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| Spring 2023 MCAS Tests:  Summary of State Results |
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November 2023

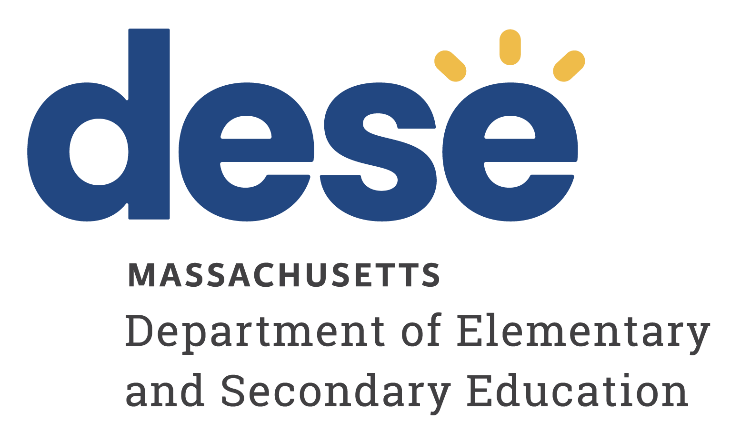
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# **I. Introduction**

The Massachusetts Comprehensive Assessment System (MCAS) is the Commonwealth’s standards-based student assessment program. This report summarizes the state-level results from the spring 2023 administration of MCAS tests in English Language Arts (ELA), Mathematics, and Science and Technology/Engineering (STE). The report provides trends in state results and changes in academic achievement gaps between demographic groups. For information on school- and district-level MCAS results, please visit the [School and District Profiles website](http://profiles.doe.mass.edu/).

## **Which MCAS Tests Were Administered in 2023?**

In 2023, Massachusetts administered the last legacy assessments and completed the process of transitioning the MCAS program to next-generation tests. The next-generation tests include new test designs and item types and are administered primarily via computer, though the Department offers paper-based tests on an ongoing basis as an accommodation for certain students.

Table 1 shows which MCAS tests were administered at each grade level in spring 2023 and whether the tests were next-generation (NG) or legacy (L) assessments.

**Table 1: Spring 2023 MCAS Tests Administered, by Grade Level**

| **Content Area** | **Grade Level** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| English Language Arts | NG | NG | NG | NG | NG | NG |  | NG |
| Mathematics | NG | NG | NG | NG | NG | NG |  | NG |
| Science and Technology/Engineering  Biology & Introductory Physics  Chemistry & Technology/Engineering |  |  | NG |  |  | NG | NGa | NGa  La |
| aStudents in grade 9 or 10 were able to take one of the high school STE next-generation tests in Biology and Introductory Physics; only grade 10 students were able to take one of the legacy tests in Chemistry and Technology/Engineering. Grade 10 STE results are reported based on students’ best performance on any STE test taken in grade 9 or grade 10; only students continuously enrolled in the state from fall of grade 9 through spring of grade 10 are included in state results. | | | | | | | | |

## **Who Participated in MCAS in 2023?**

All students who are enrolled in the tested grades and who are educated at public expense are required by state and federal law to participate in MCAS testing. In spring 2023, a total of 479,661 students in grades 3–8 and 10 participated in at least one MCAS test and are included in these summaries. On individual tests, the percentage of enrolled students who participated was consistently high, ranging from 97 to 99%.

Section V of this report provides detailed information about the demographics of the student population that was enrolled and participated in MCAS testing and summarizes changes to the population between 2022 and 2023. For additional information on state-level MCAS participation, go to the [Assessment section of the State Profile](http://profiles.doe.mass.edu/mcas/achievement_level.aspx?linkid=32&orgcode=00000000&orgtypecode=0&) on the School and District Profiles website and select “MCAS Participation Report.”

***MCAS-Alt Participation***

Students with significant cognitive disabilities who are unable to take the standard MCAS tests, even with accommodations, are required to participate in the [MCAS Alternate Assessment](http://www.doe.mass.edu/mcas/alt/) (MCAS-Alt). The MCAS-Alt enables these students to submit portfolios of their work that demonstrate their performance on the curriculum framework learning standards. The number of students in grades 3–8 and 10 who participated in the MCAS-Alt in 2023 is as follows:

* ELA: 5,822 students
* Math: 5,889 students
* STE: 2,240 students

## **What Were the Administration Guidelines for the Spring 2023 MCAS Tests?**

Table 2 provides information about the spring 2023 test administrations, including administration dates, numbers of sessions, and recommended testing times. All MCAS test administrations are untimed. The Department provides recommended session lengths to assist schools with planning.

**Table 2: Spring 2023 MCAS Test Administrations**

| **Test** | **Administration Dates** | **Number of Sessions** | **Recommended Testing Time for Spring 2023** |
| --- | --- | --- | --- |
| ELA Grades 3–8 | March 27–April 28a | 2 | 120–150 minutes per session |
| ELA Grade 10 | March 28–29 | 2 | 90–150 minutes per session |
| Mathematics Grades 3–8 | April 24–May 26a | 2 | 90 minutes per session |
| Mathematics Grade 10 | May 16–17 | 2 | 90–120 minutes per session |
| STE Grades 5 and 8 | April 25–May 26a | 2 | 60–90 minutes per session |
| STE High School | June 6–7 | 2 | 90 minutes per session |
| aAt grades 3–8, schools scheduled tests within a testing window. | | | |

MCAS test sessions are composed of a variety of question types, and the number of questions and score points vary by grade and subject. See the [MCAS test designs](http://www.doe.mass.edu/mcas/tdd/) for detailed information.

