

Prince George's County Public Schools

DATA BRIEF

Student Performance on the Maryland Comprehensive Assessment Program (MCAP) SY 2021-2022

Key Findings

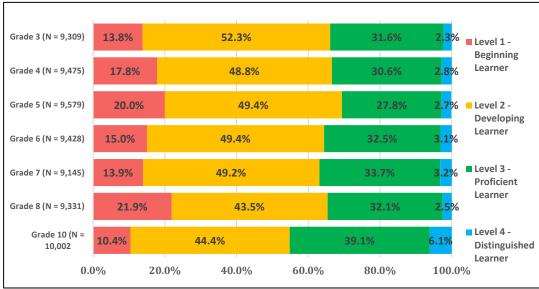
- The percentage of students demonstrating proficiency on the MCAP ELA test ranged from about 30% (grade 4) to 46% (grade 10) on MCAP ELA tests and 6% (Algebra 1) to 17% (grade 3) on MCAP mathematics tests.
- Female students performed better than male students on the MCAP ELA, but male students outperformed their female classmates on the MCAP math test.
- Asian students outperformed other racial/ethnic groups on MCAPs ELA and mathematics.
- The percentage of students who met proficiency standards increased among ELA test-takers between SY2019 and SY2022.
- The percentage of students who met proficiency standards on grade-level math tests and Algebra 1 declined from SY2019 to SY2022.

The Maryland Comprehensive Assessment Program for English language arts and literacy and mathematics (MCAP ELA and MCAP Mathematics) 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 2022 administration of MCAP ELA and MCAP mathematics, are presented and discussed.

Student Performance on MCAP ELA

<u>Overall Performance</u>: Among the tested grade levels, the percentage of students who demonstrated proficient levels of performance on the MCAP ELA ranged from approximately 30% to 46%. (See Figure 1.) At the elementary level, slightly more than a third of students in grades three and four met the Proficient or Distinguished Learner threshold, while a little more than 30% of students in grade five attained this same level of performance. In the middle grades, between 34% and 36% of students achieved performance levels three (Proficient Learner) or four (Distinguished Learner), and in high school, slightly more than 45% of 10th grade students met Proficient and Distinguished thresholds, 39.1% and 6.1%, respectively.

Figure 1. MCAP ELA Performance Level Distribution, SY22



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

Performance Level by Gender and Race/Ethnicity: Data by gender show that female students performed higher on the MCAP ELA than their male classmates. Specifically, 42.8% of female students achieved at the Proficient or Distinguished performance levels while 29.0% of male students did so. (See Table 1.) In addition, data by race/ethnicity show that more than half of students in four groups, including Asian, Native Hawaiian or Other Pacific Islander, White, and Two or More Races, met the Proficient or Distinguished performance levels. (See Table 1.) Close to 40% of American Indian or Alaska Native and Black or African American students attained the Proficient or Distinguished performance level, and nearly 28% of Hispanic or Latino students met this threshold. When compared, data show that Asian students outperformed all other racial/ethnic groups; in contrast, Hispanic or Latino students had the lowest percentage of Proficient or Distinguished learners on the MCAP ELA tests.

Table 1. Percentage of Level 3 and/or 4 Performance Levels by Gender and Race/Ethnicity on MCAP ELA, SY22

Gender	# of Test-Takers	% Proficient and Distinguished	
Male	33,627	29.0%	
Female	32,628 42.8%		
Race/Ethnicity	# of Test-Takers	% Proficient and Distinguished	
Am. Indian or Alaska Native	170	39.4%	
Asian	1,660	60.3%	
Black or African American	35,844	38.5%	
Hispanic or Latino of Any Race	25,257	27.6%	
Native Hawaiian or OPI	125	52.8%	
White	2,340	58.8%	
Two or More Races	799	54.4%	

Note. Data by gender and race/ethnicity is aggregated; as such, it includes students from all tested grade levels (i.e., 3-8 and 10). **Source**. Maryland State Department of Education, District Performance Level Summary Report, January 2023.

<u>Performance Level by Economic, English Learner (EL), and Disability Status</u>: Student service groups varied in the percentages of students who attained performance levels three or four. (See Table 2.) Slightly more than 26% of economically disadvantaged students met this threshold. Moreover, a little more than 11% of ELs and about 7% of students with disabilities (SWDs) demonstrated Proficient or Distinguished performance.

Table 2. Percentage of Level 3 and/or 4 Performance Levels by Economic Disadvantage, EL, and Disability Status on MCAP ELA, SY22

Student Service Group	# of Test-Takers	% Proficient and Distinguished	
Economically Disadvantaged	19,339	26.1%	
English Learners	15,135	11.4%	
Students with Disabilities	6,445	6.8%	

Note. Data by student service group is aggregated; as such, it includes students from all tested grade levels (i.e., 3-8 and 10). In addition, economically disadvantaged refers to students who qualify for financial services, and SWDs refer to students with IEPs only. **Source**. Maryland State Department of Education, District Performance Level Summary Report, January 2023.

