

Student Performance on the Maryland Comprehensive Assessment Program (MCAP) SY 2022-2023

Key Findings

Proficiency rates on MCAP ELA were highest on the ELA10 (52%) and lowest on the ELA05 (30%).

Proficiency rates on MCAP math grade-level tests were highest on the MAT03 (21%) and lowest on the MAT08 (6%).

Female students performed better than male students on each MCAP ELA test, but male students performed better than female students on most MCAP math tests.

Proficiency rates for groups of students receiving services for English Learners or Students with Disabilities continue to be much lower than for the students who do not need these services.

Students who received services for ELs or SwD within the past 3 years, but no longer need them perform at least as well or better on the MCAP ELA and math tests than students who never needed the services

The large proportion of English learners among the Hispanic population significantly impacts performance on the MCAP ELA and math tests.

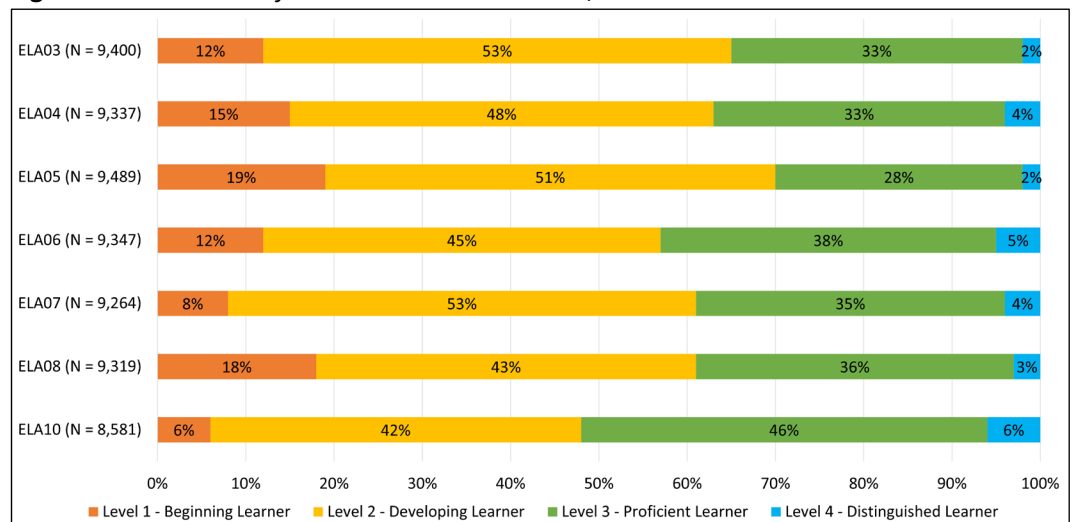
Proficiency rates for Black or African American students are significantly affected by SwD status.

The Maryland Comprehensive Assessment Program for English language arts and literacy and mathematics (MCAP ELA and MCAP Math) are a group of state tests that Prince George's County Public Schools (PGCPS) students must take. Administered annually in elementary and middle school in grades three to eight and in high school, after students complete an ELA (English 10) and mathematics (Algebra I, Geometry, or Algebra II) course, the tests specifically assess how well students meet grade-level standards of the tests' respective contents (MSDE, 2023a; 2023b). As with all tests that are a part of the state's assessment program, students who receive valid scores also receive performance levels (Appendix I) that describe students' degree of proficiency in meeting the standards (MSDE, 2022). It is within this report that such performance levels, specifically from the 2023 administration of MCAP ELA and MCAP math, are presented and discussed.

Overall Performance: Among those tested, the percentage who demonstrated proficient or distinguished levels of performance on the MCAP ELA tests ranged from approximately 30% to 52%. (See Figure 1.) At the elementary level, more than a third of students in grades three and four met the Proficient or Distinguished Learner threshold, while 30% of students in grade five attained this same level of performance. In the middle grades, nearly 40% of seventh and eighth grade students achieved performance levels of three (Proficient Learner) or four (Distinguished Learner), and 43% of sixth graders demonstrated these levels of proficiency. In high school, 52% of tested students met Proficient or Distinguished thresholds.

Student Performance on the MCAP ELA

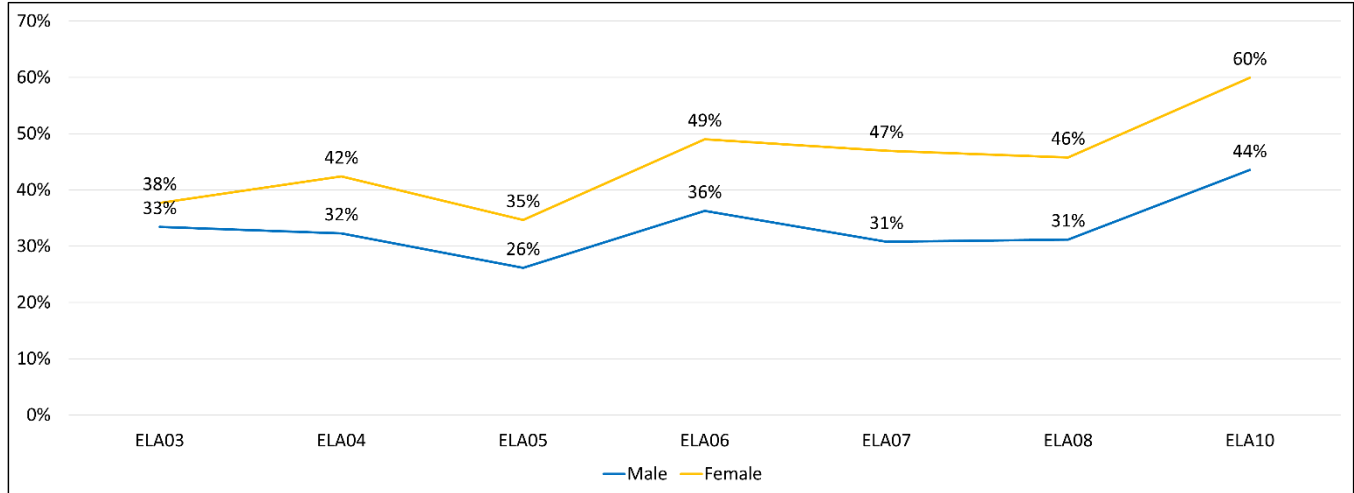
Figure 1. MCAP ELA Performance Level Distribution, SY23