## **How Are MCAS Results Reported?**

Student results on the MCAS tests are reported using scaled scores and achievement levels. Students receive a separate score and attain a separate achievement level in each subject area. In this report, performance at the state level is summarized using the percentage of students attaining each achievement level. For reporting next-generation results, an additional metric is also used: the average scaled score for the student group being evaluated. The sections below provide more information about these metrics.

***Achievement Levels***

In March 2017, the Board of Elementary and Secondary Education adopted new achievement levels for the next-generation tests. These next-generation achievement levels differ from the legacy MCAS achievement levels and are reported using a different scale. The next-generation achievement levels are designed to provide an indication of whether a student is on track to succeed in the subject matter and whether extra academic assistance may be needed for the student.

Table 3 presents the achievement levels and scaled scores for the next-generation ELA, Mathematics, and STE tests at grades 3–8 and 10. Table 4 presents the achievement levels and scaled scores for the legacy MCAS tests, which in 2023 included only the high school STE tests in Chemistry and Technology/Engineering.

**Table 3: Next-Generation MCAS Achievement Levels**

| **Achievement Level** | Scaled Score Range | Definition |
| --- | --- | --- |
| Exceeding Expectations | 530–560 | A student who performed at this level exceeded grade-level expectations by demonstrating mastery of the subject matter. |
| Meeting Expectations | 500–529 | 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 | 470–499 | A student who performed at this level partially met grade-level expectations in this subject. The school, in consultation with the student’s parent/guardian, should consider whether the student needs additional academic assistance to succeed in this subject. |
| Not Meeting Expectations | 440–469 | A student who performed at this level did not meet grade-level expectations in this subject. The school, in consultation with the student’s parent/guardian, should determine the coordinated academic assistance and/or additional instruction the student needs to succeed in this subject. |

**Table 4: Legacy MCAS Achievement Levels**

| **Achievement Level** | Scaled Score Range | Definition |
| --- | --- | --- |
| *Advanced* | 260–280 | Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter and provide sophisticated solutions to complex problems. |
| *Proficient* | 240–258 | Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems. |
| *Needs Improvement* | 220–238 | Students at this level demonstrate a partial understanding of subject matter and solve some simple problems. |
| *Failing* | 200–218 | Students at this level demonstrate a minimal understanding of subject matter and do not solve simple problems. |

***Average Scaled Scores***

As shown in Table 3, students receive a scaled score between 440 and 560 for each next-generation test they take. Because of the design of the next-generation scale, the scaled scores for a group of students can be used to calculate an average (mean) scaled score, which indicates average performance for the group. Average scaled scores can be calculated at the classroom, school, district, or state level, and for student subgroups.

In section III of this report, average scaled scores are used to summarize and compare student achievement on the next-generation tests. A benefit of using average scaled scores is that the performance of *all* students in the group contributes to the measure. Note that average scaled scores are not reported for legacy tests, as the legacy scale was not designed to support this metric.

## **How Are MCAS Results Used?**

MCAS test results are used for four primary purposes:

* to inform and improve curriculum and instruction
* to evaluate student, school, and district performance according to the Massachusetts curriculum framework content standards and MCAS performance standards
* at the high school level, to determine whether a student has met the state requirements for the Competency Determination (i.e., whether a student is eligible for a high school diploma)
* at the high school level, to determine whether a student has met one of the eligibility requirements for the John and Abigail Adams Scholarship and the Stanley Z. Koplik Certificate of Mastery Award

Information about high school graduation requirements is available at [doe.mass.edu/mcas/graduation.html](http://www.doe.mass.edu/mcas/graduation.html); Competency Determination attainment in 2023 is presented in section VI of this report.

# **II. Statewide Achievement Level Results**

This section reports statewide results from the spring 2023 MCAS tests by achievement level. In the figures and tables in this section, results for the ELA and Mathematics tests at grades 3–8 and 10; the STE tests at grades 5 and 8; and the high school STE tests in Biology and Introductory Physics are reported using the next-generation achievement levels (Exceeding Expectations, Meeting Expectations, Partially Meeting Expectations, Not Meeting Expectations).

## **Student Achievement in Grades 3–8 and 10**

Figure 1 shows the percentage of students scoring at each achievement level on the 2023 ELA tests.[[1]](#footnote-2) The percentage of students scoring Meeting Expectations or higher ranged from a high of 58% at grade 10 to a low of 39% at grade 4.

**Figure 1: 2023 Percentage of Students by Grade and Achievement Level, ELA**

Bar chart showing the percentage of grades 3 through 8 students scoring at each achievement level on the 2023 ELA tests



Table 5 summarizes changes in the percentage of students scoring Meeting Expectations or higher on the ELA tests in 2021, 2022, and 2023. The percentage point change columns illustrate the two- and three-year trends.

**Table 5: Percentage Changes in ELA Achievement in 2021, 2022, and 2023,**

**and Two- and Three-Year Trends**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Grade** | **Percentage of Students Scoring**  **Meeting Expectations or Higher in ELA** | | | **2022–2023 Percentage Point Change** | **2021–2023 Percentage Point Change** |
| **2021** | **2022** | **2023** |
| Grade 3 | 51 | 44 | 44 | 0 | -7 |
| Grade 4 | 49 | 38 | 40 | 2 | -9 |
| Grade 5 | 47 | 41 | 44 | 3 | -3 |
| Grade 6 | 47 | 41 | 42 | 1 | -5 |
| Grade 7 | 43 | 41 | 40 | -1 | -3 |
| Grade 8 | 41 | 42 | 44 | 2 | 3 |
| Grades 3–8 | 46 | 41 | 42 | 1 | -4 |
| Grade 10 | 64 | 58 | 58 | 0 | -6 |

Figure 2 shows the percentage of students scoring at each achievement level on the 2023 Mathematics tests. The percentage of students scoring Meeting Expectations or higher ranged from a high of 50% at grade 10 to a low of 37% at grade 8.

