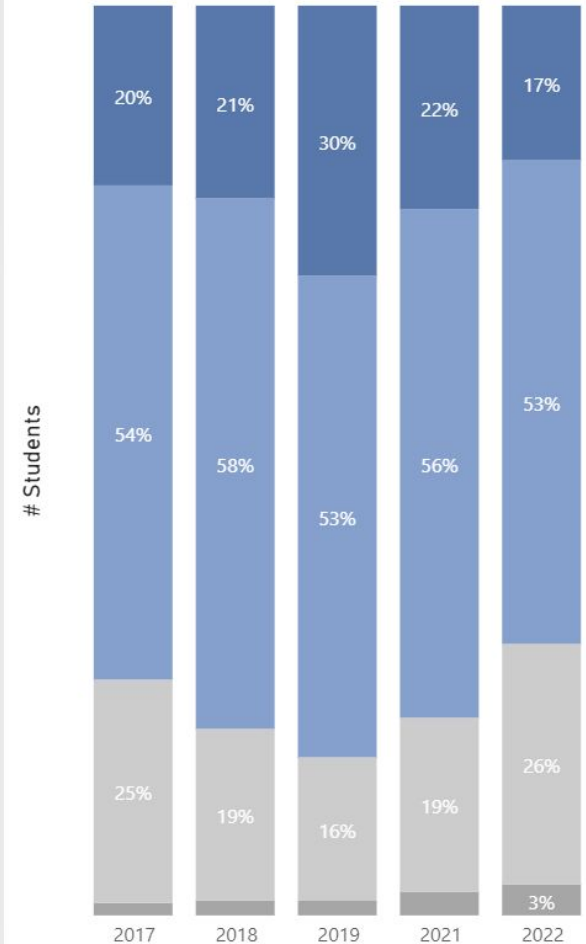
2022 ELA MCAS Results

2022 ELA MCAS Grades 3-5

- 70% of students meeting/exceeding
- Average SGP 59.9 (typical growth)

Student Performance by Year

● Not Meeti... ● Partially M... ● Meeting Ex... ● Exceedin...

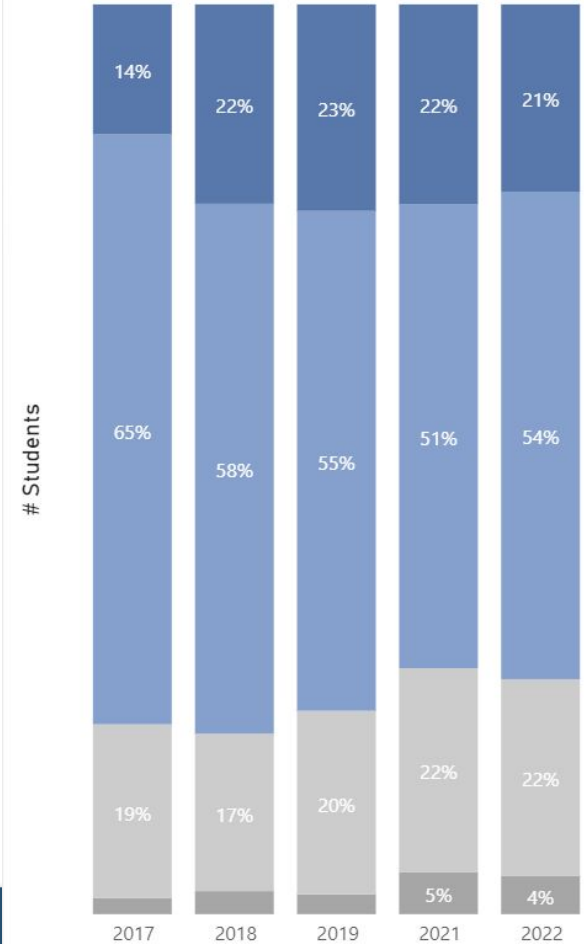


2022 ELA MCAS Grades 6-8

- 74% of students meeting/exceeding
- Average SGP 55.0 (typical growth)

Student Performance by Year

● Not Meeti... ● Partially M... ● Meeting Ex... ● Exceedin...



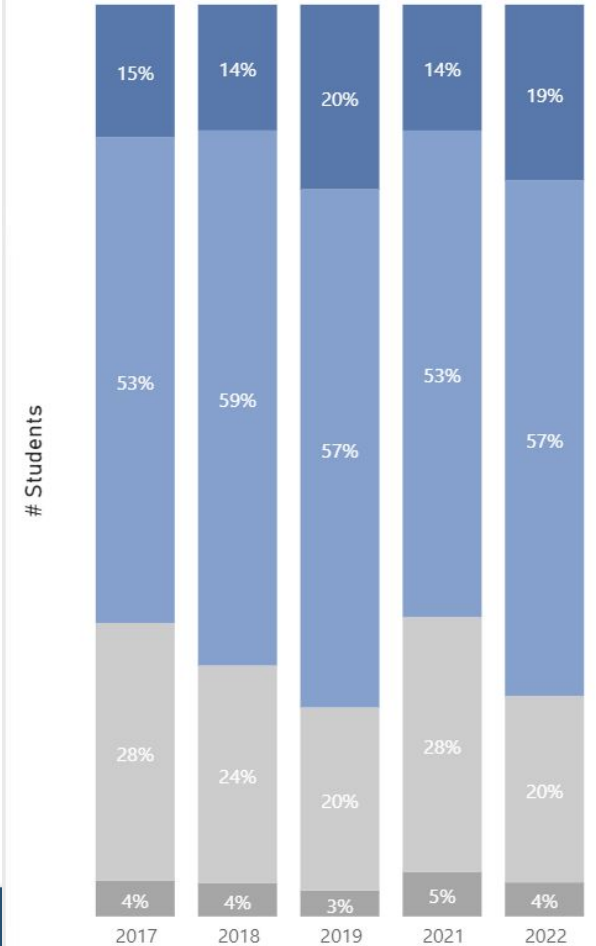
2022 Math MCAS Results

2022 Math MCAS Grades 3-5

- 76% of students meeting/exceeding
- Average SGP 56.0 (typical growth)

Student Performance by Year

● Not Meeti... ● Partially M... ● Meeting Ex... ● Exceedin...