Source. Maryland State Department of Education, 2023 Spring ELA and Mathematics Demographics Performance Level Summary, July 13, 2023.

Performance Level by Gender: Data by gender show that female students outperformed male students on the MCAP ELA. (See Figure 2). Specifically, on each grade level test, a higher percentage of females met Proficient or Distinguished Learner thresholds than males. The largest percentage point difference between the two genders was on the ELA07 and ELA10 tests, while the smallest percentage point difference was on the ELA03 test. For both genders, the lowest percentage of students to demonstrate these levels was on the fifth-grade test; in contrast, the percent proficient of both male and female occurred on the 10th grade ELA test.

Figure 2. Percent of MCAP ELA test takers achieving Proficient or Distinguished Performance Levels by Gender, SY23



Source. Maryland State Department of Education, 2023 Spring ELA and Mathematics Demographics Performance Level Summary, July 13, 2023.

Performance Level by Race/Ethnicity: Data by race/ethnicity show that Asian students outperformed all other racial/ethnic groups on the MCAP ELA. (See Table 1). More specifically, a higher percentage of these students, when compared to their peers, demonstrated level three or four performance on each grade/course test. In contrast, American Indian or Alaska Native students, in most cases, had the lowest percentage of Proficient and Distinguished Learners on these assessments. In addition, while most racial/ethnic groups had their lowest performances on the fifth-grade test, all groups had their highest performances on the 10th grade test.

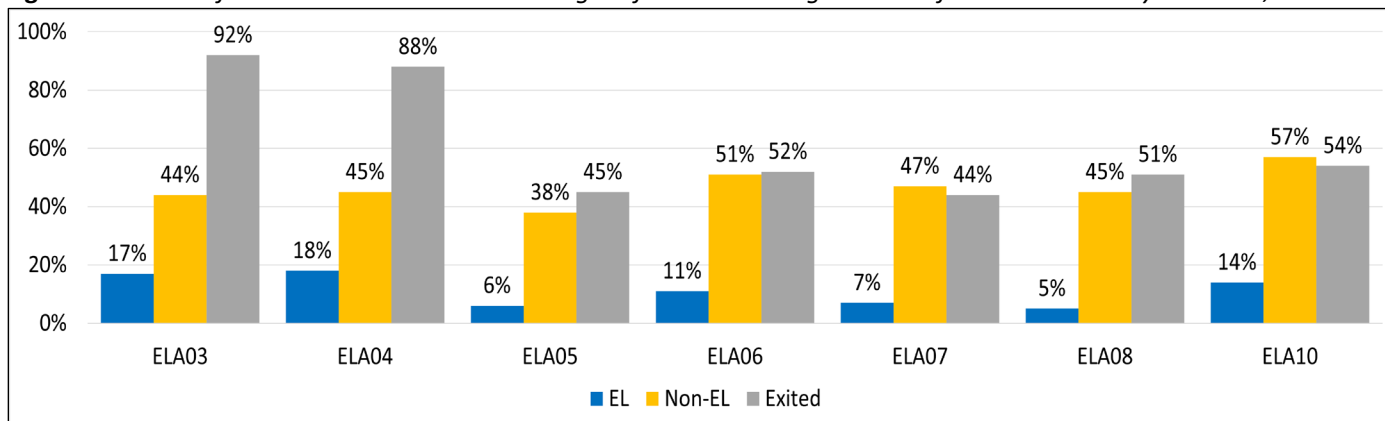
Table 1. Percent of MCAP ELA test takers achieving Proficient or Distinguished Performance Levels by Race/Ethnicity, SY23

Race/Ethnicity	ELA03	ELA04	ELA05	ELA06	ELA07	ELA08	ELA10
Am. Indian or Alaska Native	19%	21%	24%	32%	24%	31%	39%
Asian	57%	57%	49%	58%	60%	62%	69%
Black or African American	41%	41%	33%	46%	42%	41%	53%
Hispanic or Latino of Any Race	24%	28%	23%	34%	30%	32%	47%
Native Hawaiian or OPI	29%	36%	28%	41%	40%	39%	49%
White	29%	32%	26%	38%	34%	34%	49%
Two or More Races	25%	29%	23%	35%	31%	33%	47%

Source. Maryland State Department of Education, 2023 Spring ELA and Mathematics Demographics Performance Level Summary, July 13, 2023.

Performance Level by English Learner Status: On three of the MCAP tests (i.e., ELA05, ELA07, and ELA08), less than 10% of ELs demonstrated proficient or distinguished learner levels. (See Figure 3). In contrast, on the ELA03, ELA04, ELA06, and ELA10 tests, between 11% and 18% of ELs met this proficiency threshold. When compared to their non-EL peers, ELs had a considerably lower percentage of students with level three or four performance levels, with differences ranging from 27 to 43 percentage points. Students who had exited the English for speakers of other languages (ESOL) program within the last two years, however, outperformed non-EL students on most administrations of the MCAP ELA.