**Figure 2: 2023 Percentage of Students by Grade and Achievement Level, Mathematics**Bar chart showing the percentage of grades 3 through 8 students scoring at each achievement level on the 2023 Mathematics test.



Table 6 summarizes changes in the percentage of students scoring Meeting Expectations or higher on the Mathematics tests in 2021, 2022, and 2023. The percentage point change columns illustrate the two- and three-year trends.

**Table 6: Percentage Changes in Mathematics Achievement in 2021, 2022, and 2023,**

**and Two- and Three-Year Trends**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Grade** | **Percentage of Students Scoring**  **Meeting Expectations or Higher in Mathematics** | | | **2022–2023 Percentage Point Change** | **2021–2023 Percentage Point Change** |
| **2021** | **2022** | **2023** |
| Grade 3 | 33 | 41 | 41 | 0 | 8 |
| Grade 4 | 33 | 42 | 45 | 3 | 12 |
| Grade 5 | 33 | 36 | 41 | 5 | 8 |
| Grade 6 | 33 | 42 | 41 | -1 | 8 |
| Grade 7 | 35 | 37 | 38 | 1 | 3 |
| Grade 8 | 32 | 36 | 38 | 2 | 6 |
| Grades 3–8 | 33 | 39 | 41 | 2 | 8 |
| Grade 10 | 52 | 50 | 50 | 0 | -2 |

## **Student Achievement on STE Tests in Grades 5, 8, and 10**

Figure 3 shows the percentage of students at each achievement level on the STE tests. In 2023, 42% of students statewide scored Meeting Expectations or higher on the grade 5 STE test, 41% scored Meeting Expectations or higher on the grade 8 STE test, and 47% scored Meeting Expectations or higher on a next-generation high school STE test test taken by grade 10 students.

**Figure 3: 2023 Percentage of Students by Grade and Achievement Level, Science and Technology/Engineering**Bar chart showing the percentage of students in grades 5, 8 and 10 at each achievement level on the STE tests. In 2023.



Table 7 summarizes changes in the percentage of students scoring Meeting Expectations or higher on the grades 5 and 8 and high school STE tests in 2021, 2022, and 2023 The percentage point change columns illustrate the two- and three-year trend for grades 5 and 8. Grade 10 STE figures include students in the class of 2025 who participated in an STE test in grade 9 in 2022 or grade 10 in 2023; only students continuously enrolled in Massachusetts public schools from fall of grade 9 through spring of grade 10 are included in STE results.

**Table 7: Percentage Changes in STE Achievement in 2021, 2022, and 2023,**

**and Two- and Three-Year Trends**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Grade** | **Percentage of Students Scoring**  **Meeting Expectations or Higher in STE** | | | **2022–2023 Percentage Point Change** | **2021–2023 Percentage Point Change** |
| **2021** | **2022** | **2023** |
| Grade 5 | 42 | 43 | 42 | -1 | 0 |
| Grade 8 | 41 | 42 | 41 | -1 | 0 |
| Grade 10 | n/a[[2]](#footnote-3) | 47 | 47 | 0 | n/a[[3]](#footnote-4)a |

# 

# **III. Statewide Scaled Score Results**

This section reports state-level results from the spring 2023 MCAS tests by average scaled score. As described on page 3, students receive a scaled score between 440 and 560 for each test they take. The scaled scores for a group of students can be used to calculate an average (mean) scaled score, which indicates average performance for the group.[[4]](#footnote-5) By comparing the average scaled score to the score ranges for the achievement levels, shown in Table 8, a determination can be made about whether, on average, the students in the group are meeting expectations.

**Table 8: Achievement Levels and Scaled Scores**

| **Achievement Level** | **Scaled Score Range** |
| --- | --- |
| Exceeding Expectations | 530–560 |
| Meeting Expectations | 500–529 |
| Partially Meeting Expectations | 470–499 |
| Not Meeting Expectations | 440–469 |

## **Average Scaled Scores**

Table 9 shows the average scaled score for all students in the state, by grade, for ELA, Mathematics, and grades 5 and 8 STE. The average scaled scores ranged from a low of 492 in Math at grade 7 and a high of 504 in ELA at grade 10. At all grades, the average scaled scores are within 4–8 points of 500, which is the minimum score for the Meeting Expectations achievement level.

**Table 9: 2023 Average State-Level Scaled Scores by Grade**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Grade** | **ELA Average Scaled Score** | **ELA Number of Students** | **Math Average Scaled Score** | **Math Number of Students** | **STE**  **Average Scaled Score** | **STE**  **Number of Students** |
| **3** | 495 | 64,164 | 494 | 64,275 |  |  |
| **4** | 494 | 65,608 | 496 | 65,642 |  |  |
| **5** | 495 | 65,612 | 495 | 65,673 | 494 | 65,520 |
| **6** | 493 | 66,546 | 494 | 66,578 |  |  |
| **7** | 493 | 66,589 | 492 | 66,536 |  |  |
| **8** | 494 | 68,342 | 493 | 68,251 | 494 | 67,978 |
| **3–8** | 494 | 396,861 | 494 | 396,955 | 494 | 133,498 |
| **10** | 504 | 70,583 | 500 | 70,155 | 499 | 67,407**a** |

aGrade 10 STE results include students in the class of 2025 who participated in an STE test in grade 9 in 2022 or grade 10 in 2023; only students continuously enrolled in Massachusetts public schools from fall of grade 9 through spring of grade 10 are included.