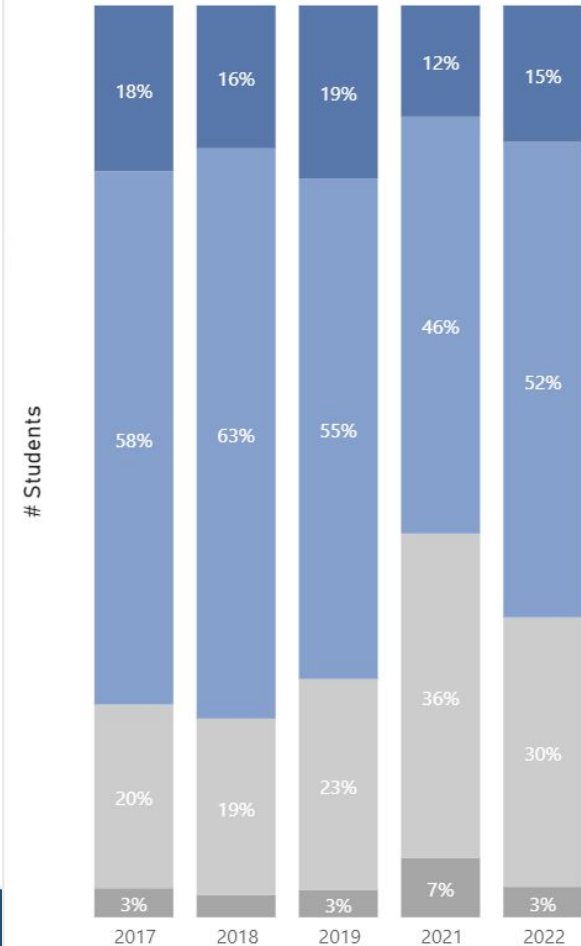


2022 Math MCAS Grades 6-8

- 67% of students meeting/exceeding
- Average SGP 52.9 (typical growth)

Student Performance by Year

● Not Meeti... ● Partially M... ● Meeting Ex... ● Exceedin...

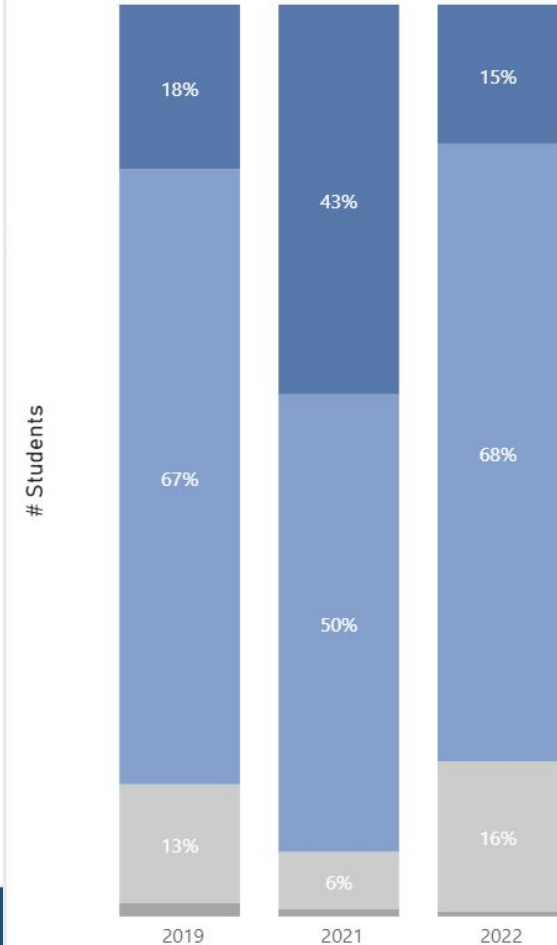


2022 ELA MCAS Grade 10

- 83% of students meeting/exceeding
- Average SGP 50.8 (typical growth)

Student Performance by Year

● Not Meeti... ● Partially M... ● Meeting Ex... ● Exceedin...