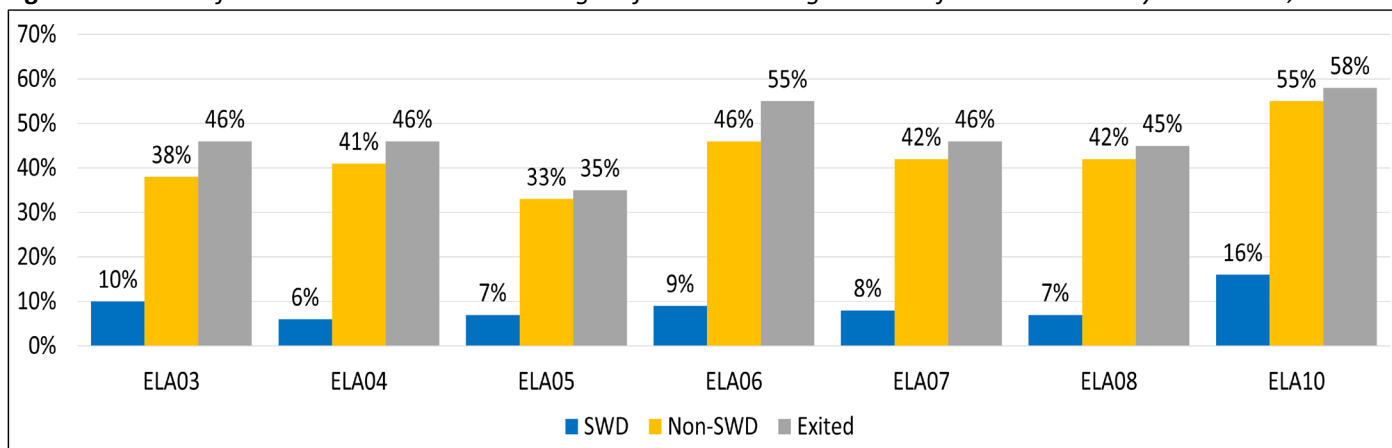
Figure 3. Percent of MCAP ELA test takers achieving Proficient or Distinguished Performance Levels by EL Status, SY23



Source. Maryland State Department of Education, 2023 Spring ELA and Mathematics Student File, July 2023.

Performance Level by Students with Disabilities: On several MCAP ELA tests, less than 10% of students with disabilities (SwDs) demonstrated three or four performance levels. (See Figure 4). On the ELA03 and ELA10, though, 10% and 16%, respectively, of SwDs met this proficiency threshold. Percentage point differences between this group and their non-SwD peers ranged from 26 to 39. On all seven administrations of the MCAP ELA, students who had exited special education services outperformed non-SwD students.

Figure 4. Percent of MCAP ELA test takers achieving Proficient or Distinguished Performance Levels by SwD Status, SY23

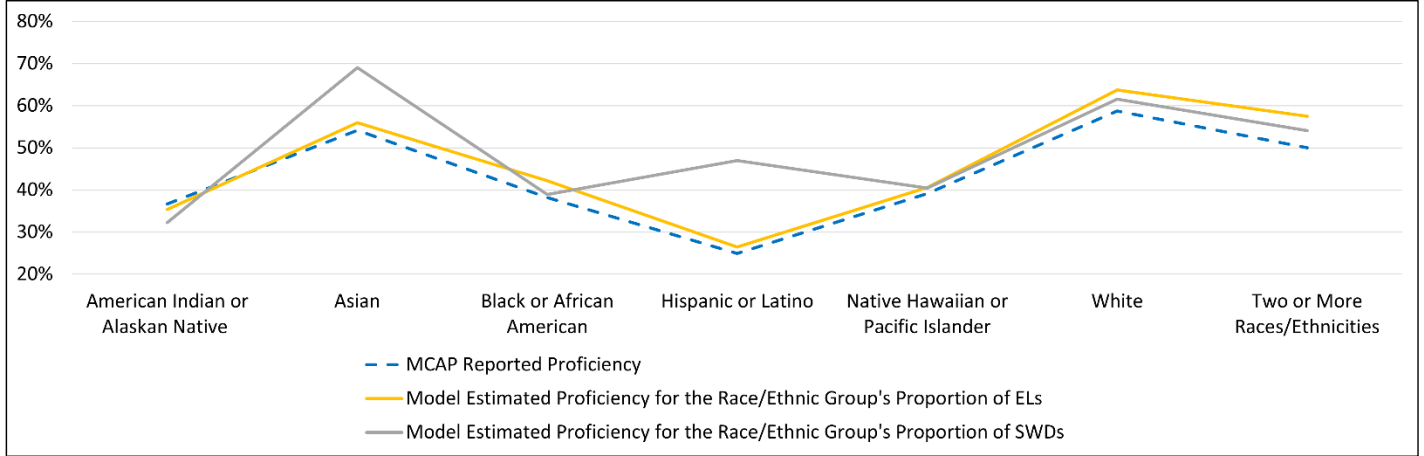


Note. The term students with disabilities (SWDs) refer only to students with an Individualized Education Program (IEP).

Source. Maryland State Department of Education, 2023 Spring ELA and Mathematics Student File, July 2023.