## **Average Scaled Scores by Grade for State’s Largest Racial/Ethnic Groups**

Table 10 shows the average scaled scores for 2021, 2022, and 2023 in grades 3–8 and 10 in ELA, Mathematics, and STE, for the state’s largest racial/ethnic reporting groups. The data illustrate the change in performance for each group and allow for comparisons between groups and between grade levels. Grades 3–8 and 10 results for other student groups, including grade-level results, are available in the statewide [Next Generation MCAS Achievement Report](http://profiles.doe.mass.edu/statereport/nextgenmcas.aspx) on the School and District Profiles website.

**Table 10: Average Scaled Score by Grade for Largest Racial/Ethnic Groups in 2021, 2022, and 2023**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grade | Student Group | ELA | | | Mathematics | | | STE | | | |
| **2021** | **2022** | **2023** | **2021** | **2022** | **2023** | **2021** | **2022** | **2023** |
| Grade 3 | African American/Black | 490 | 488 | 486 | 474 | 481 | 482 |  |  |  |
| Asian | 509 | 507 | 507 | 505 | 511 | 511 |  |  |  |
| Hispanic/Latino | 488 | 484 | 483 | 473 | 480 | 481 |  |  |  |
| White | 504 | 501 | 500 | 494 | 498 | 499 |  |  |  |
| Grade 4 | African American/Black | 489 | 485 | 485 | 474 | 482 | 483 |  |  |  |
| Asian | 507 | 502 | 505 | 505 | 511 | 513 |  |  |  |
| Hispanic/Latino | 486 | 482 | 482 | 473 | 481 | 483 |  |  |  |
| White | 503 | 497 | 498 | 494 | 499 | 501 |  |  |  |
| Grade 5 | African American/Black | 487 | 487 | 487 | 479 | 483 | 485 | 481 | 482 | 482 |
| Asian | 507 | 506 | 507 | 507 | 510 | 512 | 506 | 508 | 508 |
| Hispanic/Latino | 485 | 485 | 484 | 478 | 481 | 484 | 481 | 481 | 481 |
| White | 501 | 499 | 499 | 495 | 497 | 499 | 500 | 501 | 500 |
| Grade 6 | African American/Black | 484 | 482 | 482 | 478 | 483 | 483 |  |  |  |
| Asian | 511 | 508 | 507 | 510 | 514 | 513 |  |  |  |
| Hispanic/Latino | 483 | 480 | 478 | 478 | 483 | 481 |  |  |  |
| White | 502 | 498 | 499 | 494 | 499 | 499 |  |  |  |
| Grade 7 | African American/Black | 484 | 485 | 483 | 480 | 480 | 480 |  |  |  |
| Asian | 508 | 508 | 508 | 513 | 514 | 514 |  |  |  |
| Hispanic/Latino | 482 | 482 | 480 | 479 | 479 | 478 |  |  |  |
| White | 499 | 497 | 498 | 496 | 497 | 497 |  |  |  |
| Grade 8 | African American/Black | 484 | 486 | 484 | 478 | 482 | 482 | 482 | 482 | 482 |
| Asian | 510 | 509 | 512 | 511 | 514 | 516 | 509 | 509 | 509 |
| Hispanic/Latino | 482 | 483 | 481 | 478 | 481 | 481 | 482 | 481 | 481 |
| White | 499 | 498 | 499 | 493 | 497 | 497 | 500 | 499 | 499 |
| Grades 3–8 | African American/Black | 486 | 485 | 485 | 477 | 482 | 483 | 481 | 482 | 482 |
| Asian | 509 | 507 | 508 | 509 | 512 | 513 | 507 | 508 | 509 |
| Hispanic/Latino | 484 | 483 | 481 | 477 | 481 | 481 | 481 | 481 | 481 |
| White | 501 | 498 | 499 | 494 | 498 | 499 | 500 | 500 | 499 |
| Grade 10 | African American/Black | 495 | 494 | 495 | 487 | 488 | 489 |  | 487a | 487 |
| Asian | 518 | 514 | 518 | 521 | 521 | 521 |  | 513 | 517 |
| Hispanic/Latino | 492 | 492 | 490 | 485 | 488 | 487 |  | 485 | 485 |
| White | 513 | 506 | 509 | 505 | 505 | 505 |  | 504 | 504 |

aAverage scaled scores for Grade 10 STE are available beginning in 2022, the first year of next-generation tests in that subject.

Figures 4 and 5 show the three-year changes in average scaled scores in ELA and Mathematics, from 2021 to 2023, for the state’s largest student racial/ethnic reporting groups. In the figures, blue-shaded bars represent a positive change in average scaled scores for the three-year period. Orange-shaded bars represent negative change.

**Figure 4: ELA Average Scaled Score Point Change in 2021–2023 Among Four Largest Racial/Ethnic Groups**Figure 4 shows the three-year changes in average scaled scores in ELA from 2021 to 2023, for the state’s largest student racial/ethnic reporting groups for all grades.


**Figure 5: Mathematics Average Scaled Score Point Change in 2021–2023 Among Four Largest Racial/Ethnic Groups**
Figure 5 shows the three-year changes in average scaled scores in Mathematics, from 2021 to 2023, for the state’s largest student racial/ethnic reporting groups for all grades.