Student Performance on MCAP Mathematics

<u>Overall Performance</u>: Nearly 17% of elementary, middle, and high school students met the Proficient or Distinguished level threshold on the MCAP mathematics test. (See Figure 2.) In most grade levels, five through eight, specifically, and course-specific tests, namely Algebra I and II, the percentage of students who achieved a performance level of three or four fell below 10%. In contrast, slightly more than 10% of fourth-grade students demonstrated this level of performance, and a little more than 14% and 16%, respectively, of students who took the geometry version of the MCAP and students in fourth grade attained satisfactory levels of proficiency. Across all grade levels and course-specific tests, third grade MCAP mathematics test-takers achieved the best with 16.8% earning either Proficient or Distinguished learner status. (See Figure 2.)

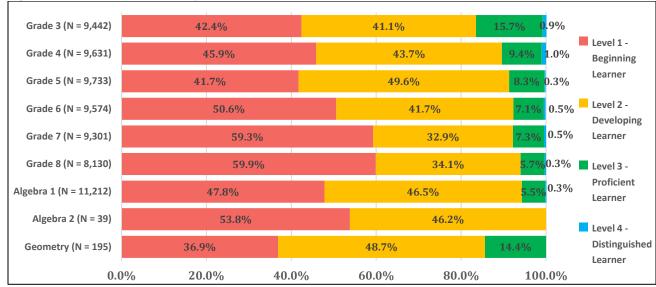


Figure 2. MCAP Mathematics Performance Level Distribution, SY22

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

Performance Level by Gender and Race/Ethnicity: Data by gender show that male students had higher percentages of Proficient or Distinguished Learners on the MCAP mathematics tests than female students did, 9.5% and 8.4%, respectively. (See Table 3.) In addition, data by race/ethnicity show that nearly 28% of students identifying as Asian or White demonstrated proficiency in math. About 20% of Native Hawaiian or Other Pacific Islanders and students identifying as two or more races met this threshold. (See Table 3.) Less than 10% of students identifying as American Indian or Alaska Native, Black or African American, and Hispanic or Latino attained performance levels of Proficient or Distinguished. When compared, data show that Asian students (27.9%) performed slightly better than White students (27.6%) and at least 10 percentage points better than students from other racial/ethnic groups. In contrast, Hispanic or Latino students had the lowest percentage (5.5%) of Proficient or Distinguished Learners on the MCAP mathematics tests.

Table 3. Percentage of Level 3 and/or 4 Performance Levels by Gender and Race/Ethnicity on MCAP Mathematics, SY22

Gender	# of Test-Takers	% Proficient and Distinguished	
Male	34,355	9.5%	
Female	32,862	8.4%	
Race/Ethnicity	# of Test-Takers	% Proficient and Distinguished	
Am. Indian or Alaska Native	182	8.2%	
Asian	1,710	27.9%	
Black or African American	35,553	9.2%	
Hispanic or Latino of Any Race	26,526	5.5%	
Native Hawaiian or OPI	115	20.0%	
White	2,264	27.6%	
Two or More Races	781	19.8%	

Note. Data by gender and race/ethnicity is aggregated; as such, it includes students from all tested grade levels (i.e., 3-8 and 10). **Source**. Maryland State Department of Education, District Performance Level Summary Report, January 2023.

<u>Performance Level by, Economic, English Learner, and Disability Status</u>: Less than 5% of students in need of special services demonstrated Proficient or Distinguished performance levels on the MCAP mathematics tests. (See Table 4.) More specifically, among students designated as Economically Disadvantaged, 4.6% achieved at the Proficient or Distinguished Learner level. In addition, 2.4% of English Learners and 2.2% of students with disabilities demonstrated proficiency on the MCAP math tests.

Table 4. Percentage of Level 3 and/or 4 Performance Levels by Economic, English Learner, and Disability Status on MCAP Mathematics, SY22

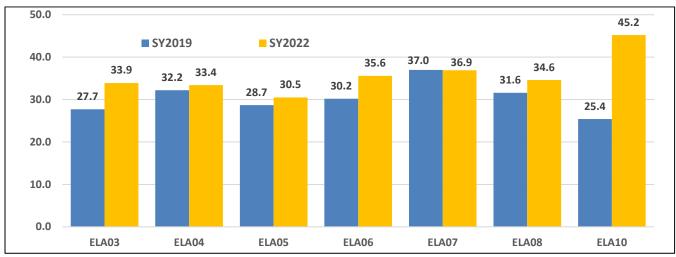
Student Service Group	# of Test-Takers	% Proficient and Distinguished	
Economically Disadvantaged	19,728	4.6%	
English Learner	16,429	2.4%	
Students with Disabilities	6,623	2.2%	

Note. Data by student service group is aggregated; as such, it includes students from all tested grade levels (i.e., 3-8 and 10). In addition, economically disadvantaged refers to students who qualify for financial services, and SWDs refer to students with IEPs only. **Source**. Maryland State Department of Education, District Performance Level Summary Report, January 2023.