Performance Level by Race/Ethnicity when Controlling for Service Group Categories: When the effects of race/ethnicity, EL and SwD status are accounted for, the actual proficiency rates for all race/ethnic groups indicate underperformance relative to what is estimated; however, the gap between the estimated and the actual MCAP results varies. (See Figure 5). The gap between the MCAP and the model-estimated Proficiency rates for three groups (Asian, Hispanic or Latino, and Hawaiian or Other Pacific Islander) is very small indicating that lower rates of English language proficiency decreased MCAP proficiency levels. The effect of limited language proficiency was not as significant for the remaining groups (American Indian or Alaska Native, Black or African American, White, and Two or More Races/Ethnicities). On the other hand, SwD status lowered MCAP ELA proficiency for American Indian or Alaska Native and Black or African American racial/ethnic groups while it has not significantly influenced proficiency rates of Asian and Hispanic or Latino students.

Figure 5. Percent of MCAP ELA test takers achieving Proficient or Distinguished Performance Levels by Race/Ethnicity When Controlling for Service Group Categories, SY23

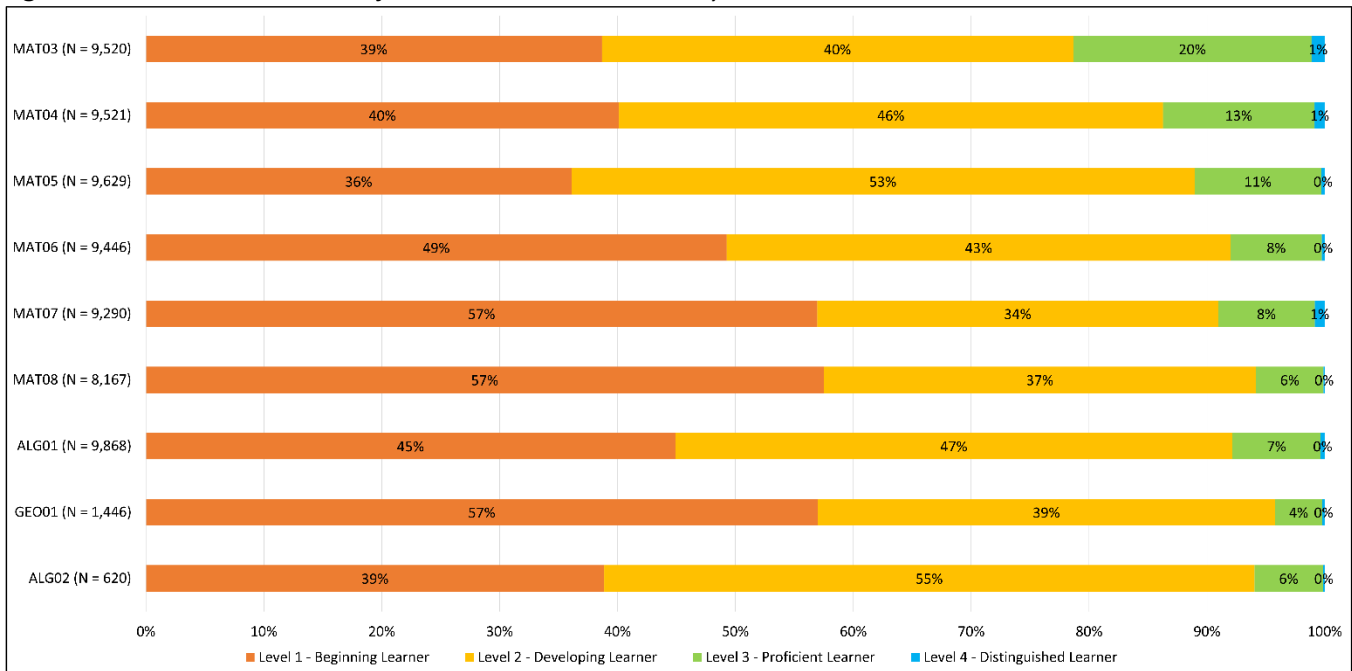


Source. Maryland State Department of Education, 2023 Spring ELA and Mathematics Student File, July 2023.

Student Performance on the MCAP Mathematics exams

Overall Performance: The percentage of students who met the Proficient or Distinguished Learner threshold on the MCAP math tests is higher for primary students than for secondary students. (See Figure 6). Specifically, between 11% and 22% of students in grades three through five demonstrated these levels; in contrast, less than 10% of students in both middle and high school attained Proficient or Distinguished Learner performance levels. Across all grade levels and course-specific tests, students who took the third grade MCAP math test had the highest percentage of Proficient or Distinguished Learners.