## **Average Scaled Score by Grade for Special Populations**

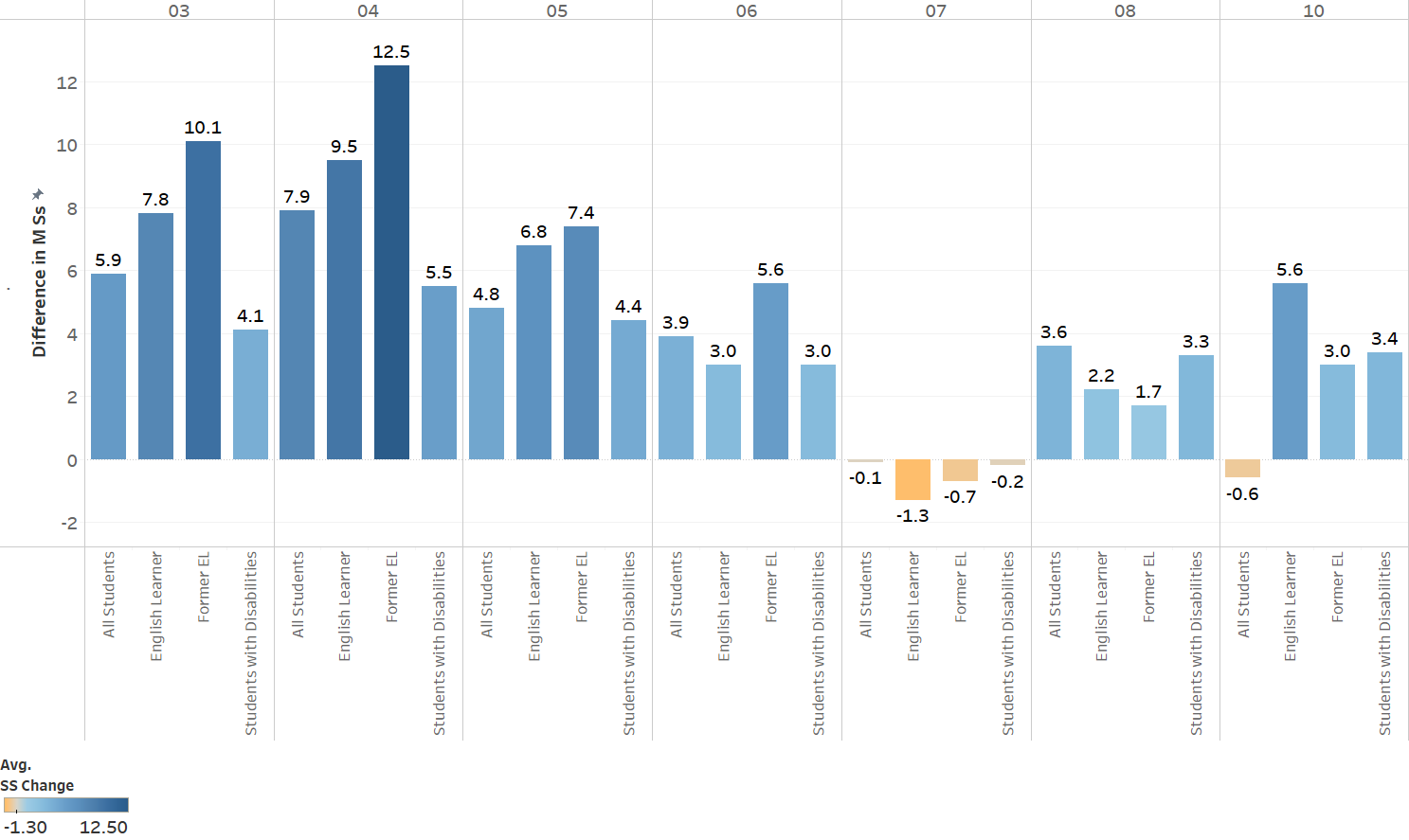
Table 11 presents the average scaled scores for 2021, 2022, and 2023 in grades 3–8 and 10 in ELA, Mathematics, and STE for economically disadvantaged and low-income students, English learners, and students with disabilities. The data illustrate the change in performance for each group and allow for comparisons between groups and between grade levels. Grades 3–8 and 10 results for other student groups, including grade-level results, are available in the statewide [Next Generation MCAS Achievement Report](http://profiles.doe.mass.edu/statereport/nextgenmcas.aspx) on the School and District Profiles website.