Grade-Level Test Comparisons

MCAP ELA Grade-Level Test Comparison: Data from the 2019 and 2022 administrations of the MCAP ELA tests show that apart from grade seven, performance improved over that four-year period. (See Figure 3.) That is, a higher percentage of students demonstrated Proficient or Distinguished learning, levels three or four, respectively, in comparison to the percentage of students in 2019 who met or exceeded proficiencyexpectations, levels four and five, respectively.

Figure 3. MCAP English Language Arts Proficiency Levels by Grade-Level Test, SY19 & SY22



Note. Conclusions about better performance between the two years should be exercised with caution because the number of performance levels differed between 2019 (i.e., PL 1-5) and 2022 (i.e., PL 1-4).

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

<u>MCAP Mathematics Grade-Level Test Comparison</u>: Conversely, data from the MCAP mathematics tests show student performance was lower on all grade level and course-specific tests in SY2022 compared with SY2019. (See Figure 4.) Specifically, lower percentages of students attained Proficient or Distinguished performance levels in 2022 than students in 2019 who met or exceeded proficiency.

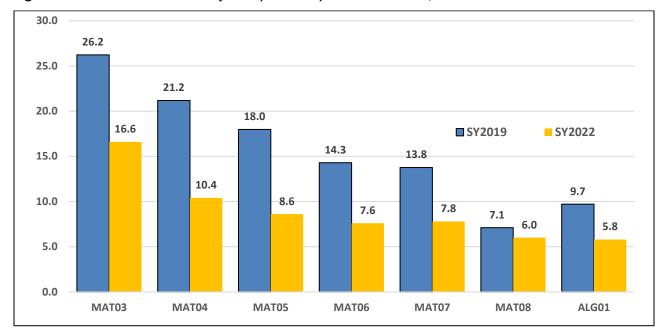


Figure 4. MCAP Mathematics Proficiency Levels by Grade-level Test, SY19 & SY22

Note. Conclusions about better performance between the two years should be exercised with caution since the number and descriptions of performance levels differed between 2019 (i.e., levels one to five) and 2022 (i.e., levels one to four).

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

<u>Cohort Analysis, MCAP ELA</u>: A comparison of scores from cohorts of students reveals that the percentage of students who demonstrated proficiency on the MCAP ELA tests grew from SY19 to SY22. (See Table 5.) In the former year, 27.9%, 33.1%, and 30.4% of students in grades three, four, and five, respectively, attained performance levels of four and five (i.e., met or exceeded proficiency expectations). In the latter year, 37.7%, 39.3%, and 36.8% of sixth, seventh, and eighth graders, respectively, attained performance levels of three or four (i.e., Proficient or Distinguished).

 Table 5. Percentage of Cohort Students' Performance Levels on MCAP ELA, SY19 and SY22

# of Test-Takers	Cohort Students'		Cohort Students'		SY2019 to
for Both SY19	Grade Level	% Proficient	Grade Level	% Proficient	SY2022 Percent
and SY22	During SY19	During SY19	During SY22	During SY22	Change
7,669	Grade 3	27.9%	Grade 6	37.7%	35.2%
7,654	Grade 4	33.1%	Grade 7	39.3%	18.9%
7,785	Grade 5	30.4%	Grade 8	36.8%	21.1%

Note. Cohorts are groups of students with two separate scores from two separate administrations of the MCAP; thus, students from SY19's administration of the MCAP ELA tests are the same group of students whose data are reported for the SY2022 administration of the MCAP ELA tests. In addition, conclusions about the percent proficient between 2019 and 2022 should be exercised with caution because the number of performance levels differed between 2019 (i.e., PL one to five) and 2022 (i.e., PL one to four).

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

<u>Cohort Analysis, MCAP Mathematics</u>: A comparison of scores from cohorts of students reveals that the percentage of students who demonstrated satisfactory levels of proficiency on the grade-level MCAP mathematics tests decreased from SY19 to SY22. (See Table 6.) During SY2019, 26.4%, 21.4%, and 10.4% of students in grades three, four, and five, respectively demonstrated proficiency on the MCAP ELA. During SY2022, however, less than 10% of these same students, now in grades six, seven, and eight, respectively, attained Proficient or Distinguished performance levels.