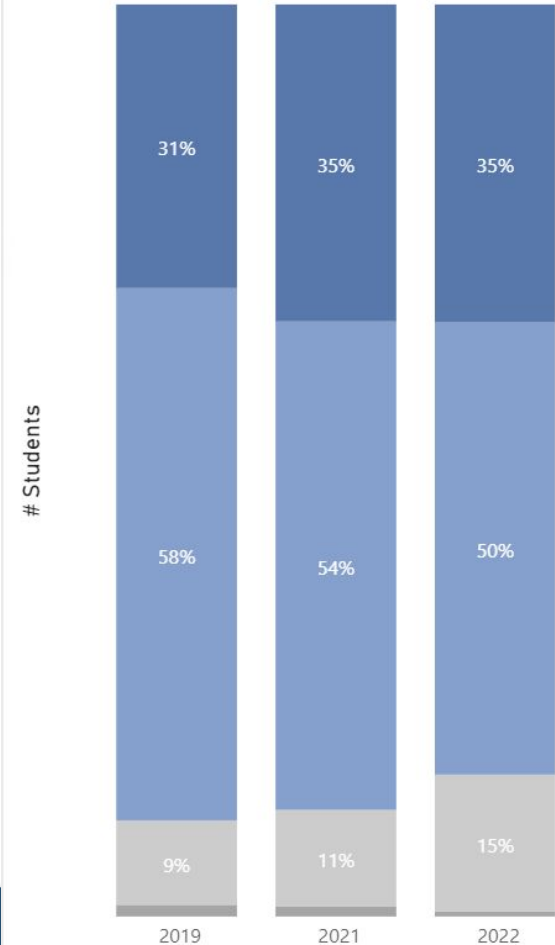


2022 Math MCAS Grade 10

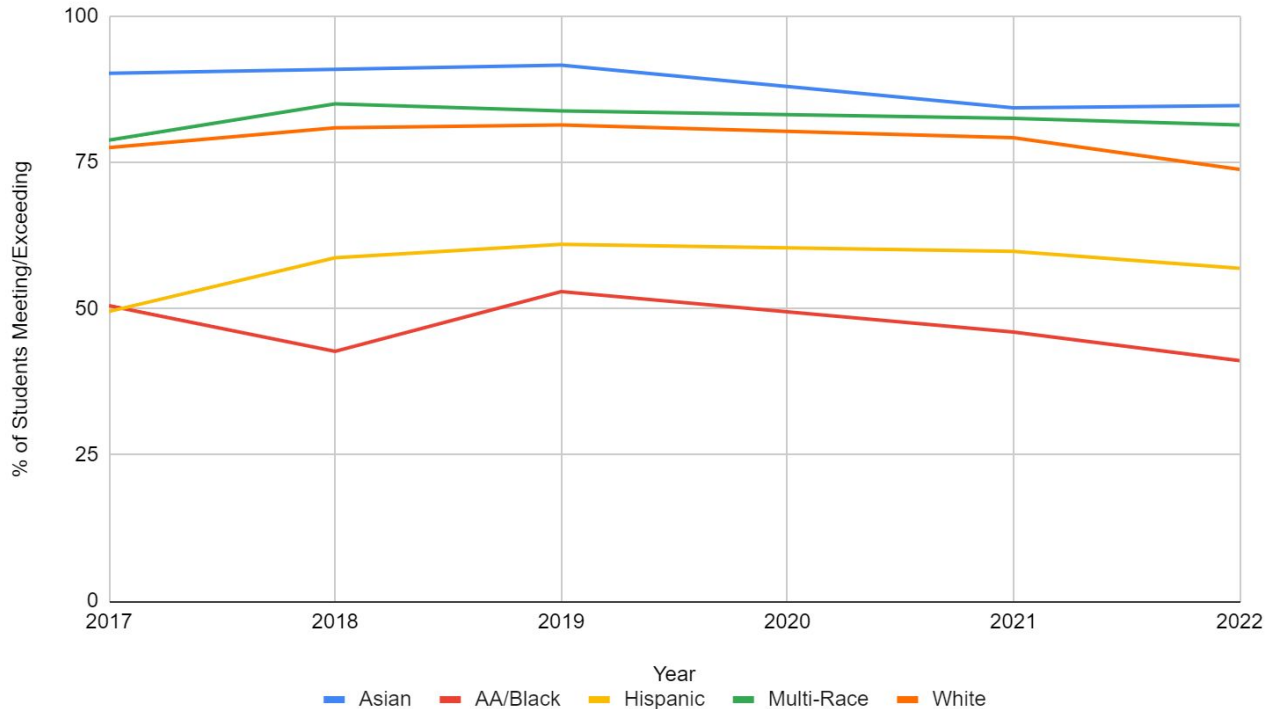
- 84% of students meeting/exceeding
- Average SGP 71.6 (high growth)

Student Performance by Year

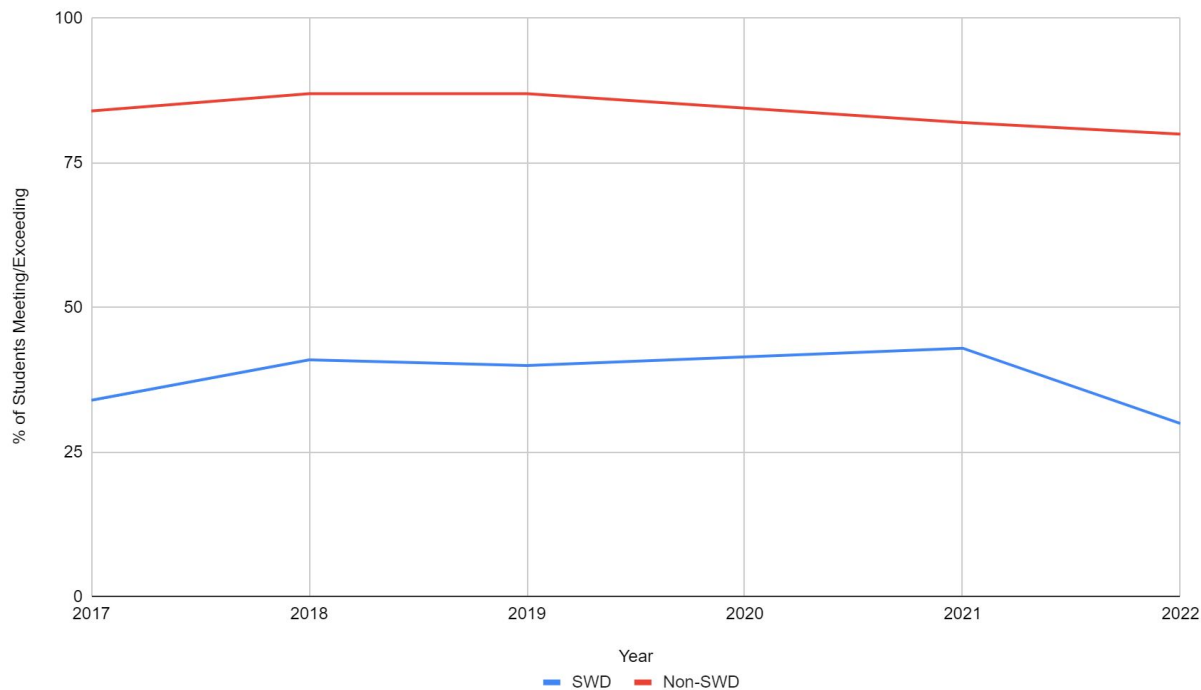
● Not Meeti... ● Partially M... ● Meeting Ex... ● Exceedin...