Figure 6. MCAP Mathematics Performance Level Distribution by test, SY23

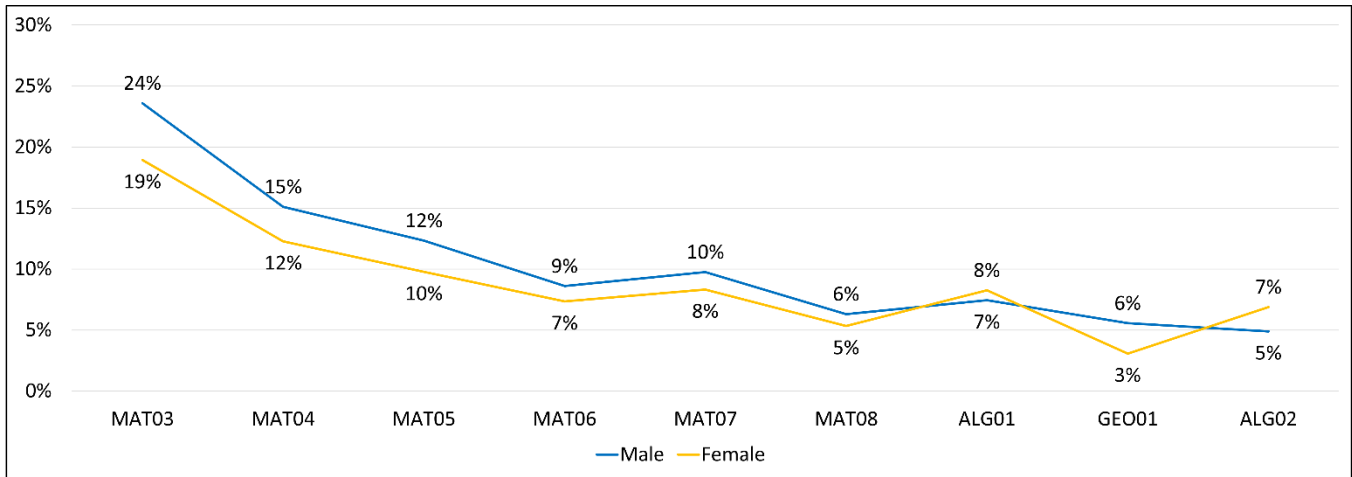


Note. On the MAT05, MAT06, MAT07, ALG01, GEO01, and ALG02 tests, a small percentage of students (i.e., < 1% percent) demonstrated the Distinguished Learner performance level.

Source. Maryland State Department of Education, District Performance Level Summary Report, January 2023.

Performance Level by Gender: On most administrations of the MCAP math tests, data show that male students had higher percentages of Proficient and Distinguished Learner levels than female students. (See Figure 7). In the case of Algebra I and II, however, a higher percentage of female students met this threshold compared with their male peers. For both genders, the test on which the highest percentage of students earned Proficient or Distinguished Learner performance levels was the third grade MCAP math test (MAT03).

Figure 7. Percent of MCAP Mathematics test takers achieving Proficient or Distinguished Performance Levels by Gender, SY23



Source. Maryland State Department of Education, 2023 Spring ELA and Mathematics Demographics Performance Level Summary, July 13, 2023.

Performance Level by Race/Ethnicity: On each mathematics test, data show that Asian students outperformed all other racial/ethnic groups. (See Table 2). On most administrations of the test, in contrast, American Indian or Alaska Native students had the lowest percentage of Proficient and Distinguished Learners. In addition, while each group had its highest percentage of threes and fours on the MAT03 test, these groups varied on the tests on which they had the lowest percentage of these levels.

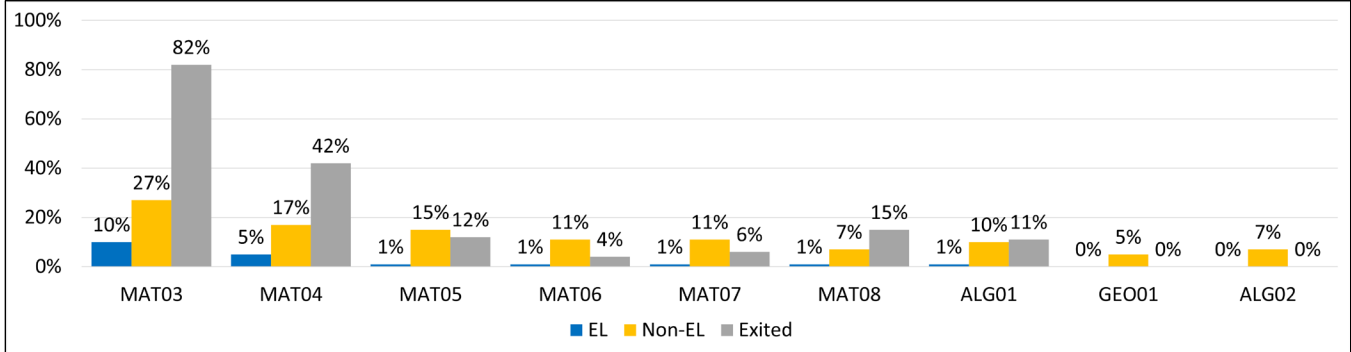
Table 2. Percent of MCAP Mathematics test takers achieving Proficient or Distinguished Performance Levels by Race/Ethnicity, SY23

Race/Ethnicity	MAT03	MAT04	MAT05	MAT06	MAT07	MAT08	ALG01	GEO01	ALG02
Am. Indian or Alaska Native	12%	6%	8%	4%	7%	2%	3%	2%	2%
Asian	45%	29%	28%	23%	28%	17%	23%	26%	15%
Black or African American	23%	14%	12%	8%	9%	6%	8%	5%	7%
Hispanic or Latino of Any Race	15%	10%	7%	5%	6%	4%	5%	1%	4%
Native Hawaiian or OPI	18%	10%	10%	3%	15%	6%	13%	5%	0%
White	19%	13%	9%	7%	8%	5%	6%	2%	5%
Two or More Races	16%	10%	7%	5%	7%	4%	5%	1%	4%

Source. Maryland State Department of Education, 2023 Spring ELA and Mathematics Demographics Performance Level Summary, July 13, 2023.

Performance Level by English Learner Status: On most administrations of the mathematics MCAP tests, less than two percent of English learners (ELs) demonstrated Proficient or Distinguished Learner levels (See Figure 8). On the MAT03 and MAT04 tests, slightly more than 10% and five percent of ELs met this threshold, respectively. When compared to their non-EL peers, ELs had a lower percentage of students with level three or four performance levels, with differences ranging from five to 17 percentage points. Students who had exited the ESOL program within the last two years outperformed non-EL students on several test administrations, including MAT03, MAT04, MAT08, and ALG01.