Table 6. Percentage of Cohort Students' Performance Levels on MCAP Mathematics, SY19 and SY22

# of Test-Takers for Both SY19 and SY22	Cohort Students' Grade Level During SY19	% Proficient During SY19	Cohort Students' Grade Level During SY22	% Proficient During SY22	SY2019 to SY2022 Percent Change
7,794	Grade 3	26.4%	Grade 6	8.3%	-68.5%
7,724	Grade 4	21.4%	Grade 7	8.3%	-61.1%
6,619	Grade 5	10.4%	Grade 8	6.1%	-40.8%

Note. Cohorts are groups of students with two separate scores from two separate administrations of the MCAP; thus, students from SY19's administration of the MCAP mathematics tests are the same group of students whose data are reported for the SY2022 administration of the MCAP mathematics tests. In addition, conclusions about the percent proficient between 2019 and 2022 should be exercised with caution because the number of performance levels differed between 2019 (i.e., PL one to five) and 2022 (i.e., PL one to four). **Source**. Maryland State Department of Education, District Performance Level Summary Report, January 2023.

<u>Discussion</u>: The 2022 administration of both MCAP ELA and MCAP mathematics tests marks the district's return to a normal testing year for the first time since the onset of the COVID pandemic. With this return comes the opportunity to resume tracking student progress in critical academic areas. While the results from these assessments show trends of improvement and, thus, areas to celebrate, these data also show trends of decline that demand attention if students are to progress through and graduate from PGCPS college- and career-ready.

One trend of improvement comes from students' performances on MCAP ELA tests. Data show that PGCPS students appear to be improving in their literacy abilities. The ELA data from more than 7,000 cohort students support this idea, as these students collectively did better on the 2022 MCAP ELA than on the 2019 MCAP ELA. (See Table 5.) Not only does this improvement follow state and national trends of returning "to pre-pandemic proficiency rates," (MSDE, 2023c, p. 1), but it also suggests that PGCPS' efforts to improve learning outcomes following the pandemic are working.

Student performance on the MCAP mathematics tests, however, paints a different picture. As noted earlier, less than 17% of students in elementary, middle, and high school earned Proficient or Distinguished performance levels on the 2022 MCAP mathematics tests. Furthermore, proficiency levels trend lower when comparing grade-levels. (See Figure 2.) Moreover, data from cohort students show sharp declines in mathematics proficiency from 2019 to 2022. (See Table 6.) Collectively, these findings show that the district is struggling to return students to the pre-pandemic upward trajectory in mathematics achievement.

The findings from the 2022 MCAP administrations highlight successes and challenges at the subgroup level. With ELA, data show that more than 40% of female students are meeting the Proficient or Distinguished threshold, but male students are performing less well, with nearly 14 percentage points separating them from their female counterparts. (See Table 1.) In addition, while more than 50% of four racial/ethnic groups demonstrated proficiency, Black or African American and Hispanic or Latino students, the groups with the largest number of students within the district, have the lowest percentages of students achieving at the Proficient or Distinguished learner level. (See Table 1.) With mathematics, data reveal that male students performed better than female students did by slightly more than one percentage point, a finding that differs from these groups' performances on other state tests (PGCPS, 2022a, 2022b). In addition, while more than 20% of several racial/ethnic groups have met satisfactory proficiency thresholds, less than 10% of Black or African American students and less than 6% of Hispanic or Latino students attained this level of performance. (See Table 3.) Lastly, while this report does not include trend data on students in service groups (Tables 2 and 4) or a comparison of them to their non-service group peers, findings within this report suggest that economically disadvantaged, ELs, and SWDs, in both ELA and mathematics tests, had some of the greatest difficulties with demonstrating Proficient or Distinguished levels of performance.

In sum, the 2022 administrations of the MCAP ELA and MCAP mathematics tests provide important information about our district's successes and challenges in improving student-learning outcomes. Additional research, however, is needed to understand more thoroughly how to improve upon these successes, such as with ELA, while simultaneously and effectively addressing declines in learning outcomes, such as with mathematics. These next steps appear to be particularly important for gender, racial/ethnic, and student service groups that have struggled more often than their respective counterparts to meet Proficient or Distinguished Learning thresholds.

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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.

- <u>Level 4 Distinguished Learners</u>: 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.
- <u>Level 3 Proficient Learners</u>: Proficiency Learners demonstrate proficiency. The students are prepared for the next grade level or course and are on track for college and career readiness.
- <u>Level 2 Developing Learners</u>: 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.
- <u>Level 1 Beginning Learners</u>: 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.