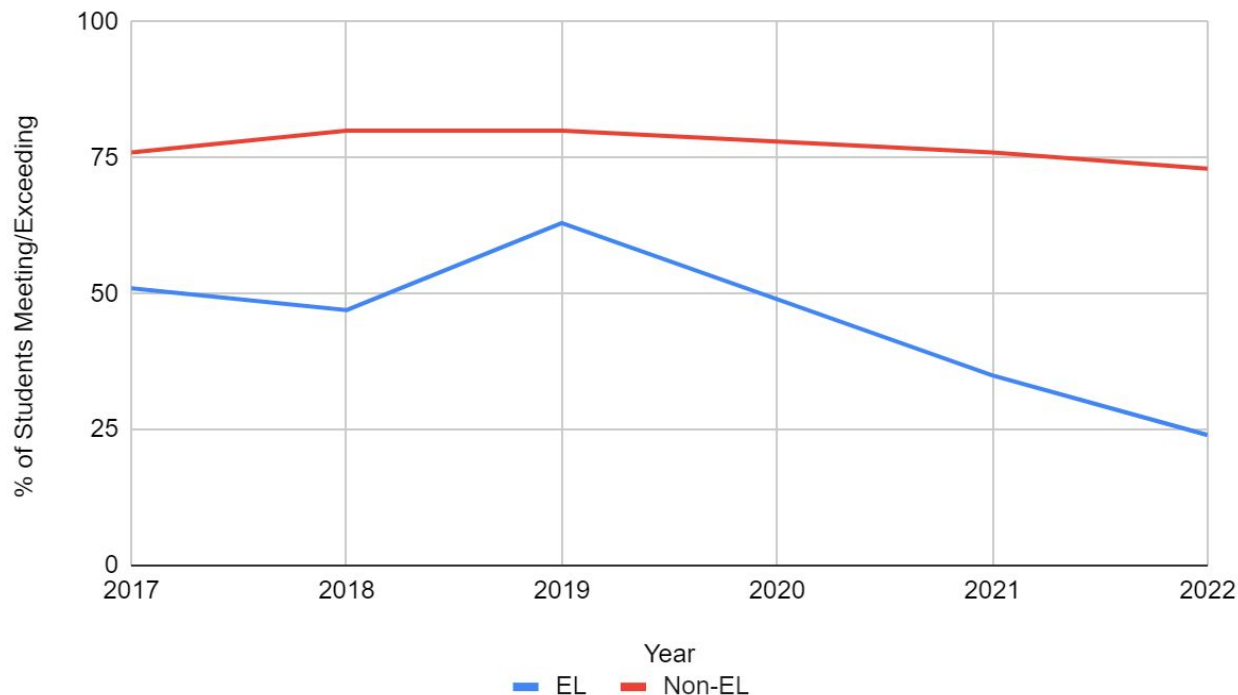
ELA MCAS Percent of Students Meeting/Exceeding by Race/Ethnicity 2017-22