**Table 11: Average Scaled Score by Grade for Special Populations in 2021, 2022, and 2023**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade** | **Student Group[[5]](#footnote-6)** | **ELA** | | | **Mathematics** | | | **STE[[6]](#footnote-7)** | | |
| **2021** | **2022** | **2023** | **2021** | **2022** | **2023** | **2021** | **2022** | **2023** |
| Grade 3 | All Students | 500 | 497 | 495 | 488 | 493 | 494 |  |  |  |
| Economically Disadvantaged | 489 |  |  | 475 |  |  |  |  |  |
| Low Income |  | 487 | 484 |  | 482 | 482 |  |  |  |
| English Learners | 481 | 478 | 476 | 469 | 476 | 477 |  |  |  |
| Students with Disabilities | 485 | 480 | 479 | 472 | 475 | 476 |  |  |  |
| Grade 4 | All Students | 498 | 493 | 494 | 488 | 494 | 496 |  |  |  |
| Economically Disadvantaged | 487 |  |  | 475 |  |  |  |  |  |
| Low Income |  | 484 | 484 |  | 483 | 484 |  |  |  |
| English Learners | 476 | 474 | 473 | 467 | 475 | 476 |  |  |  |
| Students with Disabilities | 482 | 477 | 476 | 472 | 476 | 477 |  |  |  |
| Grade 5 | All Students | 497 | 495 | 495 | 490 | 493 | 495 | 494 | 495 | 494 |
| Economically Disadvantaged | 486 |  |  | 479 |  |  | 482 |  |  |
| Low Income |  | 486 | 485 |  | 483 | 485 |  | 484 | 482 |
| English Learners | 470 | 473 | 470 | 468 | 473 | 475 | 467 | 468 | 466 |
| Students with Disabilities | 480 | 479 | 477 | 475 | 477 | 479 | 479 | 478 | 477 |
| Grade 6 | All Students | 497 | 493 | 493 | 490 | 495 | 494 |  |  |  |
| Economically Disadvantaged | 483 |  |  | 478 |  |  |  |  |  |
| Low Income |  | 482 | 480 |  | 484 | 483 |  |  |  |
| English Learners | 462 | 461 | 457 | 466 | 470 | 469 |  |  |  |
| Students with Disabilities | 474 | 472 | 469 | 473 | 477 | 476 |  |  |  |
| Grade 7 | All Students | 494 | 493 | 493 | 492 | 492 | 492 |  |  |  |
| Economically Disadvantaged | 483 |  |  | 480 |  |  |  |  |  |
| Low Income |  | 484 | 481 |  | 481 | 480 |  |  |  |
| English Learners | 464 | 463 | 462 | 467 | 466 | 466 |  |  |  |
| Students with Disabilities | 474 | 473 | 473 | 473 | 473 | 473 |  |  |  |
| Grade 8 | All Students | 495 | 494 | 494 | 489 | 493 | 493 | 496 | 494 | 494 |
| Economically Disadvantaged | 482 |  |  | 478 |  |  | 483 |  |  |
| Low Income |  | 484 | 482 |  | 483 | 482 |  | 483 | 482 |
| English Learners | 462 | 461 | 457 | 466 | 469 | 468 | 467 | 465 | 466 |
| Students with Disabilities | 474 | 472 | 470 | 471 | 474 | 474 | 478 | 476 | 476 |
| Grades 3–8 | All Students | 497 | 494 | 494 | 490 | 493 | 494 | 495 | 495 | 494 |
| Economically Disadvantaged | 485 |  |  | 477 |  |  | 482 |  |  |
| Low Income |  | 484 | 483 |  | 483 | 483 |  | 483 | 482 |
| English Learners | 472 | 470 | 468 | 467 | 473 | 473 | 467 | 467 | 466 |
| Students with Disabilities | 478 | 475 | 474 | 473 | 475 | 476 | 478 | 477 | 476 |
| Grade 105 | All Students | 507 | 503 | 504 | 501 | 501 | 500 |  | 499 | 499 |
| Economically Disadvantaged | 494 |  |  | 487 |  |  |  |  |  |
| Low Income |  | 493 | 492 |  | 490 | 489 |  | 487 | 487 |
| English Learners | 465 | 470 | 465 | 468 | 473 | 474 |  | 467 | 468 |
| Students with Disabilities | 487 | 485 | 484 | 480 | 482 | 483 |  | 481 | 481 |

Figures 6 and 7 show the three-year changes in average scaled scores in ELA and Mathematics for grades 3–8 and 10, from 2021 to 2023 for English learners (EL), former EL, students with disabilities, and all students. In the figures, blue-shaded bars represent a positive change in average scaled scores for the three-year period. Orange-shaded bars represent negative change.

**Figure 6: ELA Average Scaled Score Point Change in 2021–2023 Among English Learners (EL), former EL, Students with Disabilities, and All Students**

Figures 6 and 7 show the three-year changes in average scaled scores in ELA and Mathematics for grades 3–8 and 10, from 2021 to 2023 for English learners (EL), former EL, students with disabilities, and all students. In the Figure 6 shows ELA positive changes in EL, former EL and Students with disabilities average scaled scores for a three-year period. 
**Figure 7: Mathematics Average Scaled Score Point Change in 2021–2023 Among English Learners (EL), former EL, Students with Disabilities, and All Students**

# **IV. Statewide Achievement Gaps**

In 2010, Massachusetts passed legislation requiring the state to monitor achievement gaps and authorized the Department of Elementary and Secondary Education to take steps to intervene and attempt to close those gaps through its school accountability and assistance programs.

This section presents information about academic achievement gaps in Massachusetts from 2021 through 2023. The Department defines an achievement gap as a disparity in academic performance between two demographic groups. The figures displayed here identify achievement gaps that are based on race and special education status.

For the ELA and Mathematics tests at grades 3–8 and 10, achievement gaps are measured using the between-group differences in the percentage of students scoring in the Meeting Expectations or higher achievement levels. Figures 8, 9, 10, and 11 show the achievement gaps for the 2021, 2022, and 2023 ELA and Mathematics tests at grades 3–8 and 10.

ELA and Mathematics tests at grades 3–8 achievement gap comparisons for 2021, 2022 and 2023.
ELA: AfAmerica/Black/White 26,24,24
        Hispanic-White 28,27,29
        SWD/Non-disabled 38,37,39
Math: AfAmerica/Black/White 25,28,28
        Hispanic-White 26,29,29
        SWD/Non-disabled 30,34,37



ELA and Mathematics tests at grade 10 achievement gap comparisons for 2021, 2022 and 2023.
ELA: AfAmerica/Black/White 30,24,24,
        Hispanic-White 33,37,31        SWD/Non-disabled 464.7.44
Math: AfAmerica/Black/White 34,44,44
        Hispanic-White 34,33,35       SWD/Non-disabled 46,43,41

**V. Student Enrollment and Participation**

This section profiles the enrolled student population in 2023 and summarizes changes to the population between 2022 and 2023. Participation rates for the spring 2023 tests are also presented.

## **2023 Student Enrollment**

Figure 12 shows the 2023 statewide student enrollment in grades 3–8 and 10 by race/ethnicity. Table 12 shows the two-year enrollment changes in those grade levels for racial/ethnic groups and other student groups.