Figure 8. Percent of MCAP Mathematics test takers achieving Proficient or Distinguished Performance Levels by EL Status, SY23

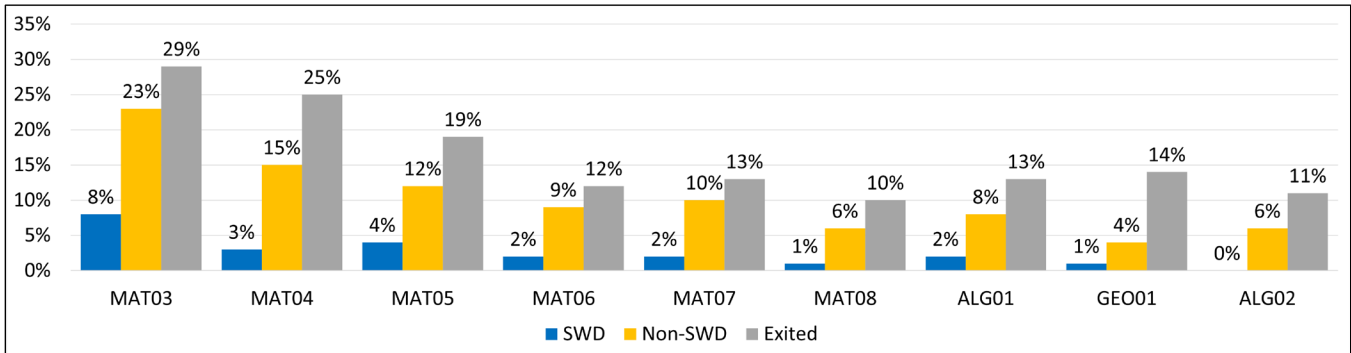


Note. On the MAT06, MAT07, MAT08, and ALG01 tests, a small percentage of students (i.e., < 1 percent) demonstrated the Distinguisher Learner performance level.

Source. Maryland State Department of Education, 2023 Spring ELA and Mathematics Student File, July 2023.

Performance Level by Students with Disabilities: On each administration of the MCAP math tests, less than 10% of SwDs attained three or four performance levels (See Figure 9). When compared to their non-SwD peers, a lower percentage of SwDs achieved the Proficient or Distinguished Learner levels; percentage point differences between these groups ranged from three to 15. On each grade level test, though, students who had exited special education services outperformed non-SwD students.

Figure 9. Percent of MCAP Mathematics test takers achieving Proficient or Distinguished Performance Levels by SwD Status, SY23

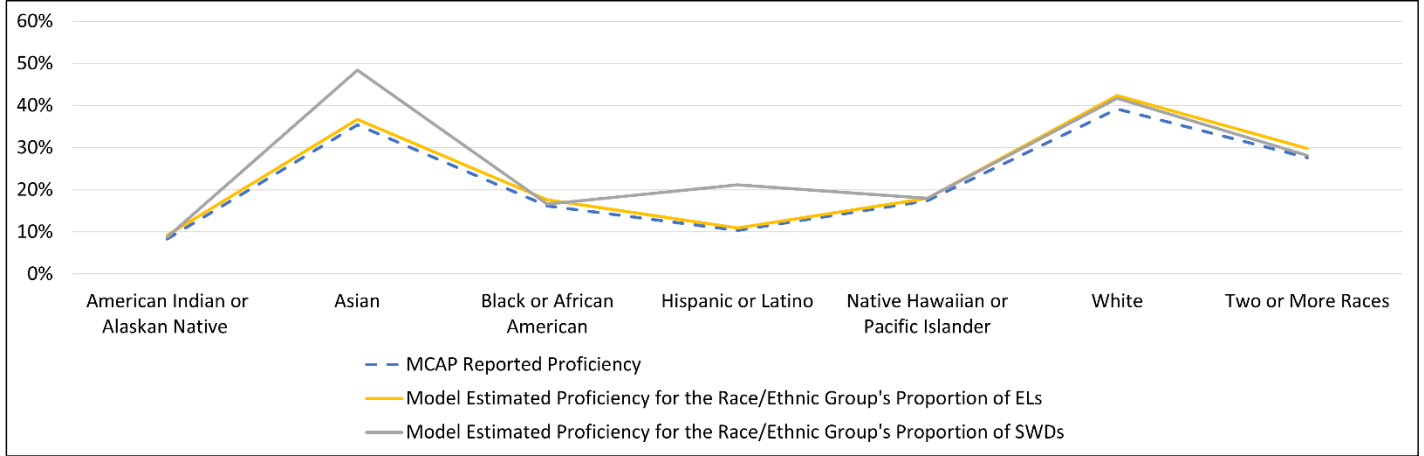


Note. The term students with disabilities (SWDs) refer only to students with an Individualized Education Program (IEP).

Source. Maryland State Department of Education, 2023 Spring ELA and Mathematics Student File, July 2023.

Performance Level by Race/Ethnicity when Controlling for Service Group Categories: When the effects of race/ethnicity, EL and SwD status are accounted, all race/ethnic groups underperform but the gap between MCAP results and what is estimated based on the proportion of ELs is relatively similar for all groups. (See Figure 10). That is, limited English proficiency influenced MCAP math proficiency rates equally for all groups. With respect to SwD, MCAP proficiency rates are nearly identical with estimated rates of proficiency for the racial/ethnic groups of American Indian or Alaskan Native, Black or African American and Native Hawaiian or Pacific Islander, indicating that their MCAP proficiency rates was heavily influenced by SwD status. Moreover, similar to the ELA results, SwD status has not significantly influenced proficiency rates of Asian and Hispanic/Latino students.