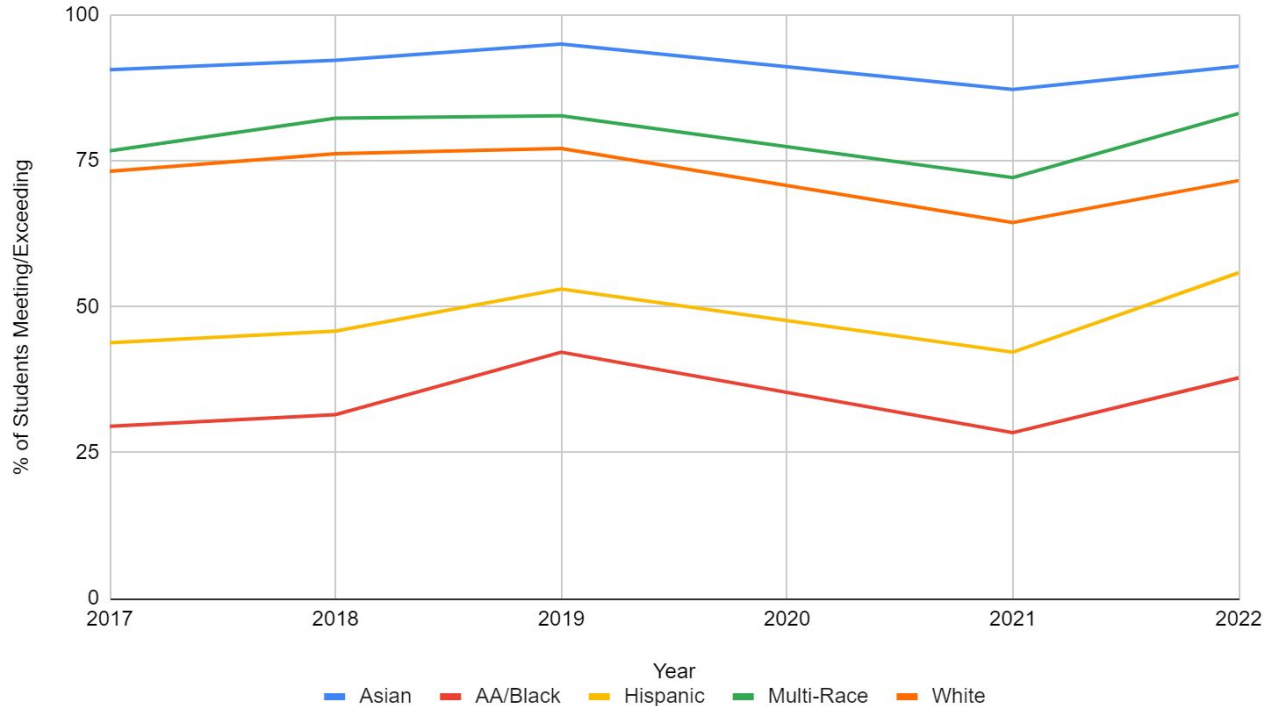
ELA MCAS Grades 3-8 Percent of Students Meeting/Exceeding by Disability Status 2017-22



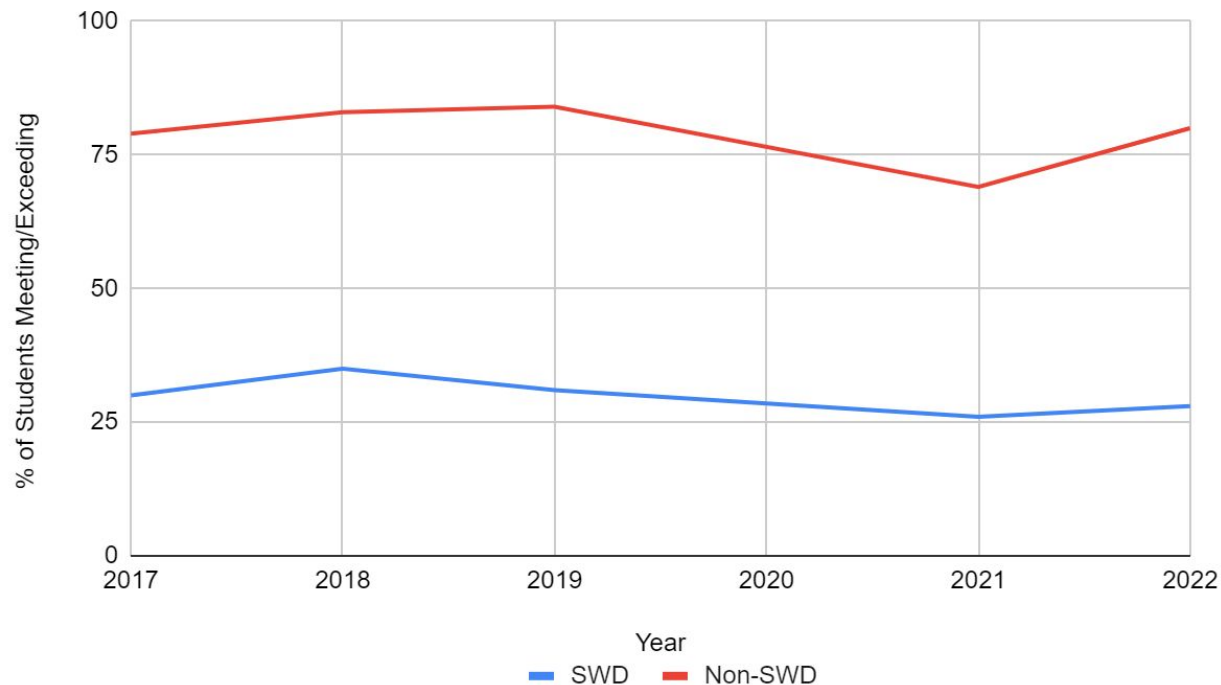
ELA MCAS Grades 3-8 Percent of Students Meeting/Exceeding by EL Status 2017-22