**Figure 12: 2023 Student Enrollment in Grades 3–8 and 10 by Race/Ethnicity**

**Table 12: Two-Year Enrollment Changes in Grades 3–8 and 10**

|  |  |  |  |
| --- | --- | --- | --- |
| **Race/Ethnicity** | **2022**  **Enrolled Students** | **2023 Enrolled Students** | **Percent Group Change, 2022–2023** |
| **Asian** | 35,176 | 35,615 | 1% |
| **African American/Black** | 45,154 | 45,402 | 1% |
| **Hispanic/Latino** | 113,609 | 117,650 | 4% |
| **Multi-race, Non-Hispanic/Latino** | 20,726 | 21,222 | 2% |
| **American Indian or Alaskan Native** | 1,095 | 1,105 | 1% |
| **Native Hawaiian or Pacific Islander** | 406 | 431 | 6% |
| **White** | 267,037 | 260,986 | -2% |
| **Total** | 483,203 | 482,411 | <1% |
| **Other Student Groups (cont’d.)** | **2022**  **Enrolled Students (cont’d.)** | **2023 Enrolled Students (cont’d.)** | **Percent Group Change (cont’d.)** |
| **Male** | 248,363 | 247,929 | <1% |
| **Female** | 234,405 | 233,867 | <1% |
| **Non-Binary** | 598 | 797 | 33% |
| **English Learner** | 52,432 | 56,590 | 8% |
| **Low Income**a | 224,713 | 217,064 | -3% |
| **Students with Disabilities** | 100,566 | 102,337 | 2% |

a Beginning in 2022, the Department replaced the Economically Disadvantaged student group with the Low Income student group. More information is available at [doe.mass.edu/infoservices/data/sims/redefining-lowincome.html](http://www.doe.mass.edu/infoservices/data/sims/redefining-lowincome.html).

## **2023 Participation Rates**

Table 13 presents information on the number and percentage of enrolled students who participated in the spring 2023 MCAS tests. The figures include participation rates for students administered the standard MCAS and the MCAS-Alt; enrolled students educated with public funds, including regular education students; students with disabilities; and EL students. As in previous years, participation rates were very high, ranging from 97 to 99%.

**Table 13: Number of Enrolled and Percentage of Tested Students, Spring 2023**

| Grade | English Language Arts | | Mathematics | | Science and Technology/Engineering | |
| --- | --- | --- | --- | --- | --- | --- |
| **Number** | **Percent** | **Number** | **Percent** | **Number** | **Percent** |
| Grade 3 | 65,922 | 99 | 65,938 | 99 |  |  |
| Grade 4 | 67,240 | 99 | 67,263 | 99 |  |  |
| Grade 5 | 67,358 | 99 | 67,379 | 99 | 67,343 | 99 |
| Grade 6 | 68,356 | 99 | 68,359 | 99 |  |  |
| Grade 7 | 68,586 | 99 | 68,589 | 99 |  |  |
| Grade 8 | 70,657 | 98 | 70,636 | 98 | 70,641 | 98 |
| Grade 10 | 73,545 | 98 | 73,365 | 97 | 73,612 | 99 |

***How is participation calculated?***

For ELA and Mathematics in grades 3–8 and 10, participation rates indicate the number of students who participated in standard MCAS tests and the MCAS-Alt divided by the number of students enrolled during the testing window. EL students enrolled in U.S. schools for the first time were not required to take ELA tests; however, they were reported in ELA school and district participation rates based on their participation in the ACCESS for ELLs (Assessing Comprehension and Communication in English State-to-State for English Language Learners) tests. The Department used ACCESS for ELLs testing for state and federal accountability purposes, which require that all EL students, except for students for whom an accommodation was not available, participate in the EL assessment.

Students absent during testing, including students not tested for medical reasons, were counted against school and district participation as non-participants. Students who transferred out of their school and/or district during the testing window were excluded from the corresponding school/district participation calculations.

***How are absent students treated in MCAS performance results?***

The federal Elementary and Secondary Education Act requires that absent students be counted as non-participants for school and district accountability calculations. Schools are placed in a lower accountability level if their participation rates fall below 95% in the aggregate or for a subgroup over a two-year period.

# **VI. Competency Determination Attainment Results**

The class of 2003 was the first graduating class in Massachusetts that was required to earn a Competency Determination (in addition to meeting local requirements) to be eligible to graduate from high school. Graduation requirements are available at [doe.mass.edu/mcas/graduation.html](http://www.doe.mass.edu/mcas/graduation.html).

To be eligible to receive a high school diploma, students in the class of 2025 must meet the following MCAS graduation requirements (in addition to meeting all local graduation requirements):

Pass the ELA and Mathematics tests in one of two ways:

* earn a scaled score of 472 or higher on the grade 10 ELA test or retest; **or** earn a scaled score of 455–471 on the ELA test or retest and fulfill the requirements of an Educational Proficiency Plan (EPP) in ELA
* earn a scaled score of 486 or higher on the grade 10 Mathematics test or retest; **or** earn a scaled score of 469–485 on the Mathematics test or retest and fulfill the requirements of an EPP in Mathematics

Pass the Science and Technology/Engineering test in one of the following ways:

* earn a scaled score of 467 or higher on the next-generation Biology test; **or** earn a scaled score of 470 or higher on the next-generation Introductory Physics test; **or** earn a scaled score of 220 (*Needs Improvement*) or higher on the legacy Chemistry or Technology/Engineering test

Table 14 displays the cumulative percentage of all students and student groups in the class of 2025 who have already met or partially met the MCAS requirement for graduation by performing at the next-generation equivalent to the *Needs Improvement* level or higher in ELA, Mathematics, and STE through the spring 2023 test administration. In 2023, 82% of students in the class of 2025 met the graduation requirement by performing at the equivalent to the *Needs Improvement* level or higher in all three subjects by the end of grade 10.