Figure 10. Percent of MCAP Mathematics test takers achieving Proficient or Distinguished Performance Levels by Race/Ethnicity when Controlling for Service Group Categories, SY23



Source. Maryland State Department of Education, 2023 Spring ELA and Mathematics Student File, July 2023.

Grade-Level Test Comparisons

MCAP ELA Grade-Level Test Comparison: Grade-level comparisons on the MCAP ELA test between SY2022 and SY2023 show that a higher percentage of students in nearly all grades achieved proficiency in SY2023 compared with their counterparts who took that grade-level test in SY2022. The only decline was among takers of the grade five MCAP ELA (ELA05). In SY2023, 30.3% of fifth-graders achieved proficiency on the ELA05, but in SY2022, the percentage of students who performed at that level was 30.5. (See Table 3). For the second year in a row, the highest proficiency was for the tenth-grade MCAP ELA for both PGCPs and the state as a whole. The growth in the proficiency rate for ELA10, however, was higher among PGCPs students than for the state as whole. Between SY2022 and SY2023, the growth in the proficiency rate on the ELA10 for PGCPs was 15.0%; for the state as a whole, it was 3.2%. The growth in proficiency rates was higher for PGCPs on the ELA04 and the ELA06, as well, compared with the state’s growth rate.

Table 3. Percent of MCAP ELA test takers achieving Proficiency by Grade-Level Test, SY22 and SY23

Test	2023 MCAP Proficiency %	2022 MCAP Proficiency %	PGCPs percentage point Growth/Decline from SY22 to SY23	2023 MCAP Proficiency % for State	2022 MCAP Proficiency % for State	State percentage point Growth/Decline from SY22 to SY23	Percentage Point Difference Between PGCPs and State SY23
ELA03	35.5%	33.9%	1.6	48%	45.1%	2.9	12.5
ELA04	37.7%	33.4%	4.3	49%	45.1%	3.9	11.3
ELA05	30.3%	30.5%	0.2	42%	40.1%	1.9	11.7
ELA06	42.4%	35.6%	6.8	48%	43.6%	4.4	5.6
ELA07	38.5%	36.9%	1.6	47%	42.1%	4.9	8.5
ELA08	38.4%	34.6%	3.8	47%	41.7%	5.3	8.6
ELA10	52.0%	45.2%	6.8	55%	53.3%	1.7	3.0

Source. Maryland State Department of Education, 2023 Spring ELA and Mathematics Student File, July 2023.

Among students who participate in service groups for English learners or SwD, rates of proficiency on the MCAP ELA increased on nearly all grade-level tests. For SwD, the largest percentage point growth occurred on the tenth grade MCAP ELA (ELA10). In SY2022, 10.4% of SwD who took the ELA10 achieved proficiency; that percentage grew to 16.0 in SY2023, which is an increase of 5.6 percentage points (53.8%). Among EL students, the largest increase was on the sixth grade MCAP ELA (ELA06)—growing from 6.0% of ELs achieving proficiency in SY2022 to 10.9% in SY2023, which is an increase of 4.9 percentage points (81.7%). (See Table 4.)

Table 4. Percent of MCAP ELA test takers achieving Proficiency by Grade-Level Test and Service Group Status, SY22 and SY23

Test	Service Group	2023 MCAP Proficiency % for PGCPs	2022 MCAP Proficiency % for PGCPs	Percentage Point Growth/Decline from SY22 to SY23
ELA03	Students with Disabilities	9.5%	6.3%	3.2
	English Learners	17.4%	17.4%	0.0
ELA04	Students with Disabilities	5.9%	7.1%	1.2
	English Learners	18.5%	17%	1.5
ELA05	Students with Disabilities	6.3%	5.3%	1.0
	English Learners	6.3%	10.8%	4.5
ELA06	Students with Disabilities	8.6%	6.5%	2.1
	English Learners	10.9%	6%	4.9
ELA07	Students with Disabilities	7.2%	6.3%	0.9
	English Learners	6.6%	4%	2.6
ELA08	Students with Disabilities	7.1%	5.7%	1.4
	English Learners	5.3%	4.4%	0.9
ELA10	Students with Disabilities	16%	10.4%	5.6
	English Learners	13%	10.8%	2.2

MCAP Mathematics Grade-Level Test Comparison: PGCPs student performance on the grade-level MCAP math tests was higher in SY2023 compared with SY2022 for all grades except the eighth grade MCAP math test (MAT08). (See Table 5.) At the state level, MCAP math performance was higher year-to-year for all grades and Algebra 1. The largest percentage point growth was on the third grade MCAP math test (MAT03); the proficiency rate grew from 16.6% in SY2022 to 21.3% in SY2023, which is an increase of 4.7 percentage points (28.3%). At the state level, the largest percentage point increase was on the fourth grade MCAP math test (MAT04). In SY2022, 27.6% of MAT04 test-takers achieved proficiency, while 32.0% achieved proficiency in SY2023, which is an increase of 4.4 percentage points (15.9%).

Proficiency on the Algebra 1 test among PGCPs students increased by 2.3 percentage points from SY2022 to SY2023, which represents growth of 40.3%. At the state level, Algebra 1 proficiency grew by 3.5 percentage points, year-to-year, which amounts to an increase of 24.1%.