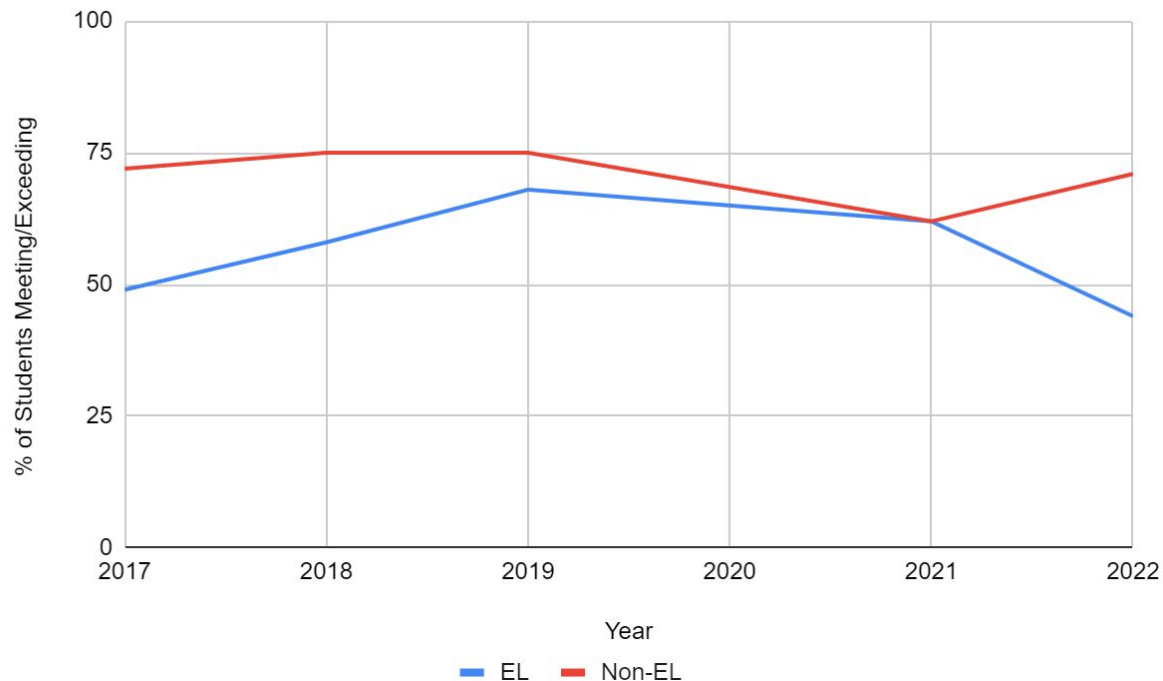
Math MCAS Percent of Students Meeting/Exceeding by Race/Ethnicity 2017-22



Math MCAS Grades 3-8 Percent of Students Meeting/Exceeding by Disability Status 2017-22



Math MCAS Grades 3-8 Percent of Students Meeting/Exceeding by EL Status 2017-22



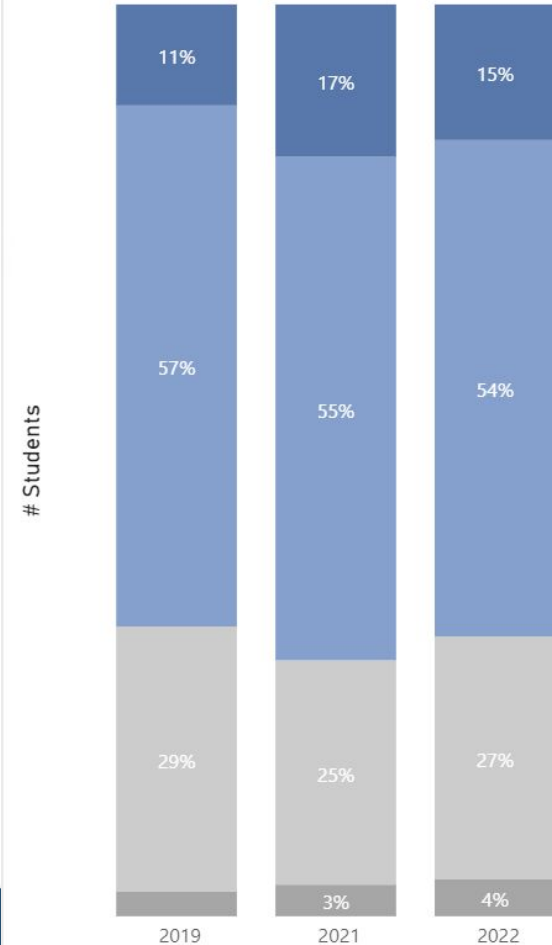
2022 STE MCAS Results

2022 STE MCAS Grade 5

- 69% of students meeting/exceeding

Student Performance by Year

● Not Meeti... ● Partially M... ● Meeting Ex... ● Exceedin...

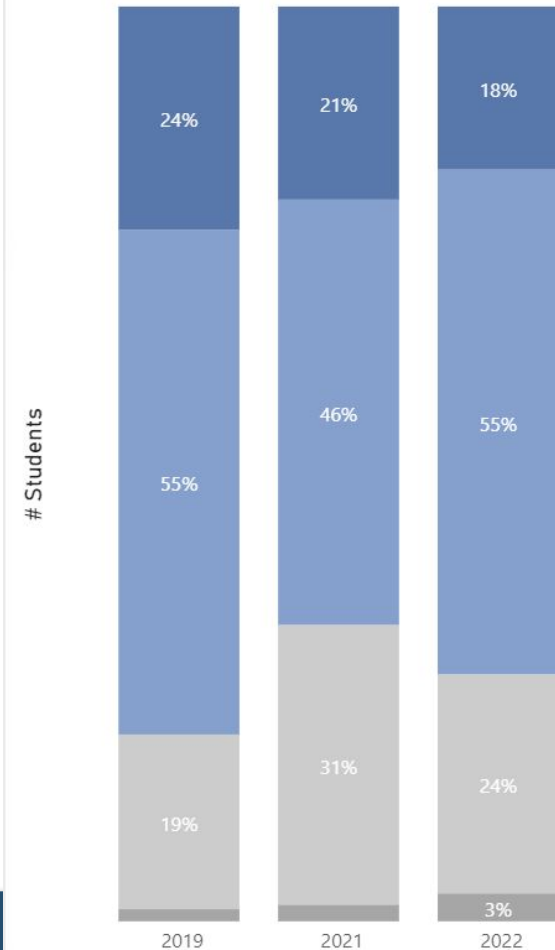


2022 STE MCAS Grade 8

- 73% of students meeting/exceeding

Student Performance by Year

● Not Meeti... ● Partially M... ● Meeting Ex... ● Exceedin...