**Table 14: Percentage of Students Who Passed the High School MCAS Tests**

**on the First Attempt**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Subgroup** | **Class of 2025** | | | | | **Class of 2024a** | **Class of 2023a** | |
| **ELA** | **Math** | **ELA and Math** | **STE** | **All Three Tests** | **All Three Tests** | | **ELA and Math (STE Not Required)** |
| **All Students** | 92 | 88 | 86 | 88 | 82 | 81 | | 88 |
| **Gender** |  |  |  |  |  |  | |  |
| Female | 93 | 89 | 87 | 89 | 83 | 83 | | 90 |
| Male | 90 | 88 | 85 | 87 | 81 | 79 | | 86 |
| Non-Binary | 94 | 91 | 89 | 94 | 88 | 79 | | 98 |
| **Race/Ethnicity** |  |  |  |  |  |  | |  |
| African American/Black | 90 | 81 | 79 | 81 | 73 | 68 | | 78 |
| Asian | 96 | 96 | 94 | 95 | 93 | 91 | | 96 |
| Native Hawaiian or Pacific Islander | 91 | 92 | 87 | 85 | 78 | 73 | | 90 |
| Hispanic/Latino | 81 | 77 | 71 | 75 | 65 | 63 | | 72 |
| Multi-Race, Non-Hispanic/Latino | 93 | 89 | 87 | 90 | 84 | 82 | | 90 |
| Amer. Ind. or Alaska Nat. | 87 | 82 | 77 | 86 | 72 | 79 | | 77 |
| White | 96 | 94 | 92 | 94 | 90 | 89 | | 94 |
| **Student Status** |  |  |  |  |  |  | |  |
| High Needsb | 85 | 80 | 75 | 79 | 70 | 68 | | 75 |
| Non-Disabled | 94 | 93 | 90 | 92 | 88 | 87 | | 92 |
| Students with Disabilities | 82 | 71 | 67 | 72 | 60 | 55 | | 67 |
| English Learner (EL) | 56 | 59 | 42 | 50 | 33 | 29 | | 36 |
| Former ELc | 96 | 90 | 88 | 90 | 83 | 80 | | 86 |
| EL and Former EL | 67 | 68 | 55 | 61 | 47 | 47 | | 56 |
| Low Incomed | 85 | 80 | 75 | 79 | 70 | 67 | |  |
| Economically Disadvantagede |  |  |  |  |  |  | | 75 |
| aDue to closures due to the Covid-19 pandemic and different school reopening schedules in spring 2021, approximately 10% of students did not participate in the grade 10 tests and were excluded from CD attainment results for the class of 2023. Results for the classes of 2024 and 2025 are therefore not directly comparable to those for the class of 2023.  bFrom 2015 to 2021, the High Needs group included students with disabilities, English learner and former English learner students, and economically disadvantaged students; beginning in 2022, the Low Income student group replaced the Economically Disadvantaged student group.  cThe Former English Learner group included students who exited EL status over the previous four-year period.  dBeginning in 2022, the Low Income student group replaced the Economically Disadvantaged student group.  eSpring 2021 was the last test administration that the Economically Disadvantaged student group was used. | | | | | | | | |

## 

## **Competency Determination Attainment Through Spring 2023**

Table 15 shows the number and cumulative percentage of students in the class of 2025 who have fully met the CD standard through the spring administration. In ELA and Mathematics, these students performed at the next-generation equivalent to *Proficient* or higher; in STE, these students performed at *Needs Improvement* or higher or at the next-generation equivalent, through the spring 2023 test administration. The table also shows the data for the class of 2024 for comparison.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CD Requirement** | **Class of 2025 Number** | **Class of 2025 Percentage** | **Class of 2024 Number** | **Class of 2024 Percentage** |
| Earned CD in all subjects | 49,885 | 67 | 47,437 | 66 |
| ELA and Mathematics *Proficient* or Higher | 50,262 | 68 | 48,196 | 67 |
| ELA *Proficient* or Higher | 62,390 | 84 | 62,281 | 87 |
| Mathematics *Proficient* or Higher | 51,473 | 69 | 48,950 | 69 |
| STE *Needs Improvement* or Higher | 65,432 | 88 | 61,240 | 86 |

**Table 15: Number and Percentage of Students Who Fully Met the CD Standard**

1. Due to rounding at individual achievement levels, the percentages in this figure, and in other figures in this report, may not add up to 100%. For the same reason, when percentages for Meeting Expectations and Exceeding Expectations are aggregated to report the percentage of students at “Meeting Expectations or higher,” the sum of the percentages for the individual achievement levels may not equal the aggregated total. [↑](#footnote-ref-2)
2. Grade 10 STE results for 2021 are not provided because only grade 9 students were eligible to participate in next-generation tests that year. Results for grade 9 students who participated in 2021 are reported with grade 10 in 2022. [↑](#footnote-ref-3)
3. [↑](#footnote-ref-4)
4. Due to rounding, average scaled scores in this report may differ in some instances by one point from average scaled scores reported in the Department’s online systems. [↑](#footnote-ref-5)
5. Beginning in 2022, the Economically Disadvantaged student group was replaced by the Low Income student group. More information is available at [doe.mass.edu/infoservices/data/sims/redefining-lowincome.html](http://www.doe.mass.edu/infoservices/data/sims/redefining-lowincome.html). [↑](#footnote-ref-6)
6. Grade 10 STE results for 2021 are not provided because only grade 9 students were eligible to participate in next-generation tests that year. Results for grade 9 students who participated in 2021 are reported with grade 10 in 2022. [↑](#footnote-ref-7)