Table 5. Percent of MCAP Math test takers achieving Proficiency by Grade-Level Test, SY22 and SY23

Test	2023 MCAP Proficiency %	2022 MCAP Proficiency %	PGCPs percentage point Growth/Decline from SY22 to SY23	2023 MCAP Proficiency % for State	2022 MCAP Proficiency % for State	State percentage point Growth/Decline from SY22 to SY23	Percentage Point Difference Between PGCPs and State SY23
MAT03	21.3%	16.6%	4.7	40%	36.2%	3.8	18.7
MAT04	13.7%	10.4%	3.3	32%	27.6%	4.4	18.3
MAT05	11.1%	8.7%	2.4	27%	23.8%	3.2	15.9
MAT06	7.9%	7.7%	0.2	19%	17.6%	1.4	11.1
MAT07	9.0%	7.8%	1.2	15%	12.1%	2.9	6.0
MAT08	5.8%	6.1%	0.3	7%	6.5%	0.5	1.2
ALG01	8.0%	5.7%	2.3	18%	14.5%	3.5	10.0

Proficiency rates on most grade-level and Algebra 1 MCAP math tests were higher in SY2023 compared with the previous year among test-takers who participate in services for ELs or SwD. The strongest growth was on the MAT03 for both ELs and SwD. In SY2022, 4.0% of SwD achieved proficiency on the MAT03, but 7.5% did so in SY2023. The 3.5 percentage point increase represents year-to-year growth of 87.5%. Among students who are classified as ELs, 6.2% who took the MAT03 in SY2022 achieved proficiency. The following year, 9.9% of MAT03 test-takers who are ELs achieved proficiency, which is an increase of 3.7 percentage points and represents growth of 59.7%. Even with this strong growth, however, MCAP math proficiency rates for service group participants are extremely low. Group performance on any of the MCAP math tests did not reach 10% on any test and was less than 1% for either ELs or SwD on the MAT06, MAT07, MAT08 and ALG01. (See Table 6.)

Table 6. Percent of MCAP Math test takers achieving Proficiency by Grade-Level Test and Service Group Status, SY22 and SY23

Test	Service Group	2023 MCAP Proficiency % for PGCPs	2022 MCAP Proficiency % for PGCPs	Percentage Point Growth/Decline from SY22 to SY23
MAT03	Students with Disabilities	7.5%	4%	3.5
	English Learners	9.9%	6.2%	3.7
MAT04	Students with Disabilities	2.8%	2.8%	0.0
	English Learners	5.1%	3.3%	1.8
MAT05	Students with Disabilities	3.8%	3.5%	0.3
	English Learners	1.4%	1.7%	0.3
MAT06	Students with Disabilities	2.1%	1.5%	0.6
	English Learners	0.8%	0.5%	0.3
MAT07	Students with Disabilities	1.5%	0.9%	0.6
	English Learners	0.5%	0.4%	0.1
MAT08	Students with Disabilities	0.9%	2.4%	1.5
	English Learners	0.5%	1.3%	0.8
ALG01	Students with Disabilities	2.0%	0.7%	1.3
	English Learners	0.5%	0.4%	0.1

Discussion

In SY2023, more than 37% of test-takers in grades three through eight achieved proficiency on the MCAP ELA tests, as did more than 52% of students who took the ELA10. On the MCAP math tests, 11.7% of students who took the grade-level tests achieved proficiency, while nearly 8% of Algebra 1 test-takers did so. These figures represent growth from the previous year. In SY2022, the proportion of students deemed proficient on grade-level MCAP ELA tests in grades three through eight was 34.1%; for the ELA10, the proficiency rate was 45.2%. The proficiency rate for the grade-level MCAP math tests was 9.6% in SY2022; among Algebra 1 test-takers, it was 5.7%. The good news is that student performance on MCAP ELA tests continues to grow and surpass pre-pandemic levels. While math proficiency rates are higher in SY2023 compared with SY2022, they are still below SY2019 levels.

When we disaggregate MCAP performance by student characteristics, we find some differences among racial and ethnic groups, but further analysis reveals that participating in services for ELs or SwD significantly affects group performance by race or ethnicity. Furthermore, students who have recently exited (within the past three years) these services perform as well or better as a group than students who never participated in EL or SwD services. While proficiency rates for groups of students participating in EL or SwD services are extremely low, there was growth on nearly all MCAP ELA and math grade-level tests and the MCAP Algebra 1 test.

To further understand factors that affect average proficiency rates on the MCAP tests, the Office of Research and Evaluation is planning to conduct further research using longitudinal data as well as administrative and other testing data from school-level and student-level files.

References

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Appendix I

Performance Level Descriptions

The following performance level descriptions come directly from a state report (Maryland State Department of Education, 2022) that includes information on both MCAP ELA and mathematics.

- **Level 4 Distinguished Learners**: Distinguished Learners demonstrate advanced proficiency. The students are well prepared for the next grade level or course and are well prepared for college and career readiness.
- **Level 3 Proficient Learners**: Proficiency Learners demonstrate proficiency. The students are prepared for the next grade level or course and are on track for college and career readiness.
- **Level 2 Developing Learners**: Developing Learners demonstrate partial proficiency. The students need additional academic support to ensure success in the next grade level or course and to be on track for college and career readiness.
- **Level 1 Beginning Learners**: Beginning Learners do not yet demonstrate proficiency. The students need substantial academic support to be prepared for the next grade level or course and to be on track for college career readiness.