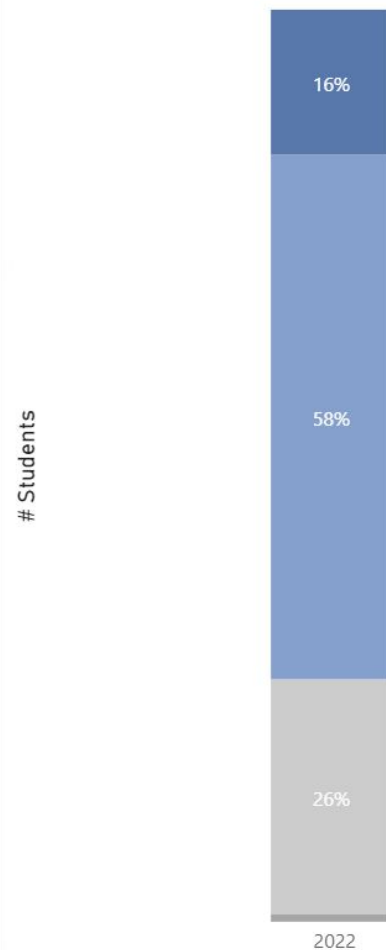


2022 STE MCAS WHS

- 73% of students meeting/exceeding
- First year of Next Gen STE MCAS

Student Performance by Year

● Not Meeti... ● Partially M... ● Meeting Ex... ● Exceedin...



District Comparisons

2022 ELA MCAS District Comparisons Percent Meeting/Exceeding Expectations

District	Grades 3-8
Lexington	75
Weston	74
Wellesley	72
Dover-Sherborn Westwood	71
Carlisle	70
Wayland Winchester	69
Needham Sudbury	68
Concord Dover (3-5)	67
Newton	65
Sherborn (3-5)	63
Natick	62
Lincoln	58

District	Grade 10
Winchester	89
Lexington Weston	88
Concord-Carlisle	86
Wayland	84
Needham	83
Dover-Sherborn Wellesley	82
Lincoln-Sudbury	81
Newton	80
Westwood	79
Natick	77



2022 Math MCAS District Comparisons Percent Meeting/Exceeding Expectations

District	Grades 3-8
Dover (3-5) Lexington	78
Weston	75
Wayland	74
Sudbury	73
Dover-Sherborn Wellesley	71
Westwood	70
Needham	69
Newton Winchester	68
Concord	67
Carlisle	66
Natick	64
Sherborn (3-5)	61
Lincoln	53

District	Grade 10
Weston	87
Lexington	86
Wellesley Winchester	83
Dover-Sherborn Needham Wayland	82
Concord-Carlisle	80
Newton	79
Lincoln-Sudbury	78
Westwood	76
Natick	71



2022 STE MCAS District Comparisons Percent Meeting/Exceeding Expectations

District	Grades 5 & 8
Carlisle	83
Lexington	79
Sudbury	77
Weston Westwood	76
Winchester	74
Wayland Dover-Sherborn (8)	73
Concord	72
Dover (5) Wellesley	71
Lincoln	68
Needham	67
Newton	66
Sherborn (5)	65
Natick	61

District	Grade 10 (Next Gen Scale)
Dover-Sherborn	86
Lexington Westwood	85
Winchester	82
Wayland	80
Concord-Carlisle Needham	79
Weston*	77
Lincoln-Sudbury Wellesley*	73
Natick*	71
Newton*	66



Summary

Areas of strength

- Accountability scores indicate high performance (88th-97th percentile)
- On average, 73% of Gr. 3-10 students achieved Meets or Exceeds
- Students in Gr. 3-8 demonstrated an Average SGP of 56.5 (Typical Growth)
- WPS Gr. 3-8 ELA - 13% growth over last year
- WPS Gr. 3-8 Math - 9% increase in Math achievement and 20% growth over the last year
- WPS Gr. 3-10 students score on average 32% greater than the state; Average SGP 9.5% greater than the state
- WHS - average of 80% of students Meet or Exceed
- WPS Chronically Absent - 11.0% of students 10% or more, 1.6% of students 20% or more
- The District's results are in line with comparable communities



Areas for improvement

- ELA areas for improvement
 - Improve ELA Writing Grades 3-8
 - Increase ELA proficiency for all students, especially students in subgroups
- Math areas for improvement
 - Update the K-5 Math curriculum sequence, ensure units are given time for students to demonstrate mastery
 - Ensure understanding of geometry and measurement concepts
 - Improve Grades 6-8 Math curriculum alignment
 - Increase Grades 3-8 Math proficiency for all students, especially students in subgroups
- Science areas for improvement
 - Identify and support essential skills impacted by the pandemic
 - Increase Gr. 5, 8, HS Science proficiency for all students, especially students in subgroups



Next Steps - District

- Conducted a MCAS item analysis at all levels to calibrate the curriculum content and sequencing
- Investing in district dashboards to help us visualize student performance and inform instructional decision-making
- Investing in professional learning about MTSS (Multi-Tiered System of Supports) to strengthen rigorous core instruction for all students and ensure interventions and extensions for students based on data
- Identifying essential standards districtwide to ensure continuity of instruction
- Developing and implementing data protocols to review student work and calibrate feedback, grading and next instructional steps
- Increasing development and use of real-time formative assessment tools such as common assessments, DIBELS, STAR, and NWEA Measures of Academic Progress
- Analyzing data across grade levels districtwide to ensure high levels of student learning for all students
- Partnering with DEI Director on building educational equity and HR and DEI on increasing staff diversity



Next Steps - Elementary

- Identify essential standards in ELA, Math and Science and focus on rigorous core instruction for all students
- Ensure common instructional time allotments for content areas across all K-5 schools
- Utilize formative assessments and continuously analyze data to inform instruction
- Pilot the NWEA Measures of Academic Progress in Mathematics
- Utilize the WIN block for Math to provide students time and support for interventions/extensions
- Utilize Student Support Teams and School Data Teams to continuously monitor student performance and align interventions and extensions to measurably improve learning
- Analyze common assessment data across district grade levels to ensure student learning
- Add writing tasks to the ELA curriculum to provide increased instruction and practice with writing from a different character's perspective, completing a story that has been presented, and developing an alternative ending to a story
- Support embedded professional development through Collaborative Team Meetings (CTM), Math Mornings and ELA/Math instructional coaching



Next Steps - Math Grades 6, 7, 8

- Created a longitudinal analysis of Grades 6, 7, 8 Math items over the last four years of MCAS to determine the concepts and skills that are typically addressed and ensure that the curriculum is aligned accordingly
- Identifying essential standards and increasing development and implementation of common assessments
- Providing specific feedback about pedagogy (academic discourse, differentiated instruction, student engagement)
- Emphasize understanding and demonstrating the concept of equivalent expressions (identifying equivalent expressions, writing equivalent expressions) across all three grade levels
- Administer the STAR Math Assessment 3x/year in Math general education classes and utilize data to determine interventions and extensions for students
- Pilot the NWEA Measures of Academic Progress in Math for students in supplemental Math classes
- Implement the NWEA Measures of Academic Progress in Math for all students in Grades 6, 7, 8 in 2023-2024



Next Steps - Math Grades 6, 7, 8

WMS Math Grade 6

- Improving alignment - shifted the “Data” unit to be the first unit and “Variables and Patterns” to the end of the school year
- Supplementing the “Number System” unit and “Expressions and Equations” unit with increased learning time and curricular materials to improve alignment to the standards

WMS Math Grade 7

- Improving alignment - shifted “Probability” unit to be the first unit and support students with fraction, decimal and percent equivalence concepts and skills
- Increasing instructional time on “Expressions and Equations”

WMS Math Grade 8

- Improving the “Number System” unit to target key concepts and skills, such as comparing and ordering irrational numbers and exponential expressions



Next Steps - ELA Grades 6, 7, 8

- Identify essential standards connected to the elementary and high school essential standards
- Design and implement common formative assessments aligned to the standards to provide specific feedback to students and inform next instructional steps
- Analyze student performance data within teams in order to determine interventions and extensions
- Build a scope and sequence for writing instruction that spirals in complexity and repeated exposure across grade levels
- Collaborate with Literacy Coordinator to map reading strategy instruction across Grades 6-8 ELA classes and reading intervention courses
- Pilot a writing lab model in Grades 7 & 8 during the Lab and Flex time where students will be able to access a content area teacher for targeted, short-term interventions and writing conferences
- Collaborate with special educators on common texts and common language for writing across content areas



Next Steps - Science Grade 8

- Identify essential standards
- Identify concepts and skills where students need additional time, support and mastery due to the pandemic (the students who took the assessment were affected by school closure in 6th grade and hybrid instruction in 7th grade) and provide reteaching and support accordingly
- Increase development and implementation of common assessments to inform instruction
- Improve science performance of students in subgroups
- Continue to conduct a content review of Grade 6 and 7 Science content before the Grade 8 MCAS



Next Steps - WHS English

- Continuously embed content standards assessed on the ELA MCAS in the English curriculum
 - Grade 9 will continue to heavily emphasize grammar, writing fundamentals, and reading comprehension
 - Grade 10 will continue to focus on core grammar and provide a continuation of the reading and writing learning
- Build students' familiarity with the types of MCAS questions and test-taking approaches
- Develop and provide specific interventions in response to each student's daily English performance
 - Students have access to 9CP Help Lab, English Lab and extra help in class and after school
- Focus on making courses and curriculum equitable, specifically identifying essential standards at each grade level, the ways students can demonstrate those skills and how teachers calibrate grading



Next Steps - WHS Math

- Analyzed the WHS MCAS Math results to inform curriculum and instruction
- Continue to provide the Math Plus class (for 11th grade students who scored “Not Meeting Expectations” on the 10th grade test or 10th grade students who scored “Not Meeting Expectations” on their 8th grade test)
- Utilize formative assessment data among teachers of CP courses to inform curricular planning and refine instruction
- Continue to help students build familiarity with the types of MCAS questions and test-taking approaches
- Continue to provide Math Lab for additional help



Next Steps - WHS Science

- Conduct an item analysis of each MCAS question and student performance to inform curriculum and instruction
- Incorporate MCAS Physics practice into ongoing formative assessments and integrate MCAS test taking strategies
- Offer a Physics MCAS Prep class to support students in preparing for the assessment
- Analyze student performance in subgroups to support individual student needs



Who to Contact with Questions

- Elementary - student's teacher, principal
- Middle School - student's teacher, department head, principal
- High School - student's teacher, department head, assistant principal, principal

